HellermannTyton

Product Catalogue

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Inspired by you

MADE FOR

Our product catalogue

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HellermannTyton



REAL

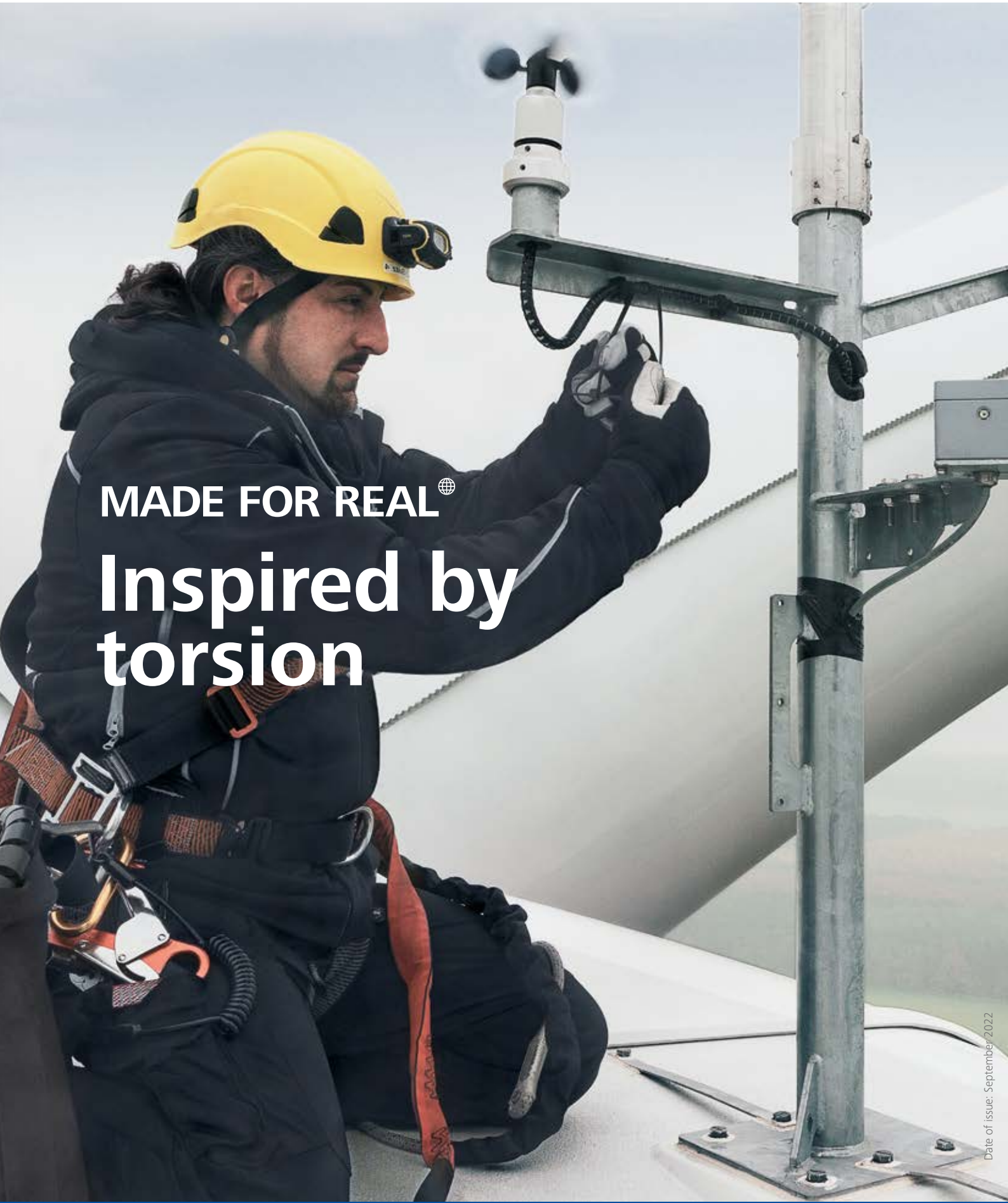
We listen. We understand. We invent. We deliver. It’s concrete action and not big words that help you effectively manage your cables.

Standard part or custom development: HellermannTyton products help industry professionals reliably affix, insulate, protect, install, identify, apply and connect electrical cables and network connectivity solutions.

Your challenges motivate us to deliver inventive products that make a difference to your business – wherever you are in the world.

Quality and service you can rely on – MADE FOR REAL.

Date of issue: September 2022



MADE FOR REAL®

Inspired by torsion

Date of issue: September 2022

HellermannTyton

HellermannTyton develops industry-specific product ranges that raise the bar across the world



Inventiveness all round

Take the Loop Spacer, for example. It minimises the abrasion on the sheaths when the cables twist in wind turbine towers. The special design ensures good air circulation and makes it easy to retrofit. This is just one of thousands of specialised cable management requests we have fulfilled.

Comprehensive industry expertise

From torsion to weight reduction – every single industry has its own unique demands in terms of cable management. With a high degree of specialist knowledge, HellermannTyton develops tailor-made technologies for different markets and industries. These include:


Agricultural technology


Automotive


Construction


Aviation and aerospace


Panel building


Food and beverage industry


Commercial vehicles


Rail vehicle construction


Shipbuilding


Solar industry


Machine and plant engineering


Wind power

For more information about our markets and industries please refer to:
www.HellermannTyton.co.uk/markets

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MADE FOR REAL®

Inspired by extremes

Date of issue: September 2022

HellermannTyton

HellermannTyton develops products that you can count on, even under extreme conditions

Reliable under extreme temperatures: PEEK cable ties

Polyether ether ketone (PEEK) is one of the most resilient thermoplastics. We manufacture the world's longest PEEK cable ties for the aerospace industry.



The oustanding performance of PEEK makes it ideal for cable ties operating under extreme conditions. This lightweight polymer has a very high tensile strength and good resistance to chemicals and radiation. It can be used permanently at temperatures from -55 °C up to as high as +240 °C. See pages 53 and 62.

Highly specialised

In order to keep on defying inhospitable conditions, HellermannTyton continuously explores the use of new materials. Our products and manufacturing methods are the only ones of their kind in many areas.



Helagaine HEGMAN

Braided sleeving made from NOMEX® combines mechanical protection and high temperature resistance. See page 355.



MBT cable ties

SS304 stainless steel metal ties with a non-releasable ball-lock mechanism are resistant to chemicals and fire. See page 80.



M-BOSS Compact

This stainless steel marking system ensures outstanding legibility under harsh conditions. See page 523.



Heavy duty mounts

Can be attached to threaded bolts and screws with a high level of tightening torque. See page 182.

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MADE FOR REAL®

Inspired by innovation

Date of issue: September 2022

HellermannTyton

HellermannTyton is an experienced partner for new challenges and individual solutions

Customer specific product development

HellermannTyton is on the spot whenever new solutions are required. Thanks to our extensive development expertise, we are always able to develop perfectly tailored products, anywhere in the world. A one-stop shop – from planning to production.



The Fixing Clip AC Pipe, for example, solves a problem connected with insulated aluminium refrigerant lines in automotive construction. Rigid connections had caused damage to the pipes due to the vibrations in the engine compartment. Now, the Fixing Clip AC Pipes, which are made of both hard and soft components, ensure that the movement tolerances specified by customers are always adhered to.



By professionals, for professionals

HellermannTyton does not see the world rigidly through the prism of cable management. We build complex machines ourselves, sometimes encountering problems that are yet to be solved. In the case of the M-BOSS Compact stainless steel marking system, an attachment solution was required for a cylinder. This is now available as a new addition to our range under the product name FlexTack, a self-adhesive mount available for both convex and concave forms. See page 142.

Ready for your challenges

Thanks to our 6,000 employees around the world, we are able to provide you with on-site support and development expertise. Our developers will be at your disposal for the entire term of larger-scale projects. We can't wait to support you.

You can contact us on **0161 945 2249** or **bespokesolutions@HellermannTyton.co.uk**

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MADE FOR REAL®

Inspired by time

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HellermannTyton

HellermannTyton enables significant gains in time during installation, planning and the entire order process

Guaranteed to give you an edge: the EdgeClip

Quick and easy to push on by hand. Hard to prise off. EdgeClip mounts with cable ties are ideal for securely routing wiring, conduits and hoses along, across or parallel to edges. No drilling, no weld studs, no adhesive required.



Utilising available edges and no need for tools saves installers time and hassle. The small size is also really great where installation space is restricted. The built-in spring steel clamp in the EdgeClip has more staying power than you would imagine. Find the right one for your edge now. See page 192.



Quick ordering process

Orders and delivery schedules are, of course, produced fully automatically in line with EDI standards.

Direct contact

With HellermannTyton, you don't spend ages waiting to get through to someone at a call centre. You can get in touch with your contact person directly and discuss everything in your language. Our advisers also have the necessary decision-making expertise.

Quick availability

An extensive global distributor network guarantees rapid delivery of small consignments and large orders.

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MADE FOR REAL®

Inspired by teamwork

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HellermannTyton

HellermannTyton is an international team with a passion for the best solutions around cables



Regardless of which HellermannTyton sites you visit or have dealings with, you can be assured of a friendly welcome and maximum reliability. Our customers regularly give us the feedback that we are easy to partner with and that they are happy to recommend our products and services.

We want things to stay that way and even improve wherever possible – without cutting any corners. That means we listen carefully and get things done to satisfy your real needs.

HellermannTyton MADE FOR REAL

Beyond our technical expertise, it's the people at HellermannTyton who make the real difference.
We act ahead. Locally, worldwide. For all our customers.

Watch our film here and discover why MADE FOR REAL defines us.

www.HellermannTyton.co.uk/discover

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MADE FOR REAL®

Inspired by needs

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HellermannTyton

HellermannTyton is your partner for close, intensive on-site co-operation

We meet growing global challenges by being close to our clients. HellermannTyton speaks your language when it comes to devising new solutions and optimising processes. We want you to be able to provide your customers with even better results.



Your local contact person

Head office

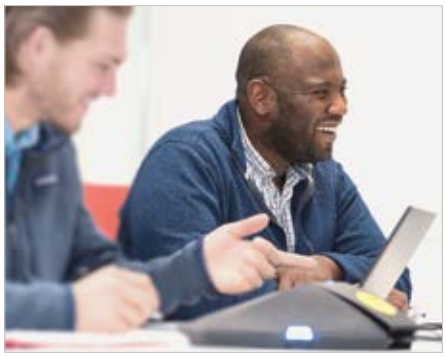
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Automotive Sales

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Let's find inspirational solutions together

Our sales advisers do so much more than just take your order – in fact, they find out what you really need. An appropriate solution will only be selected from the portfolio, or developed on your behalf, once the product requirements have been discussed in detail.

General information
For small orders under £125,- (net without sales tax) we charge a small order administration charge of £20,- (net without sales tax) per order and delivery. The delivery takes place exclusively according to our general sales and delivery conditions, available at www.HellermannTyton.co.uk/terms-and-conditions. Nominal fee £20,-
This product catalogue is valid from September 2022. It replaces all previous product catalogues. All product information is supplied without guarantee. Errors and technical modifications reserved. No liability is accepted for printing errors. As of June 2022.

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MADE FOR REAL®

Inspired by improvement

Date of issue: September 2022

HellermannTyton

HellermannTyton constantly optimises its own products – we evolve ideas every day



1. Cable Ties and Fixings

Our tip: hassle-free cable routing. One Ratchet P-Clamp can replace several p-clips of different sizes. It can be levered open for maintenance with a screwdriver and closed again simply by hand (page 184).



2. Insulation

Our tip: optimum visibility with the SA47-LA heat-shrinkable tube. The combination of transparent heat-shrinkable tube and black adhesive enables the user to precisely judge the quality of the bond (page 264).



3. Cable Protection Systems

Our tip: our wiring ducts offer protection and order when space is at a premium. They come with blunted edges that protect the cable insulation and make them safer to work with during installation and maintenance (page 364).



4. Electrical Installation

Our tip: space-saving cable installation with HelaCon Plus Mini. The innovative design is 40 per cent smaller compared with the HelaCon Plus range. The installation openings enclose the entire cable for reliable processing (page 415).



5. Identification Systems

Our tip: seamless product identification with RFID solutions. Cable ties and other accessories with RFID transponders make it easier to satisfy increasing demands in terms of traceability and location tracking (page 514).



6. Application Tooling

Our tip: recoil-free application of cable ties with the EVO9 processing tool. Even when strong forces are involved, the EVO9 significantly reduces the recoil generated when installing cable ties with conventional pliers (page 554).

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Inspired by design

EdgeClips were developed for a luxury car. The cables needed to be routed precisely along an edge where neither drilling nor welding was permitted. The newly developed EdgeClip solved the problem so brilliantly that this smart cable routing solution was quickly applied to other models all over the world. We now offer around 90 different versions that are used in different industries.

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1.1 Cable ties, inside serrated

T-Series		
standard, natural and black	PA66	38
standard, coloured	PA66	40
for outdoor use, black	PA66W, UV-resistant	42
temperatures up to +105 °C	PA66HS, heat stabilised	44
for higher impact resistance, ScanBlack	PA66HIR(S), high impact modified	46
for higher fire-protection	PA66V0, flame-retardant	47
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sustainable bioplastic, black	PA11	51
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With smart design	X-Series	55
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For food industry		
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detectable, corrosion resistant	MCTS-Series	59, 60

1.2 Cable ties, outside serrated

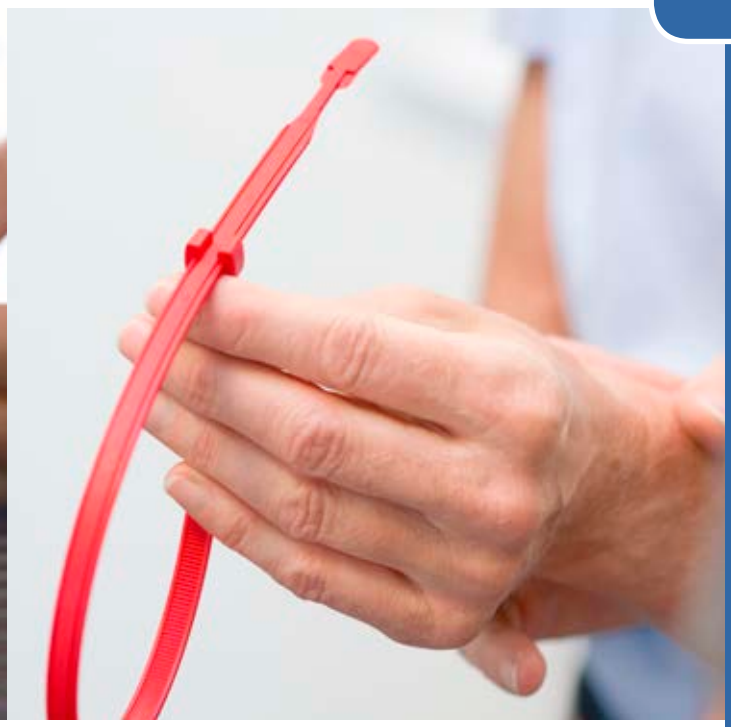
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for identification purposes, coloured	TEXTIE-Series	79

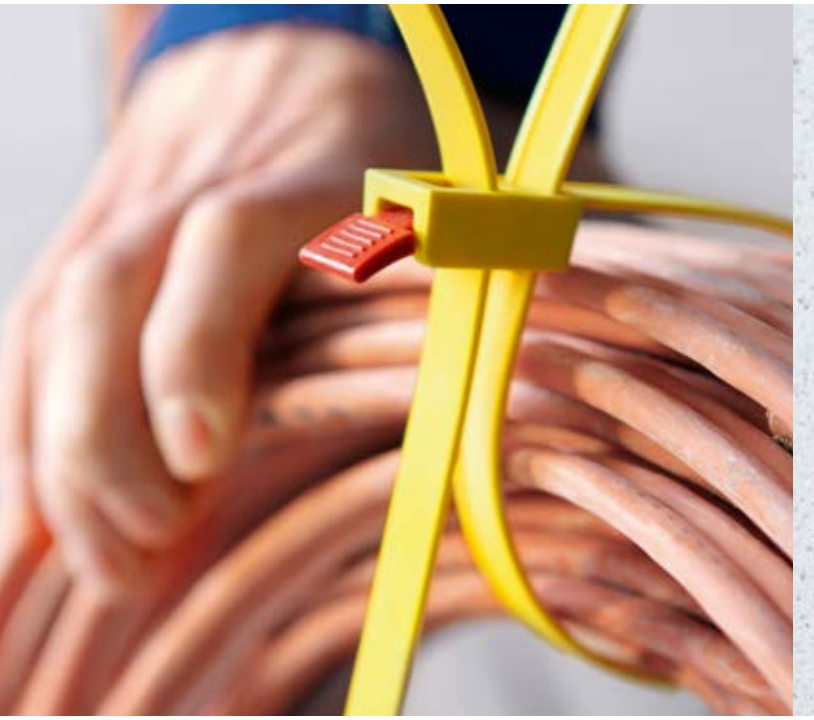
1.5 Cable ties, stainless steel

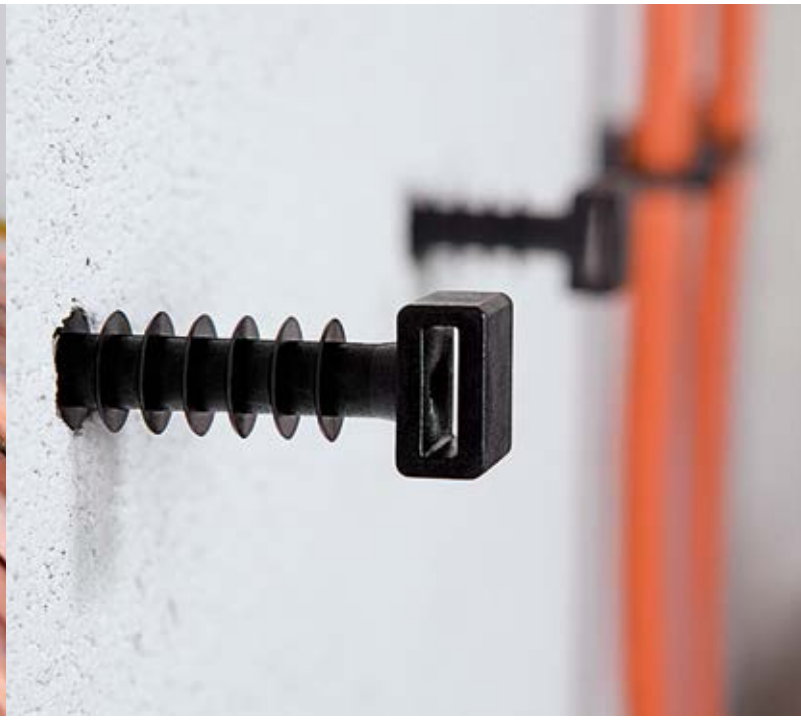
With ball-lock		
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Material Specification Overview

MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Aluminium alloy	AL	-40 °C to +180 °C	Natural (NA)		• Corrosion resistant • Antimagnetic	RoHS
Chloroprene rubber	CR	-20 °C to +80 °C	Black (BK)		• Weather resistant • High yield strength	RoHS
Ethylene Tetrafluoroethylene (Tefzel®)	E/TFE	-80 °C to +170 °C	Blue (BU)	UL 94 V0	• Resistance to radioactivity • UV resistant, not moisture sensitive • Good chemical resistance to acids, bases, oxidizing agents	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL 94 HB	• Limited brittleness sensitivity • Flexible at low temperature • Not moisture sensitive • Robust on impact	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	• Bio-plastic, derived from vegetable oil • Strong impact resistance at low temperature • Very low moisture absorption • Weather resistant • Good chemical resistance	HF RoHS
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	• Good chemical resistance to acids, bases, oxidizing agents • UV resistant	HF RoHS
Polyamide 4.6	PA46	-40 °C to +130 °C, (+150 °C, 5000 h; +195 °C, 500 h)	Natural (NA), Grey (GY)	UL 94 V2	• Resistance to high temperatures • Very moisture sensitive • Low smoke sensitivity	HF LFH RoHS
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL 94 V2	• High yield strength	RoHS
Polyamide 6, high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL 94 HB	• Limited brittleness sensitivity • Higher flexibility at low temperature	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL 94 V2	• High yield strength	HF RoHS
Polyamide 6.6, glass-fibre reinforced	PA66GF13	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK)	UL 94 HB	• Good resistance to lubricants, fuels, salt water and solvents	HF RoHS
Polyamide 6.6, heat and UV-stabilised	PA66HSUV	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK)	UL 94 V2	• High yield strength • Modified elevated maximum temperature • UV resistant	HF RoHS
Polyamide 6.6, heat stabilised	PA66HS	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK), Natural (NA)	UL 94 V2	• High yield strength • Modified elevated maximum temperature	HF RoHS
Polyamide 6.6, high impact modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	• Limited brittleness sensitivity • Higher flexibility at low temperature	RoHS
Polyamide 6.6, high impact modified, heat and UV-stabilised	PA66HIRHSUV	-40 °C to +110 °C	Black (BK)	UL 94 HB	• Limited brittleness sensitivity • Higher flexibility at low temperature • Modified elevated maximum temperature • High yield strength, UV resistant	RoHS
Polyamide 6.6, high impact modified, heat stabilised	PA66HIRHS	-40 °C to +105 °C, (+105 °C for 500 h)	Black (BK)	UL 94 HB	• Limited brittleness sensitivity • Higher flexibility at low temperature • Modified elevated maximum temperature	RoHS
Polyamide 6.6, high impact modified, scan black	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL 94 HB	• Limited brittleness sensitivity • Higher flexibility at low temperature	RoHS
Polyamide 6.6, UV-resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL 94 V2	• High yield strength • UV resistant	HF RoHS
Polyamide 6.6, with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL 94 HB	• High yield strength • Metal and X-Ray detectable	HF RoHS
Polyamide 6.6, with metal particles	PA66MP+	-40 °C to +85 °C	Blue (BU)	not flame-retardant	• High yield strength • Metal and X-Ray detectable	HF RoHS

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MATERIAL	Material Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	Material Specifications
Polyamide 6.6 V0	PA66V0	-40 °C to +85 °C	White (WH)	UL 94 V0	• High yield strength • Low smoke emission	HF LFH RoHS
Polyester	SP	-50 °C to +150 °C	Black (BK)		• UV resistant • Good chemical resistance to most acids, bases and oils	HF LFH RoHS
Polyetheretherketone	PEEK	-55 °C to +240 °C	Beige (BGE)	UL 94 V0	• Resistance to radioactivity • Not moisture sensitive • Good chemical resistance to acids, bases, oxidising agents	HF LFH RoHS
Polyethylene	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL 94 HB	• Low moisture absorption • Good chemical resistance to most acids, bases, alcohol, oils	HF RoHS
Polyolefin	PO	-40 °C to +90 °C	Black (BK)	UL 94 V0	• Low smoke emissions	HF LFH RoHS
Polypropylene	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL 94 HB	• Floats in water • Moderate yield strength • Good chemical resistance to acids, bases and solvents	HF RoHS
Polypropylene, Ethylene Propylene Diene Terpolymer rubber free of Nitrosamine	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL 94 HB	• Good resistance to high temperature • Good chemical and abrasion resistance	HF RoHS
Polypropylene with metal particles	PPMP	-40 °C to +115 °C	Blue (BU)	UL 94 HB	• Metal and X-Ray detectable • Heat resistant • Moderate yield strength • Good chemical resistance	RoHS
Polypropylene with metal particles	PPMP+	-40 °C to +85 °C	Blue (BU)	not flame-retardant	• High yield strength • Metal and X-Ray detectable	HF RoHS
Polyvinylchloride	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL 94 V0	• Low moisture absorption • Good chemical resistance to acids, bases, salts, alcohol, oils	RoHS
Stainless Steel	SS304, SS316	-80 °C to +538 °C	Natural (NA)	Non burning	• Corrosion resistant • Antimagnetic • Weather resistant • Chemical resistance • SS316 also resistant against seawater, salt spray and anorganic acids	HF LFH RoHS
Thermoplastic Polyurethane	TPU	-40 °C to +85 °C	Black (BK)	UL 94 HB	• High elasticity • Good chemical resistance to: • acids, bases and oxidizing agents	HF RoHS

Tefzel® is a registered trademark of DuPont. General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In additon to Tefzel® from DuPont HellermannTyton also uses equivalent E/TFE raw material from other suppliers.

**Further colours available on request.

*These details are only guide values. They should not be regarded as a exhaustive material specification and are no substitute for suitability tests. Please see our datasheets for further details.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

HF = Halogen Free

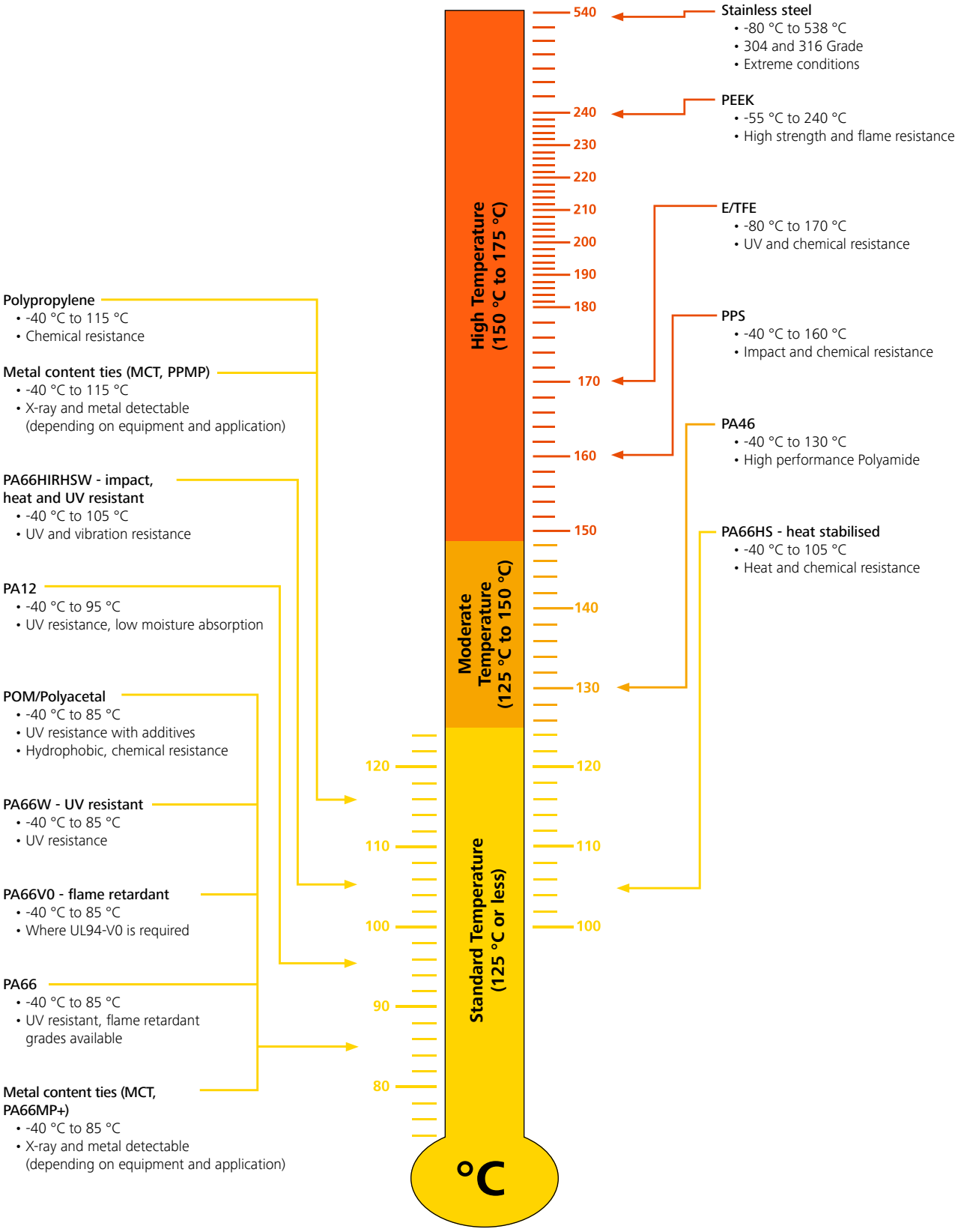
LFH = Limited Fire Hazard

RoHS = Restriction of Hazardous Substances

Date of issue: September 2022

Operating temperature ranges of cable tie materials

This Material Selection Guide illustrates the minimum and maximum operating temperatures for cable ties according to the material from which we manufacture them. It gives an overview of materials HellermannTyton uses to manufacture cable ties. Please contact our sales team to check availability of products in your preferred material.



Date of issue: September 2022

Properties of Polyamide PA66

Polyamides are among the most important thermoplastic synthetic materials. Thermoplastics can be reshaped by heating as often as required without undergoing chemical decomposition or other negative changes. This makes polyamide ideal for processing via injection moulding into high quality products. About 90 % of cable ties and fixings from HellermannTyton are made from this material. Polyamide is also known under the brand name of Nylon®, which was introduced by the Dupont company.

The inner structure of polyamide displays a partial order of polymer chains, i.e. polyamides are partially crystalline. Due to the tighter packing of the individual molecular chains polyamide only has limited transparency to light. The plastic is therefore described as translucent.

Each base unit contains 6 carbon atoms (C). Hence the name PA66.

The polyamide PA66 has many properties which are highly advantageous for HellermannTyton cable ties and fixings, such as:

- High strength, rigidity and hardness
- High dimensional stability, even under the effect of heat
- High abrasion resistance

Having a wide range of polyamides and additives allows for an optimum adaptation of the properties of the finished product to suit the respective requirements.

The following PA66 variants are used for HellermannTyton products:

- Polyamide 6.6 standard (PA66) for temperature conditions of up to +85 °C
- Polyamide 6.6 Heat Stabilised (PA66HS) for temperature conditions of up to +105 °C
- Polyamide 6.6 UV Stabilised (PA66W) for exterior use
- Polyamide 6.6 Heat Stabilised and UV Stabilised (PA66HSW) for exterior use up to +105 °C
- Polyamide 6.6 Impact Resistant (PA66HIR) for high elasticity requirements
- Polyamide 6.6 Impact Resistant and Heat Stabilised (PA66HIRHS) for high elasticity requirements and temperatures up to +105 °C
- Polyamide 6.6 V0 for high standards of fire protection

Water content in polyamide

Polyamide is a hygroscopic material - this means that it absorbs and releases water. The mechanical properties are significantly affected by the water content – especially flexibility and minimum tensile strength.

In a standard atmosphere of 23 °C and 50 % relative humidity, the degree of water saturation of polyamide is around 2.5 %. For optimal processing of cable ties it is therefore important that the polyamide has a water content of approximately 2.5 % in a state of equilibrium.

The quality and functionality of the products are thus affected by the water content, therefore the correct storage of our products is crucial. Please read our separate instructions on storage.

Since humidity is so critical to the quality of the tie, the question arises: What happens if the tie is installed and the water content in the tie alters?

The water content determines the flexibility and strength of a tie. At a water content of approximately 2.5 % the tie has the ideal flexibility for installation. When the strap is being threaded through the head of the tie, the pawl must be flexible enough to “see-saw” over the serration of the strap without breaking. On the other hand, there must also be adequate material rigidity for the serrations of the pawl to engage with the serrations of the strap during the tying process so that a 'positive locking' action is achieved. After achieving the positive locking action the tie is in a static condition. Changes in the mechanical properties of the tie as a function of water content are insignificant during this status.

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Properties of UV-stabilised Polyamide PA66W

The question constantly arises as to whether a black cable tie is suitable for use outside. This is dependant on the application of the tie, but in general the following statements can be made:

A black cable tie made of polyamide 6.6 standard (PA66) is only coloured black with a low proportion of carbon black. This is not sufficient to protect the material from damage caused by UV-radiation in the long term.
Products made from UV-stabilised polyamide PA66W are produced in accordance with ASTM standard D6779 with a higher carbon black percentage of approx. 2 %. So they resist UV-radiation in the European area for a considerably longer period than standard PA66.
This is clearly illustrated by the comparison of the two images:

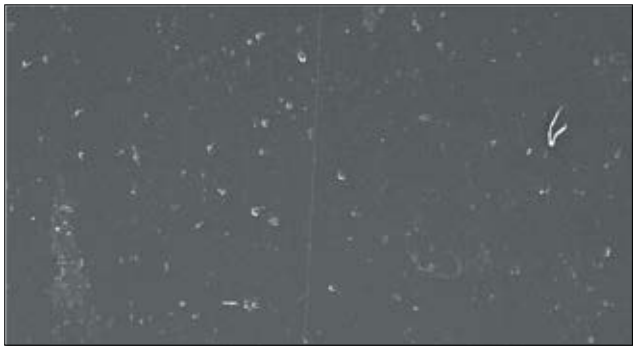
After 500 hours of UV-radiation exposure

Polyamide 6.6 standard (PA66) dyed black:



The joint has been damaged throughout by UV-radiation.

Polyamide 6.6 UV-stabilised (PA66W) with approx. 2 % carbon black:



The joint has only been altered at isolated points by the UV-radiation.

For outdoor use we recommend our range of products made from UV-stabilised polyamide (PA66W).

A simple practical test: "the hammer test"

You can quickly determine whether or not a cable tie is UV stabilised. Strike with a hammer the tail of the strap on the tie. Hold up this flattened end to the light. Cable ties with a carbon black content of about 2 % allow no light through and look black throughout. Standard black ties, however, are transparent on the flattened end.

Properties of Polyamide PA11/PA12

Apart from PA66, there are polyamides which are less hygroscopic. These include PA11/PA12.

PA11/PA12 have the following advantages over PA66:

- Less hygroscopic - saturation at 23 °C and 50 % relative humidity is approximately 1 %
- Better impact performance
- Good weather resistance, even without a special additive

These three properties make PA11/PA12 ideal for use outdoors, in particularly when requirements may include impact resistance.

The water absorption of PA11/PA12 is not only less than that of PA66 but also slower. This is the requirement where the mechanical properties need to remain relatively unaffected by changing environmental conditions.

Properties of Polyamide PA46

Polyamide PA66, despite the use of additives, is not suitable for long-term use in temperatures of +105 °C. Due to considerably better heat resistance, polyamide PA46 is more suitable for temperatures of up to +195 °C (depending on the length of time of operation).

Advantages of PA46 over PA66:

- Greater rigidity, even at higher temperatures
- Higher operating temperature ranges of up to +150 °C (5,000 hours) and +195 °C (500 hours)
- Greater form stability at higher temperatures
- Excellent chemical resistance
- Operating temperature (long-term) up to +130 °C

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Properties of Polyetheretherketone PEEK

PEEK, a linear aromatic polymer, is semi-crystalline and is widely regarded as the highest performance thermoplastic material currently available. A summary of key physical properties is as follows:

High temperature performance
- Melting temperature of +343 °C
- Continuous use temperature of +240 °C (UL 746B)

Wear resistance
- Outstanding wear resistance over wide ranges of pressure, velocity, temperature and counter facial roughness

Chemical resistance
- Excellent resistance to a wide range of chemical environments, even at elevated temperatures
- The only common environment that dissolves it is concentrated sulfuric acid

Fire, smoke and toxicity
- Highly stable and requires no flame-retardant additives to achieve a UL94 V0 rating at 1.45 mm thickness
- The composition and inherent purity of the material results in extremely low smoke and toxic gas emission in fire situations

Hydrolysis resistance
- PEEK is not attacked by water or pressurized steam
- Components that are constructed from these materials retain a high level of mechanical properties when continuously conditioned in water at elevated temperatures and pressures

Radiation resistance
- Excellent radiation resistance due to the energetically stable chemical structure of PEEK

Purity
- PEEK materials are inherently pure with exceptionally low levels of ionic extractables
- Excellent out gassing characteristics

This makes PEEK the right choice for any high performance application in any industry with a clearly outstanding continuous use temperature of +240 °C.

Properties of Ethylene Tetrafluoroethylene (E/TFE) - Tefzel®

E/TFE can be best described as a rugged thermoplastic with an outstanding balance of properties.

Mechanically, it is tough, has medium stiffness, impact and abrasion resistance.

E/TFE can perform successfully in applications where other materials are lacking in mechanical toughness, broad thermal capability and the ability to meet severe environmental conditions.

Tefzel® is a registered trademark of DuPont.

Summary of key properties:
- No load continuous use temperature of +170 °C
- Weather resistant
- Inert to most solvents and chemicals
- Hydrolytically stable
- Substantially better resistance to radiation than other plastic materials

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Chemical resistance of various plastics

▲ = resistant
△ = partly resistant
○ = not resistant

These values are only rough guides. They should not be regarded as a material specification and are no substitute for a suitability test. Please see our technical datasheets for further details.

	Conc. (%)	Temp. (°C)	PA66	PA46	PA12	PA11	POM	PP	E/TFE (Tefzel®)	TPU	PEEK
Acetaldehyde, liquid	100	23 °C	▲	○		▲	▲	△	▲	○	▲
Acetowne	100	23 °C	▲	▲	▲	▲	▲	▲	▲	○	▲
Allyl chloride	100	23 °C				▲		▲		○	
Aniline	100	23 °C	▲	△	△	▲	△	▲	▲	○	▲
Aromatic compounds							▲	○	▲	△	▲
Benzaldehyde		23 °C	▲	△		▲	▲	▲	▲	○	▲
Benzine/Benzol mix		23 °C	▲	▲	▲	▲	▲	△	▲	△	▲
Benzol	100	23 °C	▲		▲	▲	△	△	▲	△	▲
Bromine		23 °C		○	○	○		○		○	
Carbon bisulphide	100	23 °C	▲	○	▲	○	▲	○	▲	○	▲
Carbon tetrachloride	100	23 °C	▲	▲	△	○	▲	△	▲	○	▲
CFC								△			
Chlorine, gaesous	100	23 °C	○			○		○	▲	△	
Chlorine, liquefied	100	23 °C	○	○		○		○			
Chlorobenzene	100	23 °C			○	△	△	▲			
Chloroform	100	23 °C		○	○	▲	○	△		○	
Chromic acid 10 %	10	23 °C	○	○		○	○	▲	▲	○	▲
Chromic acid 20 %	20	20 °C	○	○		○	○	▲	▲	○	▲
Chromic acid 50 %	50	20 °C	○	○		○	○	▲	▲	○	▲
Cyclohexane	100	23 °C	▲			▲	▲	▲	▲	▲	▲
Cyclohexanone	100	23 °C	▲			▲	▲	▲	▲		▲
Decahydronaphthlene	100	23 °C	▲			▲	▲	△	▲	▲	▲
Diethyl ether	100	23 °C	▲			▲	▲	△	▲		▲
Di-isopropyl ether	100	23 °C						△			
Dimethyl formamide	100	23 °C	▲	▲		▲	▲	▲	▲		▲
Dioctyl phthalate		23 °C	▲	▲		▲	▲	▲	▲	○	▲
Engine oil	100	23 °C			▲	▲	▲	▲		▲	▲
Ethanonic acid 10 %	10	20 °C	○	△	△	▲	▲	▲	▲		
Ethanonic acid 100 %	100	23 °C	○	○		▲	△	▲	▲		
Ethanonic acid 25 %	25	20 °C	○			▲	△	▲	▲		
Ethanonic acid 50 %	50	20 °C	○			▲	△	▲	▲		
Ethyl acetate	100	23 °C		▲	▲	▲	△	△		△	▲
Formic acid	98	23 °C	○		○	▲	○	▲	▲	○	△
Freon		23 °C						▲			▲
Heptane	100	23 °C	▲	▲	▲	▲	▲	▲	▲	▲	▲
Hydrogen peroxide 10 %	10	20 °C	△			▲	▲	▲	▲	△	
Hydrogen peroxide 30 %	30	23 °C	○	○		▲	▲	▲	▲	△	
Ketone			▲	▲			▲	▲	▲		▲
Methyisobutylketone	100	23 °C	▲			▲	▲	▲	▲		▲
Methylethylketone	100	23 °C	▲	▲		▲	△	▲	▲	○	▲
Nitric acid 10 %	10	20 °C	○		○	○	○	▲	▲	○	▲
Nitric acid 50 %	50	23 °C	○		○	○	○	○	▲	○	○
Nitrobenzene	100	23 °C	▲	△		▲	▲	▲	▲	○	▲
Ordinary petrol		23 °C		▲		▲	▲	▲			▲
Paraffin oil		23 °C	▲	▲	▲	▲	▲	▲	▲	▲	▲
Perchloroethylene		23 °C	▲		▲	△	▲	△	▲	○	▲
Petroleum		23 °C	▲	▲	▲	▲	▲	▲	▲	▲	▲
Phenol	65	23 °C	○	○	○	○	○	▲	▲	○	
Potass. Permanganate	6	23 °C	○	○	○	○	▲	▲	▲	△	▲
Salad oil		23 °C		△		▲		▲			▲
Silicon oil		23 °C	▲	▲	▲	▲	▲	▲	▲	▲	▲
Sulphuric acid 10 %	10	20 °C	○		△	▲	○	▲	▲	○	△
Sulphuric acid 50 %	50	20 °C	○				○	▲	▲	○	○
Sulphuric acid 96 %	96	23 °C	○	○			○	○	▲	○	○
Toluol	100	23 °C	▲		▲	▲	▲	△	▲	○	▲
Trichlorethylene	100	23 °C	▲	△	△	△	△	△	▲	○	▲
Water, cold			▲		▲	▲	▲			▲	▲
Water, hot						▲		▲		△	▲
Xylene	100	23 °C	▲	▲	▲	▲	▲	△	▲	○	▲

Tefzel® is a registered trademark of DuPont.

General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In additon to Tefzel® from DuPont HellermannTyton also uses equivalent E/TFE raw material from other suppliers.

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What does flammability UL94 mean?

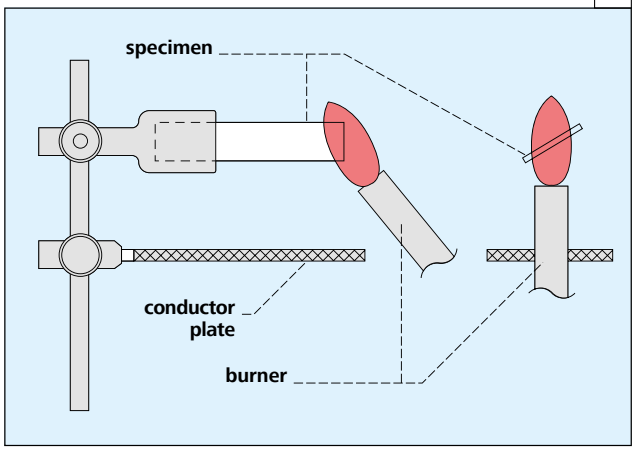
UL is the shortcut for Underwriters Laboratories. This is an independent organisation in the United States to control and certificate product safety.

Beside a lot of product standards UL also specified the flammability test UL94 for plastic materials. UL94 is a material burning test done on defined specimen of the raw material but not a test on final products. UL94 differs between a horizontal burning test UL94 HB (picture 1) and a vertical burning test UL94 V (picture 2). For the vertical test UL94 V there are three flame ratings defined: UL94 V0, UL94 V1 and UL94 V2.

In all these burning tests an open flame is applied for a certain time to the specimen. As the burning behaviour also depends on the thickness of the material it is important to classify the material not only according to HB, V0, V1 or V2 but also to mention the thickness of specimen.

UL94 HB:
Horizontal burning test

1

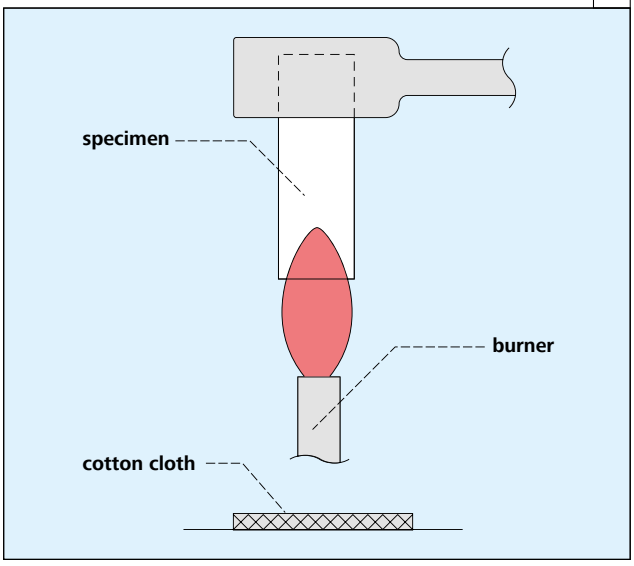


Test criteria:
- burning rate of specimen in mm/min.

Classification:
- according to HB

UL94 V:
Vertical burning test

2



Test criteria:
- afterflame time of specimen
- drip of flaming particles

Classification:
- according to V0, V1 or V2

Following table is a summary of test procedures and requirements of the UL94 classification.

	Horizontal Test UL94		Vertical Test UL94		
Classification	**HB**		**V0**	**V1**	**V2**
Number of specimen	3	3	5	5	5
Thickness of specimen	< 3 mm	3 to 13 mm	up to max. 13 mm		
1st flame application	30 sec.	30 sec.	10 sec.	10 sec.	10 sec.
2nd flame application	-	-	10 sec.	10 sec.	10 sec.
Burning rate	max. 75 mm/min	max. 40 mm/min	-	-	-
Afterflame time after 1st flame application for each individual specimen	-	-	max. 10 sec.	max. 30 sec.	max. 30 sec.
Afterflame time after 2nd flame application for each individual specimen	-	-	max. 30 sec.	max. 60 sec.	max. 60 sec.
Total afterflame time for all 5 specimen after 1st and 2nd flame application	-	-	max. 50 sec.	max. 250 sec.	max. 250 sec.
Afterflame or afterglow of any specimen up to its end allowed	yes	yes	no	no	no
Cotton indicator ignited by flaming particles or drops allowed	-	-	no	no	yes

Flammability behaviour on the following product pages are always related to the raw material burning rate according to UL94. Most commonly used raw materials for cable ties and fixing elements are Polyamide 6.6 standard, Polyamide 6.6 weather resistant and Polyamide 6.6 heat stabilised. These materials normally fulfill UL94 V2 requirement.

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HellermannTyton cable ties conform to IEC 62275 standard

As a leading global manufacturer of quality, high performance cable management products for over 85 years, HellermannTyton's extensive fastening and fixings portfolio reflects our long-standing industry expertise.

Cable ties from the inside serrated (T-Series, Q-Series), the outside serrated (OS-Series) as well as our metal cable ties (MBT-Series and MST-Series) have been tested in accordance with the international cable tie standard IEC 62275 (Cable management systems - Cable ties for electrical installations).

Cable ties manufactured from the standard material polyamide 6.6 (PA66), heat-stabilised polyamide 6.6 (PA66HS), UV-stabilised polyamide 6.6 (PA66W) and stainless steel grades SS304 and SS316 have been successfully tested and approved.

The IEC 62275 standard includes the following tests:

- Installation test on minimum and maximum specified bundle diameters
- Installation test at minimum specified installation temperature
- Impact test at minimum specified operating temperature
- Minimum tensile strength (in the standard this is described as the loop test)
- Loop tensile test after heat ageing at the specified operating temperature
- Loop tensile test after heat cycling at the minimum and maximum operating temperatures
- Loop tensile test after humidity and heat cycling at the minimum and maximum operating temperatures
- Contribution to the spread of fire on both the actual product and test substrate (tissue paper)
- Loop tensile and visual tests after exposure to ultraviolet light radiation for PA66W ties
- Resistance to corrosion (dependent on material)
- Loop tensile test after vibration test for metal cable ties

The following cable ties have been tested and certified:

- T-Series inside serrated in PA66-NA, PA66-BK, PA66HS-NA, PA66HS-BK, PA66W
- OS-Series outside serrated in PA66-NA, PA66-BK, PA66HS-NA, PA66HS-BK, PA66W
- Q-Series inside serrated in PA66-NA, PA66-BK, coloured PA66, PA66HS-NA, PA66HS-BK
- MBT-Series, uncoated in SS316 material grade
- MST-Series, uncoated in SS304 material grade

Material specification please see page 26.

In addition to the IEC 62275, we are proud to offer our customers products that have been certified by well-known and independent laboratories such as:

Profit from our knowledge and experience and the high-quality of HellermannTyton cable management solutions for your particular industry and market.

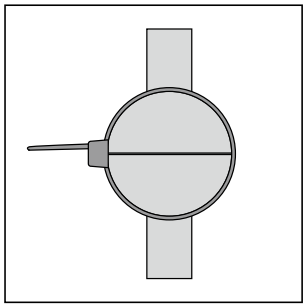
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Determination of minimum tensile strength

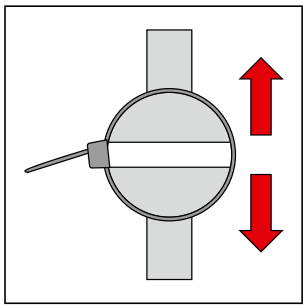
The minimum tensile strength is a critical selection criteria for cable ties. It expresses how much loading a cable tie can bear.

The test procedure to determine minimum tensile strength:

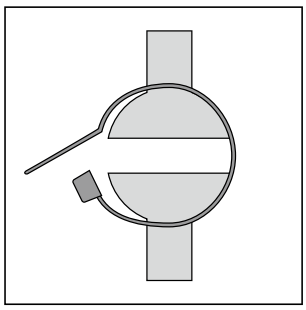
- Testing at room temperature (23 °C ± 5 °C)
- Stabilisation to achieve equilibrium moisture content
- Set-up of the tensile test fixture
- Application of the tie on a split mandrel fixture
- Test speed



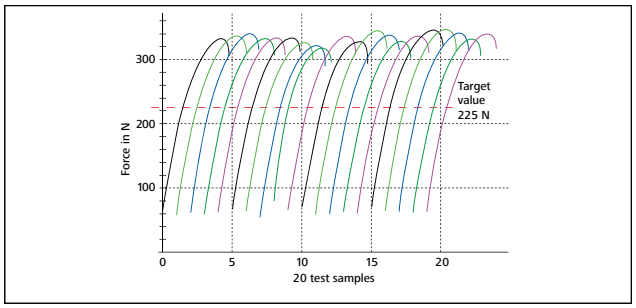
The cable tie is fixed onto a split mandrel fixture with the suitable cable tie application tool.



The mandrel is opened at a defined speed.



The loading at which the cable tie fails is determined. This value is stated in newtons (N) and is recorded through a computer programme reading the tests. This programme produces graphs as outlined below.



Typical measurement protocol of a T50R made of PA66 with a minimum tensile strength of 225 N.

Explanation of minimum tensile strengths

What does a minimum tensile strength of 225 N (50 lbs) mean?
To explain what this value means, the mass with which the tie can be loaded is calculated. The unit of measurement of the mass is stated in kg. To do so, the unit newton (N) is shown in the following way:

$$[N] = [kg \times m/s^2]$$

The formula for calculating the mass is:

Mass = minimum tensile strength÷acceleration due to gravity

The acceleration due to gravity is 9.81 m/s^2

Mass = minimum tensile strength÷[kg × m/s^2]÷9.81 [m/s^2]

At a minimum tensile strength of 225 N (50 lbs) the mass is:

Mass = 225 [kg × m/s^2]÷9.81 [m/s^2]

The units m/s^2 cancel each other out, leaving the unit [kg] for the mass. Thus:

Mass = 225÷9.81 kg = 22.9 kg

Therefore, a T50R cable tie with a minimum tensile strength of 225 N (50 lbs) can be loaded with 22.9 kg.

Conversely, with the required loading capacity the minimum tensile strength can be calculated by a mass:

Min. tensile strength = mass × 9.81[m/s^2]

If the tie is to be loaded with, for example, 53 kg this produces:

Minimum tensile strength = [53 kg] × 9.81 [m/s^2] = 520 N

In order to withstand a load of 53 kg, the tie must therefore have a minimum tensile strength of 520 N. In this case, select our T120R with a minimum tensile strength of 535 N (120 lbs).

225 N÷9,81 = 22,9 kg

53 kg × 9.81 = 520 N

= Minimum Loop Tensile Strength for Cable Ties (newton)

Date of issue: September 2022

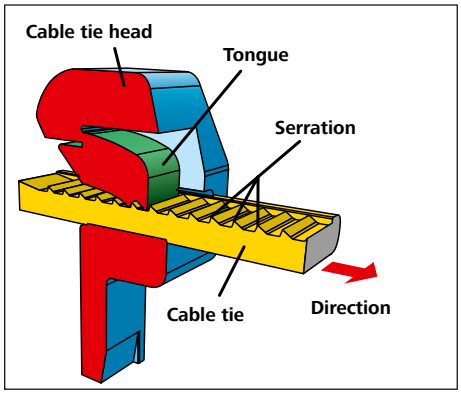
Introduction to the main locking technologies used for cable ties

HellermannTyton offers a wide range of cable ties for use in different applications. By constantly refining our products and satisfying the ever-changing demands of the market, various locking technologies have been developed. Below you will find a brief overview of three most common locking technologies and their characteristics.

Cable ties with plastic pawls

This technology is used in 90 % of all polyamide (PA) cable ties applied by HellermannTyton. In order to cover a variety of applications, there are different variants of this system, for example: releasable versions, in-line versions, open head versions.

These are one-piece cable ties, the pawl is moulded as an integral part of the cable tie, thereby building in inherent strengths.



Locking technology of an outside serrated tie.

Locking technology

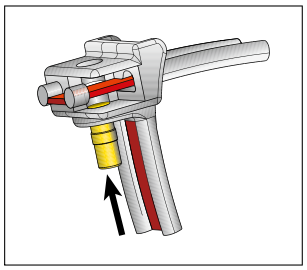
Positive locking is achieved by engaging the pawl with the strap serrations. This allows the cable tie to perform to the published minimum tensile strength, that is the loading that the cable tie can hold under application.

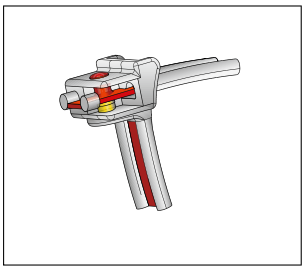
KR series cable ties

This cable tie is distinguished by its smooth strap and unique locking mechanism. With the KR series the chamfered head achieves an especially firm fit around the bundled material.

Locking technology

This patented lock technology takes advantage of the excellent deformation properties of polyamide (PA). Here, the glass fibre-reinforced (GRP) locking pin (yellow) is forced into the strap by the use of an application tool - either the KR6/8 or KR8PNSE. The strap is deformed into the head of the tie by the application of the pin, thereby locking the cable tie in position and allowing for the bundling of heavy loads.


The unlocked head (yellow) of a KR-tie.


The cable tie (red) is locked into place with the pin.

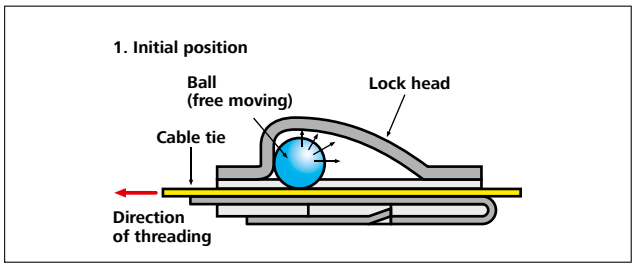
MBT series cable ties

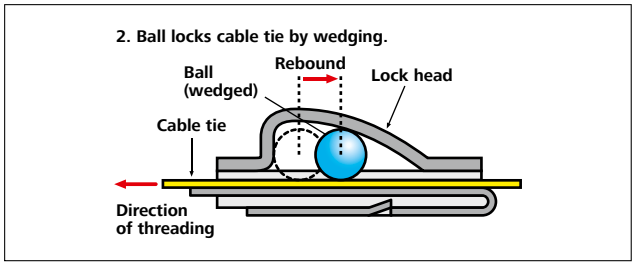
Made of stainless steel grade 304 or 316, the MBT range of cable ties has no serrations on the strap and is threaded parallel through the head, gliding under a metal ball-bearing locking mechanism. By using an appropriate application tool like our MK9SST the cable tie is tensioned and the strap cut to a flush finish.

Locking technology

The strap is locked into the head by means of the small ball-bearing. The ball locks into the small end of the wedged shaped housing, forming a positive locking with the strap.

This cable tie is not suitable for rigid objects. Retraction of the ball-bearing (see drawing) is required into the small end of the wedged shaped housing to allow for a positive locking of the strap and also having a flush cut off at the end of the strap. This retraction cannot be ensured when bundling around inflexible materials such as metal pipes. The force by cutting the cable tie might end up in a rebound that could allow the ball moving back slightly. For rigid objects we therefore recommend a protective channel (LFPC) to be laid between strap and bundled object in order to compensate the rebound. The MBT locking technology allows for minimum tensile strengths of up to 7,000 newton.





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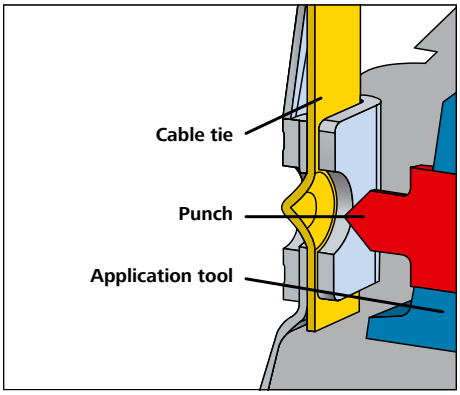
Introduction to the main locking technologies used for cable ties

MST series cable ties

MST cable ties are made of stainless steel 304. They offer similar features to MBT products but with a different head design and closure. Where space is tight the flat head allows for space savings. MST cable ties are not only weather-resistant but also highly resistant to heat, fire, and radiation. It can be used in challenging environments including indoor, outdoor and underground installations.

Locking technology

The punch-locking mechanism keeps the lock tight even in challenging areas with very high vibration such as on trains. Our MST application tools (MST6/MST9) have been specifically developed for tightening and cutting MST cable ties. This tool is mandatory to apply and lock these stainless steel cable ties properly.



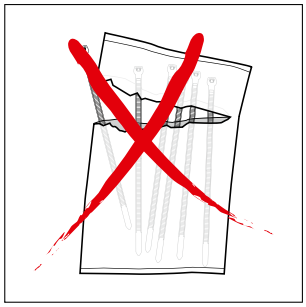
Punch-locking mechanism of the MST-Series.

Optimum storage conditions for cable ties made of Polyamide (PA)

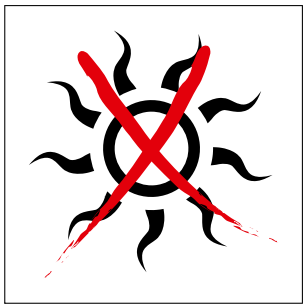
HellermannTyton cable ties, fastenings and fixings are manufactured from high-quality polyamide (PA). This industrial synthetic material is mainly processed using injection moulding, but can also be extruded.

Polyamide is a hygroscopic material. This means that the material absorbs and loses moisture. For optimum handling of cable ties it is important that the material is in a condition of equilibrium with a water content of approximately 2.5 %.

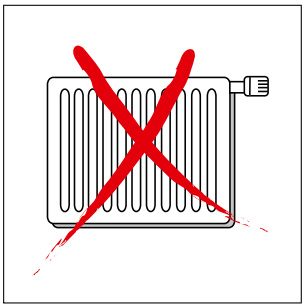
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties.



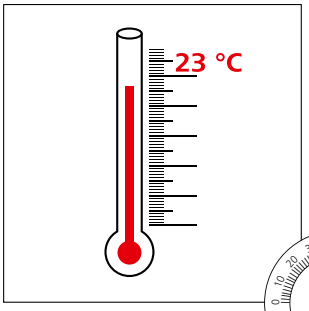
1. Once opened you should use the ties as quickly as possible.
2. Always store ties in the sealed plastic bag.



3. Do not expose the product to direct sunlight.
4. Do not store the product in sunlight; for example, on the windowsill.



5. Store the product away from direct sources of heat.
6. Avoid contact with heat: for example, do not place on the radiators.



7. The ideal storage conditions are those of the central European standard climate: 23 °C

50% relative humidity

Cable ties polyamide 6.6 standard

T-Series in PA66 natural and black

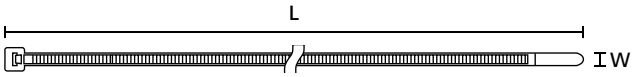
T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

Features and benefits

- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



Standard T-Series cable ties – for almost any type of application (PA66).



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18S	2.3	83.0	16.0	80	PA66	Natural (NA)	1,000 pcs.	1-2;4-6;25	111-02809
T18R	2.5	100.0	22.0	80	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-01910
	2.5	100.0	22.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-01919
T18I	2.5	145.0	35.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-02319
	2.5	145.0	35.0	80	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-02370
T18L	2.5	203.2	55.0	80	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-02010
	2.5	203.2	55.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-02019
T25L	2.8	240.0	65.0	110	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-02500
	2.8	240.0	65.0	110	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-02519
T25LL	2.8	330.0	95.0	110	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-02619
T30R	3.5	150.0	35.0	135	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-03011
	3.5	150.0	35.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-03009
T30L	3.5	198.0	50.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-03419
	3.5	198.0	50.0	135	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-03410
T30LL	3.5	290.0	80.0	135	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-03500
	3.5	290.0	80.0	135	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-03529
T40R	4.0	175.0	40.0	180	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-01626
T50S	4.6	150.0	35.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-05810
	4.6	150.0	35.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05819
T50R	4.6	200.0	50.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-05000
	4.6	200.0	50.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05013
T50M	4.6	245.0	65.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-06201
	4.6	245.0	65.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-06200
T50I	4.6	300.0	85.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-05210
	4.6	300.0	85.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05219
T50L	4.6	390.0	110.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-05400
	4.6	390.0	110.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05409
T50LL	4.6	445.0	130.0	225	PA66	Black (BK)	500 pcs.	1-2;4-6;25	111-06002

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-38

Date of issue: September 2022

Cable ties polyamide 6.6 standard

T-Series in PA66 natural and black

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T80R	4.7	205.0	55.0	355	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05019
	4.7	205.0	55.0	355	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-08010
T80I	4.7	305.0	85.0	355	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-08229
	4.7	305.0	85.0	355	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-08210
T80L	4.7	390.0	110.0	355	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-05410
	4.7	390.0	110.0	355	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-05419
T120S	7.6	225.0	55.0	535	PA66	Natural (NA)	50 pcs.	1;3;9-10;25	111-12829
T120I	7.6	300.0	80.0	535	PA66	Black (BK)	100 pcs.	1;3;9-10;25	111-12210
	7.6	300.0	80.0	535	PA66	Natural (NA)	100 pcs.	1;3;9-10;25	111-12219
T150R	7.6	365.0	100.0	670	PA66	Black (BK)	100 pcs.	1;3;9-10;25	111-14810
	7.6	365.0	100.0	670	PA66	Natural (NA)	100 pcs.	1;3;9-10;25	111-14819
T120R(E)	7.6	387.0	100.0	535	PA66	Black (BK)	100 pcs.	1;3;9-10;25	111-12010
	7.6	387.0	100.0	535	PA66	Natural (NA)	100 pcs.	1;3;9-10;25	111-12019
T120M	7.6	460.0	125.0	535	PA66	Black (BK)	100 pcs.	1;3;9-10;25	111-12610
	7.6	460.0	125.0	535	PA66	Natural (NA)	100 pcs.	1;3;9-10;25	111-12619
T120XM	7.6	600.0	175.0	535	PA66	Black (BK)	50 pcs.	1;3;9-10;25	111-12701
	7.6	600.0	175.0	535	PA66	Natural (NA)	50 pcs.	1;3;9-10;25	111-12704
T120L	7.6	760.0	225.0	535	PA66	Black (BK)	50 pcs.	1;3;9-10;25	111-12403
	7.6	760.0	225.0	535	PA66	Natural (NA)	50 pcs.	1;3;9-10;25	111-12429
T150M	8.9	530.0	150.0	780	PA66	Black (BK)	25 pcs.	1;9-10	111-00124
	8.9	530.0	150.0	780	PA66	Natural (NA)	25 pcs.	1;9-10	111-15619
T150L	8.9	820.0	245.0	780	PA66	Black (BK)	25 pcs.	1;9-10	111-15405
	8.9	820.0	245.0	780	PA66	Natural (NA)	25 pcs.	1;9-10	111-15419
T150XL	8.9	1,095.0	330.0	780	PA66	Black (BK)	25 pcs.	1;9-10	111-15500
	8.9	1,095.0	330.0	780	PA66	Natural (NA)	25 pcs.	1;9-10	111-15519
T150XLL	8.9	1,325.0	405.0	780	PA66	Black (BK)	25 pcs.	1;9-10	111-15300
T250R	12.4	515.0	125.0	1,115	PA66	Natural (NA)	25 pcs.	9-10	111-24803
T250M	12.4	565.3	150.0	1,115	PA66	Black (BK)	25 pcs.	9-10	111-25001
	12.4	565.3	150.0	1,115	PA66	Natural (NA)	25 pcs.	9-10	111-25002
T250I	12.4	730.0	203.0	1,115	PA66	Natural (NA)	25 pcs.	9-10	111-25219
T250L	12.4	880.0	254.0	1,115	PA66	Black (BK)	25 pcs.	9-10	111-24601
T250XL	12.4	1,030.0	305.0	1,115	PA66	Black (BK)	25 pcs.	9-10	111-25200
T250X	12.5	370.0	100.0	1,115	PA66	Black (BK)	100 pcs.	9-10	111-25102

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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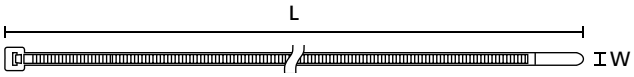
Cable ties polyamide 6.6 standard

T-Series in PA66 coloured

Coloured T-Series cable ties are ideally suited for marking purposes. They can be used to secure and/or identify different kinds of bundles at the same time.

Features and benefits

- Available in a wide range of colours and sizes
- Strong cable tie to permanently mark or identify bundles
- Easy application either manually or with a processing tool
- Coloured T-Series cable ties provide an inside serration



T-Series



T-Series cable ties – ideally suited for colour coding.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	101.6	22.0	80	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	111-00265
	2.5	101.6	22.0	80	PA66	Green (GN)	100 pcs.	1-2;4-6;25	111-01815
	2.5	101.6	22.0	80	PA66	Red (RD)	100 pcs.	1-2;4-6;25	111-01812
	2.5	101.6	22.0	80	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	111-01810
T30R	3.5	150.0	35.0	135	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	111-03008
	3.5	150.0	35.0	135	PA66	Green (GN)	100 pcs.	1-2;4-6;25	111-03014
	3.5	150.0	35.0	135	PA66	Red (RD)	100 pcs.	1-2;4-6;25	111-03004
	3.5	150.0	35.0	135	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	111-03006
T50R	4.6	200.0	50.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	111-04800
	4.6	200.0	50.0	225	PA66	Green (GN)	100 pcs.	1-2;4-6;25	111-04801
	4.6	200.0	50.0	225	PA66	Red (RD)	100 pcs.	1-2;4-6;25	111-04804
	4.6	200.0	50.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	111-04805
T50L	4.6	390.0	110.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	111-05404
	4.6	390.0	110.0	225	PA66	Green (GN)	100 pcs.	1-2;4-6;25	111-05402
	4.6	390.0	110.0	225	PA66	Red (RD)	100 pcs.	1-2;4-6;25	111-05406
	4.6	390.0	110.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	111-05428

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

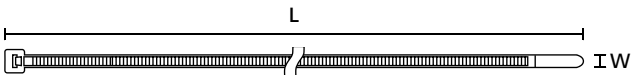
For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-40

Cable ties polyamide 6.6 standard

T-Series in PA66 coloured



T-Series

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T80R	4.7	210.0	55.0	355	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	116-08016
	4.7	210.0	55.0	355	PA66	Green (GN)	100 pcs.	1-2;4-6;25	116-08015
	4.7	210.0	55.0	355	PA66	Red (RD)	100 pcs.	1-2;4-6;25	116-08012
	4.7	210.0	55.0	355	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	116-08014
T80L	4.7	390.0	110.0	355	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	116-05416
	4.7	390.0	110.0	355	PA66	Green (GN)	100 pcs.	1-2;4-6;25	116-05415
	4.7	390.0	110.0	355	PA66	Red (RD)	100 pcs.	1-2;4-6;25	116-05412
	4.7	390.0	110.0	355	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	116-05414
T150R(H)	7.6	365.0	100.0	670	PA66	Blue (BU)	100 pcs.	1;3;9-10;25	116-15016
	7.6	365.0	100.0	670	PA66	Red (RD)	100 pcs.	1;3;9-10;25	116-15012
	7.6	365.0	100.0	670	PA66	Yellow (YE)	100 pcs.	1;3;9-10;25	116-15014
T120R(E)	7.6	387.0	100.0	535	PA66	Green (GN)	100 pcs.	1;3;9-10;25	111-12001
	7.6	387.0	100.0	535	PA66	Red (RD)	100 pcs.	1;3;9-10;25	111-12002

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-41

Cable ties for outdoor use (UV-resistant)

T-Series in PA66W/UV black

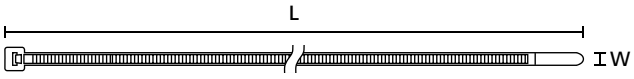
These inside serrated cable ties are made of UV-resistant Polyamide 6.6 (PA66W/UV) and thus suitable for outdoor applications. UV stabilised cable ties resist UV radiation for a considerably longer period compared to standard PA66 cable ties. They can easily be used for bundling and securing cables, pipes and hoses especially in outdoor areas.

Features and benefits

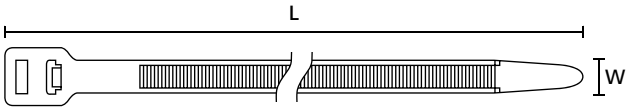
- UV-resistant black cable tie available in a wide range of sizes
- Made from 100 % high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to bent tail



UV-resistant T-Series cable ties (PA66W/UV).



T-Series



T250-series

Material specification please see page 26.

Specific part numbers according to EN45545 available on request.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-01960
T18I	2.5	145.0	35.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-02360
T18L	2.5	203.2	55.0	80	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-02012
T25LL	2.8	330.0	95.0	110	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-02660
T30R	3.5	150.0	35.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-03030
T30L	3.5	198.0	50.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-03460
T30LL	3.5	290.0	80.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-03570
T40R	4.0	175.0	40.0	180	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-01625
T50S	4.6	150.0	35.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-05860
T50R	4.6	200.0	50.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-04889
T50M	4.6	245.0	65.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-06206
T50I	4.6	300.0	85.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-05260
T50L	4.6	390.0	110.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-05440
T50LL	4.6	445.0	130.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-06000
T80R	4.7	205.0	55.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-05060
T80I	4.7	305.0	85.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-08290
T80L	4.7	390.0	110.0	355	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-05460

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

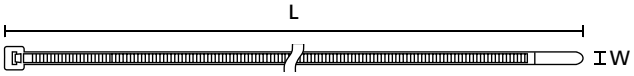
For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-42

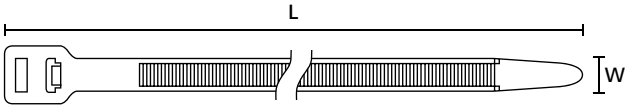
Date of issue: September 2022

Cable ties for outdoor use (UV-resistant)

T-Series in PA66W/UV black



T-Series



T250-series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T120S	7.6	225.0	55.0	535	PA66W	Black (BK)	50 pcs.	1;3;9-10;25	111-12830
T120I	7.6	300.0	80.0	535	PA66W	Black (BK)	100 pcs.	1;3;9-10;25	111-12230
T150R(H)	7.6	365.0	100.0	670	PA66W	Black (BK)	100 pcs.	1;3;9-10;25	111-14860
T120R(E)	7.6	387.0	100.0	535	PA66W	Black (BK)	100 pcs.	1;3;9-10;25	111-12060
T120M	7.6	460.0	125.0	535	PA66W	Black (BK)	100 pcs.	1;3;9-10;25	111-12660
T120L	7.6	760.0	225.0	535	PA66W	Black (BK)	50 pcs.	1;3;9-10;25	111-12430
T150M	8.9	530.0	150.0	780	PA66W	Black (BK)	25 pcs.	1;9-10	111-15660
T150L	8.9	820.0	245.0	780	PA66W	Black (BK)	25 pcs.	1;9-10	111-15460
T150XL	8.9	1,095.0	330.0	780	PA66W	Black (BK)	25 pcs.	1;9-10	111-15502
T150XLL	8.9	1,325.0	405.0	780	PA66W	Black (BK)	25 pcs.	1;9-10	111-15305
T250R	12.4	515.0	125.0	1,115	PA66HIRHSUV	Black (BK)	25 pcs.	9-10	111-24805

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-43

Cable ties for temperatures up to + 105 °C (heat stabilised)

T-Series in PA66HS natural and black

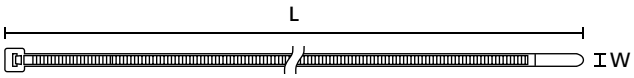
These inside serrated cable ties are made from heat stabilised Polyamide 6.6 (PA66HS). They can be applied in environments with continuous temperatures up to +105 °C. T-Series cable ties can be easily installed by hand or using an application tool to ensure consistency of installation.



Heat stabilised T-Series cable ties up to +105 °C.

Features and benefits

- Heat stabilised cable ties (PA66HS) for temperatures up to +105 °C
- Available in a wide range of sizes to cover almost every application
- Inside serration provides a strong hold onto bundles
- Manual and/or pneumatic tools available for greater process reliability
- Commonly offered in natural and black, other colours available on request



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-01950
	2.5	100.0	22.0	80	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-01959
T18I	2.5	145.0	35.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-02358
	2.5	145.0	35.0	80	PA66HS	Natural (NA)	1,000 pcs.	1-2;4-6;25	111-02359
T18L	2.5	203.2	55.0	80	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-02005
	2.5	203.2	55.0	80	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-02059
T30R	3.5	150.0	35.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-03259
	3.5	150.0	35.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-03050
T30L	3.5	198.0	50.0	135	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-03460
	3.5	198.0	50.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-03450
	3.5	198.0	50.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-03459
T30LL	3.5	290.0	80.0	135	PA66HS	Black (BK)	1,000 pcs.	1-2;4-6;25	111-03660
	3.5	290.0	80.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-03569
T40R	4.0	175.0	40.0	180	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-01623
	4.0	175.0	40.0	180	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-01627
T50S	4.6	150.0	35.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-05859
	4.6	150.0	35.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-05850
T50R	4.6	200.0	50.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-04950
T50I	4.6	300.0	85.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-05259
	4.6	305.0	80.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-05250
T50L	4.6	390.0	110.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-05435
	4.6	390.0	110.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-05436

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

STD VG

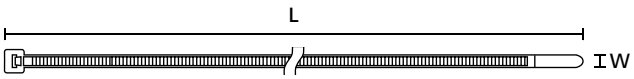
For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-44

Cable ties for temperatures up to + 105 °C (heat stabilised)

T-Series in PA66HS natural and black



T-Series

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T80R	4.7	205.0	55.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-05059
	4.7	210.0	55.0	355	PA66HS	Black (BK)	1,000 pcs.	1-2;4-6;25	117-08070
T80I	4.7	305.0	85.0	355	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-08250
	4.7	305.0	85.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-08259
T80L	4.7	390.0	110.0	355	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-00388
	4.7	390.0	110.0	355	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	111-05459
T120S	7.6	225.0	55.0	535	PA66HS	Black (BK)	50 pcs.	1;3;9-10;25	111-12850
T150R(H)	7.6	365.0	100.0	670	PA66HS	Black (BK)	100 pcs.	1;3;9-10;25	111-15050
	7.6	365.0	100.0	670	PA66HS	Natural (NA)	100 pcs.	1;3;9-10;25	111-15069
T120R(E)	7.6	387.0	100.0	535	PA66HS	Black (BK)	100 pcs.	1;3;9-10;25	111-12050
	7.6	387.0	100.0	535	PA66HS	Natural (NA)	100 pcs.	1;3;9-10;25	111-12059
T120M	7.6	460.0	125.0	535	PA66HS	Black (BK)	100 pcs.	1;3;9-10;25	111-00153
T120XM	7.6	600.0	175.0	535	PA66HS	Black (BK)	50 pcs.	1;3;9-10;25	111-12700
	7.6	600.0	175.0	535	PA66HS	Natural (NA)	50 pcs.	1;3;9-10;25	111-12719
T120L	7.6	760.0	225.0	535	PA66HS	Natural (NA)	50 pcs.	1;3;9-10;25	111-12449
	7.6	760.0	225.0	535	PA66HS	Black (BK)	50 pcs.	1;3;9-10;25	111-12440
T150M	8.9	530.0	150.0	780	PA66HS	Black (BK)	25 pcs.	1;9-10	111-15609
T150L	8.9	820.0	245.0	780	PA66HS	Black (BK)	25 pcs.	1;9-10	111-15410
T150XL	8.9	1,095.0	330.0	780	PA66HS	Black (BK)	25 pcs.	1;9-10	111-15510

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-45

Cable ties for higher impact resistant polyamide 6.6 ScanBlack

T-Series in PA66HIR(S) black

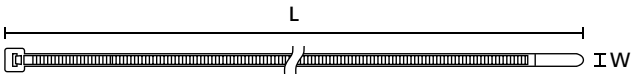
Impact resistance T-Series cable ties are manufactured from PA66HIR(S) – an impact modified material formulation. This high performance material offers limited brittleness sensitivity and a higher flexibility even at low temperatures. PA66HIR(S) cable ties meet increasing requirements like in the chemical, medical and/or automotive industry.

Features and benefits

- Impact resistant cable tie in black colour
- For bundling and securing cables, pipes and hoses
- Available in different sizes
- Higher flexibility especially in cold environments
- Limited brittleness sensitivity



Impact resistant T-Series cable tie (PA66HIR(S)).



T-Series

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T50R	4.6	200.0	50.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-6;25	111-04890
T50I	4.6	300.0	85.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-6;25	111-00222
T50L	4.6	390.0	110.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-6;25	111-05441
T120I	7.6	300.0	80.0	535	PA66HIR(S)	Black (BK)	100 pcs.	1;3;9-10;25	111-12203
T120R(E)	7.6	387.0	100.0	535	PA66HIR(S)	Black (BK)	100 pcs.	1;3;9-10;25	111-12032
T120L	7.6	760.0	225.0	535	PA66HIR(S)	Black (BK)	50 pcs.	1;3;9-10;25	111-12402

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-46

Date of issue: September 2022

Cable ties for higher fire-protection

T-Series in PA66V0 white

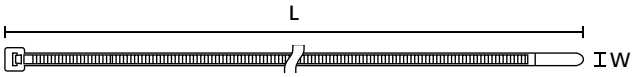
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application especially where safety regulations are high and the reduction of smoke and dangerous gases is required. PA66V0 products are most critically used within public sector areas – particularly in the rail, construction and defence industry.



White T-Series cable ties for higher fire protection (PA66V0).

Features and benefits

- White cable tie for higher fire-protection
- Conform to low smoke generation requirements (UL94 V0)
- Low evolution of toxic gases and corrosive acids in event of a fire
- PA66V0 cable ties are available in different sizes
- High safety rating due to low fire hazard



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	111-91819
T18L	2.5	203.2	55.0	80	PA66V0	White (WH)	1,000 pcs.	1-2;4-6;25	111-02043
T30R	3.6	150.0	35.0	135	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	111-93019
T50R	4.6	200.0	50.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	111-95019
T50I	4.6	300.0	85.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	111-00317
T50L	4.7	390.0	110.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	111-05438
T120R(E)	7.6	387.0	100.0	535	PA66V0	White (WH)	100 pcs.	1;3;9-10;25	111-91210

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-47

Cable ties for temperatures up to +150 °C (5000 h) in polyamide 4.6

T-Series in PA46 natural and grey

These inside serrated cable ties are made from Polyamide 4.6 (PA46). They can be applied in environments with temperatures up to +195 °C (for 500 hours) which makes them suitable for applications where a broader temperature range is required. Polyamide 4.6 is a well known material in the automotive, railway or white goods area. An application tool is recommended to ensure greater process reliability while installing cable ties.

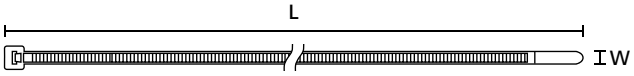
Features and benefits

- Cable tie for high temperature applications up to +150 °C (5000 h) and +195 °C (500 h)
- Available in different sizes to cover various bundle diameters
- Low smoke generation in the event of a fire
- PA46 is a moisture sensitive material
- Inside serrated cable tie offers strong hold around bundles
- Easy application either manually or with an application tool



T-Series cable ties – higher temperature resistance up to +150 °C for 5000 hours (PA46).

Material specification please see page 26.



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA46	Natural (NA)	1,000 pcs.	1-2;4-6;25	114-01879
T30R	3.5	150.0	35.0	135	PA46	Grey (GY)	100 pcs.	1-2;4-6;25	111-00264
	3.5	150.0	35.0	135	PA46	Natural (NA)	100 pcs.	1-2;4-6;25	114-03379
T50R	4.6	202.0	50.0	225	PA46	Grey (GY)	100 pcs.	1-2;4-6;25	111-00824
	4.6	202.0	50.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-6;25	111-00525
T50I	4.6	300.0	85.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-6;25	111-05220
T50L	4.6	390.0	110.0	225	PA46	Natural (NA)	100 pcs.	1-2;4-6;25	114-05779
T120R(E)	7.6	387.0	100.0	535	PA46	Natural (NA)	100 pcs.	1;3;9-10;25	114-12179
	7.6	387.0	100.0	535	PA46	Grey (GY)	100 pcs.	1;3;9-10;25	111-00819

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

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Add items to your watchlist!
www.HT.click/49-48

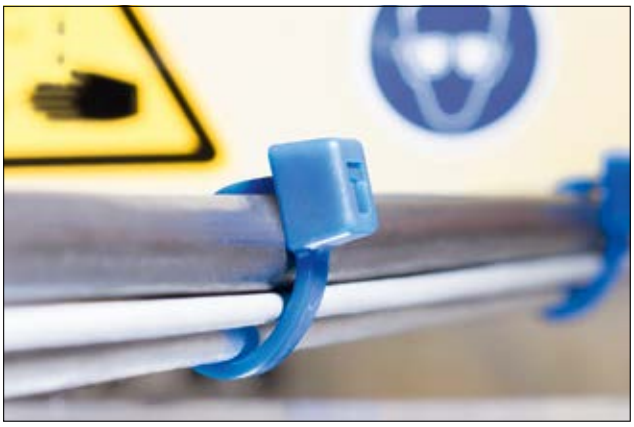
Cable ties for higher chemical resistance and temperatures of -80° to +170 °C

T-Series in E/TFE (Tefzel®) blue

E/TFE or Tefzel® cable ties are used when higher chemical resistance and/or temperatures up to +170 °C are required. These ties are most likely chosen for challenging applications in industries like food and beverage, aerospace, automotive or railway.

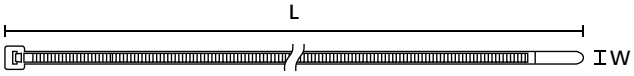
Features and benefits

- Blue cable tie offering high chemical resistance
- Suitable for applications with temperatures of -80° to +170 °C
- Resistant to radioactivity and UV light
- E/TFE is a non hydroscopic material, no moisture absorption
- Complying with UL94 V0 requirements



T-Series E/TFE cable ties – for higher chemical resistance up to +170 °C.

For more information on E/TFE mounts please refer to KR-Series on page 171.



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	101.6	22.0	80	E/TFE	Blue (BU)	100 pcs.	2;5	111-00659
T30R	3.5	150.0	36.0	133	E/TFE	Blue (BU)	100 pcs.	1-2;4-6;25	111-00698
T50R	4.7	202.0	50.0	225	E/TFE	Blue (BU)	100 pcs.	1-2;4-6;25	111-00732
T50L	4.7	381.0	105.0	225	E/TFE	Blue (BU)	100 pcs.	1-2;4-6;25	111-00718
T120R	7.4	387.0	105.0	535	E/TFE	Blue (BU)	50 pcs.	1;3;9-10;25	111-01125

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In additon to Tefzel® from DuPont HellermannTyton also uses equivalent E/TFE raw material from other suppliers.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-49

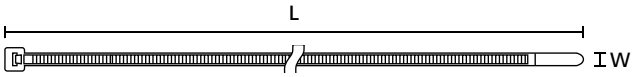
Polypropylene cable ties for higher chemical resistance and temperatures up to +115 °C

T-Series in PP natural and black

T-Series cable ties made from Polypropylene (PP) are less hydroscopic and offer a higher chemical resistance and temperature range compared to a standard Polyamide 6.6 (PA66) material. Cable ties from Polypropylene can withstand continuous operating temperatures up to +115 °C. These cable ties are used to bundle and secure cables, pipes and/or hoses.

Features and benefits

- Polypropylene cable ties for higher chemical reistance
- Can withstand continuous operating temperatures up to +115 °C
- Different sizes available in black and natural colour
- Due to its low density PP cable ties can float on water
- Less hydroscopic material, almost no water absorbtion



T-Series



T-Series cable ties for higher chemical resistance and temperatures up to +115 °C (PP).

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	65	PP	Black (BK)	100 pcs.	1-2;4-6;25	111-08310
	2.5	100.0	22.0	65	PP	Natural (NA)	100 pcs.	1-2;4-6;25	111-01723
T30R	3.5	150.0	35.0	105	PP	Natural (NA)	100 pcs.	1-2;4-6;25	111-01725
T50R	4.6	200.0	50.0	135	PP	Black (BK)	100 pcs.	1-2;4-6;25	111-08311
	4.6	200.0	50.0	135	PP	Natural (NA)	100 pcs.	1-2;4-6;25	111-01728
T120R	7.6	387.0	104.0	270	PP	Black (BK)	100 pcs.	1;3;9-10;25	111-08313

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-50

Cable ties made from sustainable bioplastic

T-Series in PA11 black

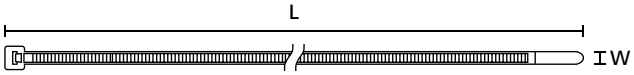
T-Series cable ties manufactured from PA11 have many technical features making them suitable for use in a variety of applications to fix and support cables, pipes and other elements. They offer an excellent resistance to chemicals in most challenging environments like offshore or on oil rigs and construction vehicles. In addition the very good UV resistance makes it a perfect choice for solar panel cable installations.

Features and benefits

- Made of Polyamide 11 – a sustainable bioplastic from vegetable oil
- Very good UV resistance and durability in outdoor applications
- Stable technical performance even at very low temperatures
- High resistance to chemicals including chlorides
- Low water absorption rate offers consistent technical performance



A sustainable T-Series cable tie with high resistance to chemicals and UV light.



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18R	2.5	100.0	22.0	80	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-01718
T30R	3.5	150.0	35.0	130	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-01719
T50S	4.6	150.0	35.0	170	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-01720
T50R	4.6	200.0	50.0	170	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-01721
T50M	4.6	245.0	65.0	225	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-02218
T50I	4.6	300.0	85.0	225	PA11	Black (BK)	100 pcs.	1-2;4-6;25	111-02217
T120XM	7.6	600.0	175.0	535	PA11	Black (BK)	50 pcs.	1;3;9-10;25	111-12705
T120L	7.6	760.0	225.0	535	PA11	Black (BK)	50 pcs.	1;3;9-10;25	111-12470

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-51

Cable ties in-between size to T-Series

LK-Series

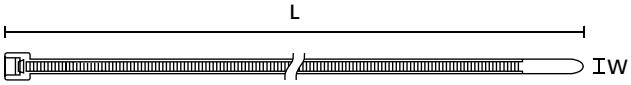
For bundling and securing cables, pipes, hoses and other elements. These cable ties can be used for a countless number of applications. The LK-Series is similar to T-Series but offers in-between sizes to fit individual customer needs.

Features and benefits

- Inside serrated cable ties for a strong hold around bundles
- Various materials and sizes are available
- High tensile strength with very low insertion force
- Easy application either manually or with an application tool



LK-Series – in-between size to T-Series.



LK-Series

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
LK2A	4.6	270.0	73.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	111-60110
	4.6	270.0	73.0	225	PA66	Blue (BU)	100 pcs.	1-2;4-6;25	111-60104
	4.6	270.0	73.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	111-60119
	4.6	270.0	73.0	225	PA66	Red (RD)	100 pcs.	1-2;4-6;25	111-60106
	4.6	270.0	73.0	225	PA66	Yellow (YE)	100 pcs.	1-2;4-6;25	111-60108
	4.6	270.0	73.0	225	PA66HIR	Black (BK)	500 pcs.	1-2;4-6;25	111-00118
	4.6	270.0	73.0	225	PA66HIR(S)	Black (BK)	100 pcs.	1-2;4-6;25	111-00127
	4.6	270.0	73.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	111-60150
	4.6	270.0	73.0	225	PA66HS	Brown (BN)	100 pcs.	1-2;4-6;25	111-60136
	4.6	270.0	73.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	111-60160
LK2	4.8	120.0	28.0	135	PA66	Natural (NA)	200 pcs.	1-2;4-6;25	111-60219
LK5	13.2	535.0	150.0	1,115	PA66	Black (BK)	50 pcs.	1;3;9-10;25	111-60510
	13.2	535.0	150.0	1,115	PA66	Natural (NA)	50 pcs.	1;3;9-10;25	111-60519
	13.2	535.0	150.0	1,115	PA66HIR(S)	Black (BK)	50 pcs.	1;3;9-10;25	111-60501
	13.2	535.0	150.0	1,115	PA66HS	Natural (NA)	50 pcs.	1;3;9-10;25	111-60559
	13.2	535.0	150.0	1,115	PA66W	Black (BK)	50 pcs.	1;3;9-10;25	111-60560

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-52

Date of issue: September 2022

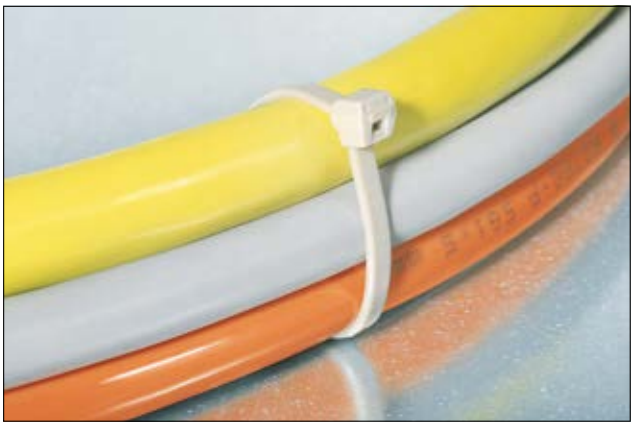
Cable ties for high temperature applications up to +240 °C

PEEK Ties, inside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitablility for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability



The PEEK cable tie PT220 for high temperature applications.

Please find more PEEK products for your system solutions: with foot part, see page 95. Screw Mount CTAM, see page 172.

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PT220	4.7	220.0	8.0	56.0	380	PEEK	Beige (BGE)	100 pcs.	1-2;4-6;25	111-01235

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-53

Cable ties with open head

Q-Series

Q-Series cable ties for bundling and securing cables, pipes and hoses. The innovative and effective cable ties enable a simple and quick installation.

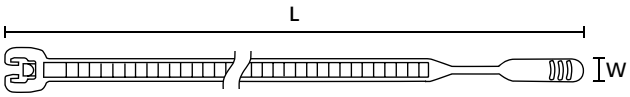
Features and benefits

- Open lock head for quick and easy insertion
- Integrated pre-locking function
- More than 25 % faster in application
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool



Q-tie cable ties: choose from a wide product range in different sizes.

Please find more Q-Series products for your system solution on page 143.



Q-Series

www.HellermannTyton.co.uk/Q-Series-cat22

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
Q18R	2.6	105.0	24.0	80	PA66	Black (BK)	100 pcs.	1-2;4-6;25	109-00030
	2.6	105.0	24.0	80	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	109-00001
Q30R	3.6	160.0	38.0	130	PA66	Black (BK)	100 pcs.	1-2;4-6;25	109-00039
	3.6	160.0	38.0	130	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	109-00010
Q50L	4.7	410.0	110.0	225	PA66	Black (BK)	100 pcs.	1-2;4-6;25	109-00051
	4.7	410.0	110.0	225	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	109-00022
Q120R	7.7	420.0	110.0	530	PA66	Black (BK)	100 pcs.	1;9-10;25	109-00055
	7.7	420.0	110.0	530	PA66	Natural (NA)	100 pcs.	1;9-10;25	109-00026

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools								
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-54

Date of issue: September 2022

Cable ties with smart design

X-Series

The X-Series range of cable ties provides a new and improved design compared with standard cable ties, delivering a range of benefits and enhanced performance. With a new streamlined design and smaller head, the X-Series cable ties provide a superior fixing solution for tight applications, whilst also benefiting from a better grip around the bundle. This professional cable tie range is available in weather resistant and high impact / heat stabilised materials, ensuring these fixings consistently perform well both at high temperatures and in cold environments.

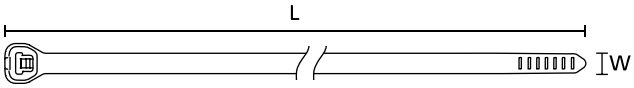


X-Series provides a superior fixing solution for tight applications.

Features and benefits

- Inside serrated cable tie
- High tensile strength around cable bundles
- Smooth, rounded head design
- Space saving solution
- Improved ergonomic design
- Provides a secure fastening with no lateral movement

Material specification please see page 26.



X-series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
X80R	4.7	200.0	50.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-6;25	108-00004
X80I	4.7	300.0	84.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-6;25	108-00018
X80L	4.7	385.0	110.0	355	PA66HIRHS	Black (BK)	100 pcs.	1-2;4-6;25	108-00028
X120R	7.7	369.0	100.0	535	PA66HIRHS	Black (BK)	100 pcs.	1;5;25	108-00040
	7.7	369.0	100.0	535	PA66W	Black (BK)	100 pcs.	1;5;25	108-00042
X250R	13.0	535.0	150.0	1,115	PA66HIRHS	Black (BK)	50 pcs.	1;3;9-10;25	108-00050
	13.0	535.0	150.0	1,115	PA66W	Black (BK)	50 pcs.	1;3;9-10;25	108-00052
X250I	13.0	715.0	205.0	1,115	PA66HIRHS	Black (BK)	50 pcs.	1;3;9-10;25	108-00045

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-55

Cable ties for hose and gaiter

CTT-Series natural and black

CTT is designed to secure pipes, hoses and gaiters where low pressures are being secured. These ties can be used in many different industries including automotive, white goods manufacturing, medical industry and construction.

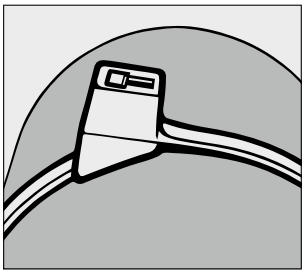
Features and benefits

- Curved head design offers a good fit to the bundle
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool

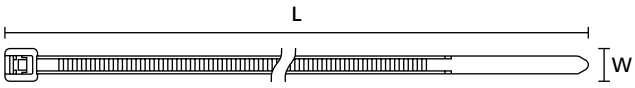


CTT ties installed on flexible gaiters.

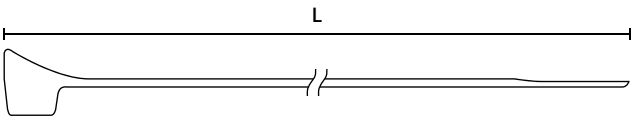
Material specification please see page 26.



For secure fixing of round and solid shapes.



CTT series



CTT Hose Ties

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
CTT20R	2.5	100.0	13.0	89	PA66HS	Black (BK)	1,000 pcs.	1-2;4-6;25	112-51960
	2.5	100.0	13.0	90	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	112-51919
CTT60R	4.7	205.0	45.0	267	PA66	Black (BK)	100 pcs.	1-2;4-6;25	112-56019
	4.7	205.0	45.0	267	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	112-52112

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-56

Date of issue: September 2022

Cable ties for parallel routing

DH-Series

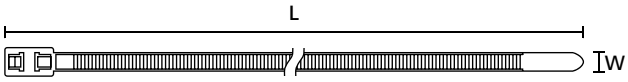
Double loop head ties are ideal for separation of two cable runs without the need for additional cable ties. Additionally these ties are widely used within the packaging industry. The first loop closes and secures the bag whilst the second loop can be made into a carrying handle (subject to weight).



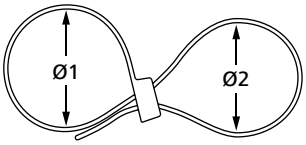
DH-Series cable ties for parallel routing.

Features and benefits

- Possibility to separate bundles with only one cable tie
- Cable tie with two heads creating an inside and outside serrated loop
- Available in a wide range of materials
- Bundles can be of different diameter
- Maximum bundle diameter is a maximum combined bundle
- Easy application either manually or with a processing tool



DH-Series



DH-Series maximum combined bundle diameter

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Min. Tensile Strength 2nd loop	Material	Colour	Pack Cont.	Tools	Article-No.
T50RDH	4.7	210.0	38.0	225	180 N	PA46	Grey (GY)	100 pcs.	1-2;4-6;25	117-05168
	4.7	210.0	38.0	225	180 N	PA66	Natural (NA)	100 pcs.	1-2;4-6;25	117-05002
	4.7	210.0	38.0	225	180 N	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	117-05050
	4.7	210.0	38.0	225	180 N	PA66W	Black (BK)	500 pcs.	1-2;4-6;25	117-05060
	4.7	210.0	38.0	225	180 N	PA66	Black (BK)	100 pcs.	1-2;4-6;25	117-05000
T50IDH	4.7	305.0	76.2	225	180 N	PA66HS	Black (BK)	1,000 pcs.	1-2;4-6;25	117-05350
	4.7	305.0	76.2	225	180 N	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	117-05360
T50LDH	4.7	395.0	100.0	225	180 N	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	117-00008

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-57

Cable ties for food industry, detectable

MCT-Series, PA66MP

The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small ‚cut-off' sections of the tie to be detected by standard metal-detecting equipment. Ideally suited for the installaton of cabling in and around the manufacturing process.

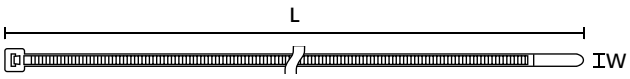
Features and benefits

- Total metal dispersion throughout the tie
- Can support quality assurance in the production of food stuffs, for example HACCP
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Magnetic detectable (detection level depending on specific application and equipment)



Our detectable MCT(S) cable ties are used in the food and pharmaceutical industry.

www.HellermannTyton.co.uk/MCT-cat22



MCT-Series

Material specification please see page 26.

Can support quality assurance in the production of food stuffs, for example HACCP.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
MCT18R	2.5	100.0	22.0	80	PA66MP	Blue (BU)	100 pcs.	1-2;4-6;25	111-01225
MCT30R	3.5	150.0	35.0	135	PA66MP	Blue (BU)	100 pcs.	1-2;4-6;25	111-00829
MCT50R	4.6	203.2	50.0	225	PA66MP	Blue (BU)	100 pcs.	1-2;4-6;25	111-00830
MCT50L	4.7	380.0	110.0	225	PA66MP	Blue (BU)	100 pcs.	1-2;4-6;25	111-00831
	4.7	380.0	110.0	225	PA66MP	Green (GN)	100 pcs.	1-2;4-6;25	111-01169
	4.7	380.0	110.0	225	PA66MP	Red (RD)	100 pcs.	1-2;4-6;25	111-01167
	4.7	380.0	110.0	225	PA66MP	Yellow (YE)	100 pcs.	1-2;4-6;25	111-01168
MCT120R	7.6	387.0	100.0	535	PA66MP	Blue (BU)	100 pcs.	1;3;9-10;25	111-01136

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-58

Cable ties for food industry, detectable, corrosion resistant

MCTS-Series, PA66MP+

Our MCTS cable ties have been specifically developed to be used in the food and beverage as well as in the pharmaceutical industry. A unique manufacturing process in combination with a unique material formulation offers outstanding perfomance in line with high corrosion resistance. This makes the MCTS an ideal product even for very humid environments. In addition, the MCTS ties manufactured from a polypropylene base material offer very good chemical resistance.

Features and benefits

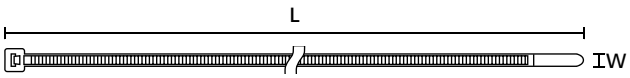
- Total metal dispersion throughout the tie
- Can support quality assurance in the production of food stuffs, for example HACCP
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Magnetic detectable (detection level depending on specific application and equipment)
- MCTS ties have very good corrosion resistance



Our detectable MCT(S) cable ties are used in the food and pharmaceutical industry.

More colours on request. Please contact us.

Can support quality assurance in the production of food stuffs, for example HACCP.



MCT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
MCTS100	2.5	100.0	22.0	60	PA66MP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01341
MCTS150	3.5	153.0	36.0	110	PA66MP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01342
	3.5	153.0	36.0	110	PA66MP+	Mustard (MST)	100 pcs.	1-2;4-6;25	111-01381
MCTS200	4.7	202.0	50.0	150	PA66MP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01343
	4.7	202.0	50.0	150	PA66MP+	Mustard (MST)	100 pcs.	1-2;4-6;25	111-01382
	4.7	202.0	50.0	150	PA66MP+	Russet (RUS)	100 pcs.	1-2;4-6;25	111-01385
MCTS300	4.8	301.0	80.0	150	PA66MP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01399
	4.8	301.0	80.0	150	PA66MP+	Mint Green (MGN)	100 pcs.	1-2;4-6;25	111-01400
	4.8	301.0	80.0	150	PA66MP+	Mustard (MST)	100 pcs.	1-2;4-6;25	111-01401
	4.8	301.0	80.0	150	PA66MP+	Russet (RUS)	100 pcs.	1-2;4-6;25	111-01402

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Cable ties for food industry, detectable

The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small ‚cut-off' sections of the tie to be detected by standard metal-detecting equipment. Ideally suited for the installaton of cabling in and around the manufacturing process.

Features and benefits

- Manufactured from metal content Polypropylene
- High chemical and temperature resistance
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Magnetic and X-Ray detectable (detection level depending on specific application and equipment)
- MCTS ties have very good corrosion resistance
- Can support quality assurance in the production of food stuffs, for example HACCP

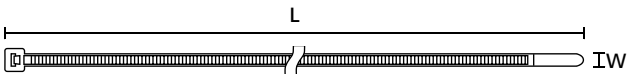


MCTPP ties have a high chemical and temperature resistance.

The MCT ties made of PA66MP are the ideal complement for MCMB mounts on page 167.

Can support quality assurance in the production of food stuffs, for example HACCP.

MCT-Series / MCTS-Series PPMP



MCT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
MCTPP18R	2.4	100.0	22.0	85	PPMP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01664
MCTPP30R	3.5	150.0	35.0	130	PPMP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01665
MCTPP50R	4.6	203.2	50.0	150	PPMP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01666
MCTPP50L	4.6	390.0	110.0	150	PPMP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01667
MCTPP120R	7.6	387.0	100.0	380	PPMP+	Blue (BU)	100 pcs.	1;3;9-10;25	111-01668

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

MCTS-Series, PPMP+

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
MCTS200	4.7	201.0	50.0	140	PPMP+	Blue (BU)	100 pcs.	1-2;4-6;25	111-01386

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-60

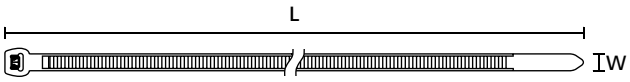
Cable ties for thin-walled bundles

OS-Series

OS-Series cable ties are used in many areas where thin-walled or soft insulation wires and cable are being installed, for instance automotive and aircraft industry. OS ties manufactured from PA66V0 material are suitable for applications where safety regulations require reduction of smoke and dangerous gases.

Features and benefits

- Outside serrated cable tie with smooth surface to the bundle
- Tie follows the contours of the cable bundle perfectly
- Takes up less space due to curved head design
- Easy insertion combined with high tensile strength
- PA46 material for higher temperatures up to +195 °C (500 h)
- PA66V0 cable ties fulfill Limited Fire Hazard requirements
- Easy application either manually or with a processing tool



OS-Series



The curved head design of the OS-Series



Outside serrated OS-Series cable tie with smooth surface to the bundle.

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
T18ROS	2.5	100.0	20.0	80	PA66HS	Natural (NA)	1,000 pcs.	1-2;4-6;25	118-00035
	2.5	100.0	20.0	80	PA66HS	Black (BK)	500 pcs.	1-2;4-6;25	118-04701
	2.5	100.0	20.0	80	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	118-00079
T30ROS	3.4	145.0	35.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	118-04800
T30LOS	3.4	200.0	50.0	135	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	118-00044
	3.4	200.0	50.0	135	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	118-00080
	3.4	200.0	50.0	135	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	118-04900
T50SOS	4.6	150.0	35.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	118-05850
T50ROS	4.6	200.0	50.0	225	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	118-05059
	4.6	200.0	50.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	118-00127
	4.6	200.0	50.0	225	PA46	Grey (GY)	500 pcs.	1-2;4-6;25	118-05078
	4.6	200.0	50.0	225	PA66HS	Black (BK)	500 pcs.	1-2;4-6;25	118-05040
T50MOS	4.6	245.0	66.0	225	PA66V0	White (WH)	100 pcs.	1-2;4-6;25	118-00081
	4.6	245.0	66.0	225	PA66W	Black (BK)	100 pcs.	1-2;4-6;25	118-00128
	4.6	245.0	66.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	118-00018
T50LOS	4.6	384.0	110.0	225	PA66HS	Black (BK)	100 pcs.	1-2;4-6;25	118-05900
T120ROS	7.6	385.0	105.0	535	PA66HS	Natural (NA)	100 pcs.	1;3;9-10;25	118-00067
	7.6	385.0	105.0	535	PA66V0	White (WH)	100 pcs.	1;3;9-10;25	118-00082
	7.6	385.0	105.0	535	PA66W	Black (BK)	100 pcs.	1;3;9-10;25	118-00130
	7.6	385.0	105.0	535	PA66HS	Black (BK)	100 pcs.	1;3;9-10;25	118-00066

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-61

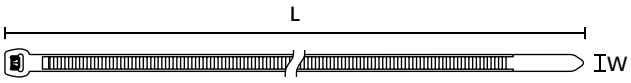
Cable ties for high temperature applications up to +240 °C

PEEK Ties, outside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitablility for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Outside serrated cable tie with smooth surface to the bundle
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability



PEEK-Series



Outside serrated Cable Tie and Identification tag HFTP48 made from Peek.

Please find more PEEK products for your system solutions: with foot part, see page 95. Screw Mount CTAM, see page 172.

Material specification please see page 26.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PT2A		3.4	145.0	4.0	35.0	230	PEEK	Beige (BGE)	100 pcs.	1-2;4-6;25	118-00032
PT3B		4.7	250.0	4.0	65.0	300	PEEK	Beige (BGE)	100 pcs.	1-2;4-6;25	118-00116

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-62

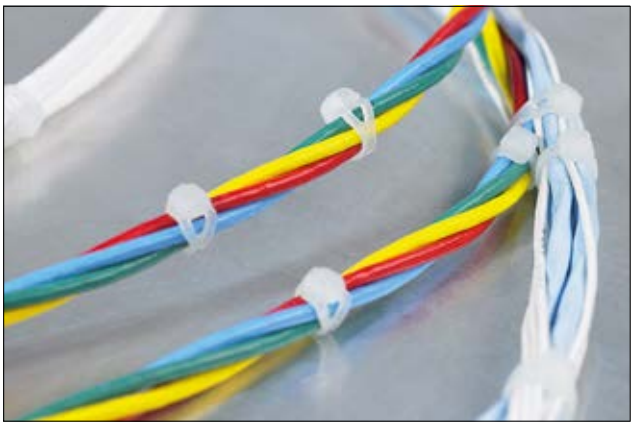
Date of issue: September 2022

Cable ties with 90° angled head

V-Series

Due to its low profile head, V-Series outside serrated cable ties are perfectly suited for applications with restricted space, such as camera, alarm and automation systems (Remote I/O Systems).

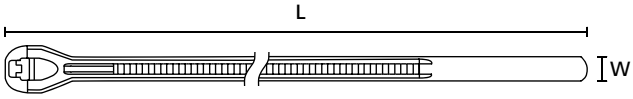
Where bundles are fed through a grommet or ductwork, V-Series provides a practical solution due to its unique rounded design.



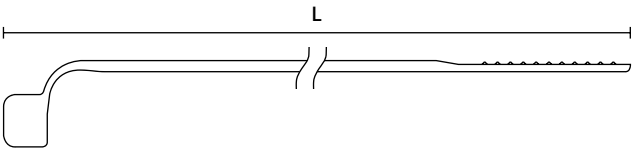
V-Series is perfect for parallel bundles.

Features and benefits

- Outside serrated cable tie with smooth surface to the bundle
- The 90° angled head perfectly fits onto the bundle
- Rounded head design minimises the risk of damage to insulation, especially of parallel routed bundles
- Low profile head takes up less space above the bundle
- Easy insertion and high tensile strength
- Easy application either manually or with a processing tool



V-Series



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
V100R	2.5	102.5	20.0	100	PA66HS	Natural (NA)	1,000 pcs.	1-2;4-6;25	118-00074
V150R	3.3	150.0	35.0	150	PA66HS	Natural (NA)	100 pcs.	1-2;4-6;25	118-00089

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-63

Cable ties with low profile head

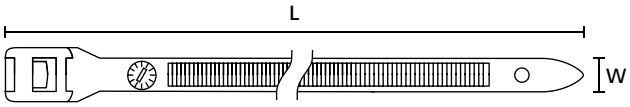
These ties are particularly useful in areas with restricted space. The low profile design ensures that nothing snags on the heads. Coloured low profile cable ties are ideal for securing foam padding to playgroud equipment or as a simple means of identifying equipment.

Features and benefits

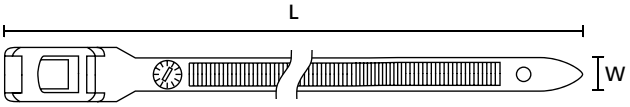
- Outside serrated cable tie with a smooth surface to the bundle
- Coloured cable ties can be used for identification
- Broad contact area with the bundle minimises risk of damage
- Low profile head for ideal use in restricted spaces
- Parallel entry for optimal fit around circular bundles



Low profile cable ties are minimising the risk of injury and simultaneously taking it easy on the material.



PE-Series



RPE-Series

PE-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
PE180	9.0	180.0	42.0	445	PA66HS	Black (BK)	100 pcs.	1;9-10	112-18061
	9.0	180.0	42.0	445	PA66HSW	Black (BK)	100 pcs.	1;9-10	112-18060
PE400	9.0	400.0	116.0	445	PA66	Blue (BU)	100 pcs.	1;9-10	112-18101
	9.0	400.0	116.0	445	PA66	Green (GN)	100 pcs.	1;9-10	112-18100
	9.0	400.0	116.0	445	PA66	Red (RD)	100 pcs.	1;9-10	112-18102
	9.0	400.0	116.0	445	PA66	Yellow (YE)	100 pcs.	1;9-10	112-18103
PE530	9.0	535.0	146.0	445	PA66HSW	Black (BK)	100 pcs.	1;9-10	112-53060

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

RPE-Series releasable

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RPE275	9.0	275.0	69.0	445	PA66HSW	Black (BK)	100 pcs.	112-27560
RPE350	9.0	350.0	92.0	445	PA66HSW	Black (BK)	100 pcs.	112-00006
	9.0	350.0	92.0	445	PA66HSW	Black (BK)	100 pcs.	112-35060

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools			
	1 MK10-SB	9 EVO9HT	10 MK9P
	550	554	556

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-64

Date of issue: September 2022

Cable ties with low profile head

LPH-Series

LPH cable ties are made of Polyamide 6.6 materials. The design with its serration on the outside provides a smooth surface to the bundle. Any damage to the insulation can be avoided. The flat head is ideal in areas with restricted space. They are mainly used within the electrical industry but the tough design is perfectly suited to a variety of indoor and outdoor applications.

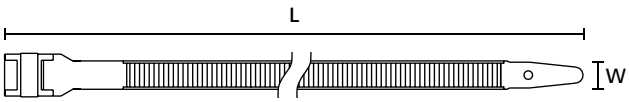
Features and benefits

- High impact modifed cable ties are also available
- Good tensile strength with a single – or a double bridged head
- Outside serration allows for a smooth surface to the bundle
- Design protects against damage to cable insulation
- Low profile head for optimised use especially in restricted spaces
- Strap is threaded parallel through the low profile head

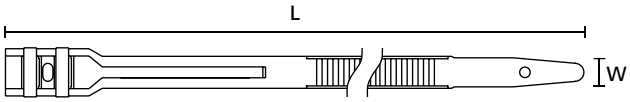


LPH-Series with a smooth surface to the bundle.

Material specification please see page 26.



LPH175



LPH275, LPH350

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
LPH175	9.0	175.0	40.0	310	PA66	Black (BK)	100 pcs.	1;9-10	112-00203
LPH275	9.0	265.0	62.0	480	PA66HIR(S)	Black (BK)	100 pcs.	1;9-10	112-00303
LPH350	9.0	355.0	92.0	480	PA66HIR(S)	Black (BK)	100 pcs.	1;9-10	112-00403
LPH500	9.0	505.0	140.0	540	PA66HIR(S)	Black (BK)	100 pcs.	1;9-10	112-00033
LPH750	9.0	752.0	220.0	540	PA66HIR(S)	Black (BK)	100 pcs.	1;9-10	112-00034

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools			
	1 MK10-SB	9 EVO9HT	10 MK9P
	550	554	556

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-65

Cable ties with low profile head

Robusto-Series

Robusto cable ties manufactured from PA11 have many technical features making them suitable for use in a variety of applications to fix and support cables, pipes and other elements. They offer an excellent resistance to chemicals in most challenging environments like offshore or on oil rigs and construction vehicles. In addition, the very good UV resistance makes it a perfect choice for solar panel installations.

Features and benefits

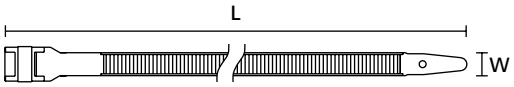
- Made of Polyamide 11, a sustainable bioplastic
- Outside serrated cable tie with rounded head design
- Low insertion force for tool-free application
- High tensile strength with a single – or a double-bridged head
- Soft material for easy handling without damaging the bundle
- Very good UV resistance and durability in outdoor applications
- Stable technical performance even at very low temperatures
- Offers limited resistance to acids, bases and oxidising agents
- Low water absorption rate and high durability
- Prelocking possible by pushing the strap through the eyelet



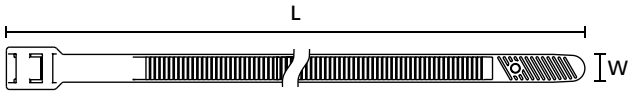
Flat head cable tie from sustainable bioplastic, Robusto-Series.

www.HellermannTyton.co.uk/Robusto-cat22

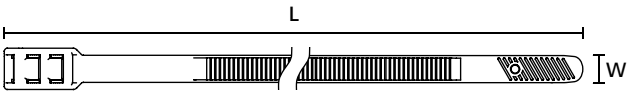
Material specification please see page 26.



Robusto (LPH922)



Robusto (LPH942)



Robusto (LPH962, LPH992)

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
Robusto (LPH922)	9.0	123.0	22.0	310	PA11	Black (BK)	100 pcs.	1;9-10	112-00025
Robusto (LPH942)	9.0	180.0	42.0	360	PA11	Black (BK)	100 pcs.	1;9-10	112-00011
Robusto (LPH962)	9.0	260.0	62.0	530	PA11	Black (BK)	100 pcs.	1;9-10	112-00012
Robusto (LPH992)	9.0	355.0	92.0	530	PA11	Black (BK)	100 pcs.	1;9-10	112-00013

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools			
	1 MK10-SB	9 EVO9HT	10 MK9P
	550	554	556

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-66

Cable ties for strong hold on smooth bundles

Soft Grip-Series

Soft Grip cable ties are 2-component or "twin-shot" ties (that combine PA66HS with a soft TPE inner layer). It is designed for the flexible and easy bundling and fastening of smooth and sensitive bundles, such as pipes in vehicle fluid management applications. It has a pre-locking feature and can also be re-opened with a screwdriver. Soft Grip cable ties can be used in combination with specially developed mounts with standardised tie head retention and customisable footparts.

Features and benefits

- 2-component cable tie (PA66HS and TPE) assures high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements on the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable tie can be removed with a screwdriver for maintenance
- EVO9 SG application tool with adjusted nose piece available

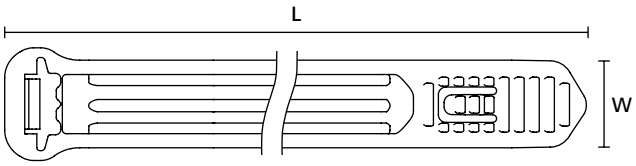
Please find more Soft Grip Products on page 94, 158 and 164.



Soft Grip Cable Ties (2-component cable ties).



Soft Grip Cable Ties (2-component cable ties).



SGT100S

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
SGT100S	12.7	140.0	25.4	315	PA66HIRHSUV, TPE	Black (BK), Blue (BU)	500 pcs.	8	111-50001
	12.7	140.0	25.4	445	PA66HS, TPE	Black (BK), Blue (BU)	500 pcs.	8	111-50000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools	
	8 EVO9SG
	554

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-67

Cable tie locked by glass fibre pin

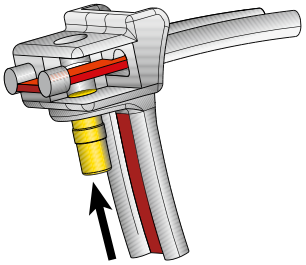
This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

Features and benefits

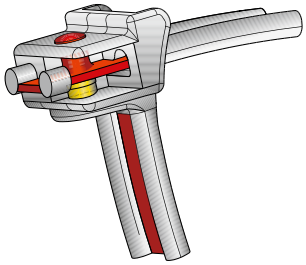
- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- Very secure and vibration resistant fixing
- Available in various materials, colours and almost every length
- Cable ties from PA12 are highly resistant to chemicals, impact and UV light
- KR-ties up to 426 mm are made as one piece
- For assembly a special KR-tool is needed



KR-Series ties applied on a cable tray.



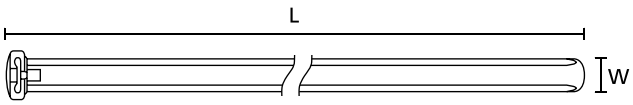
The unlocked head (yellow) of a KR-tie.



The cable tie (red) is locked into place with the pin.

Material specification please see page 26.

KR-Series, 1-Piece



Cable tie KR-Series

Specific part numbers according to EN45545 available on request.

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
KR6/35	6.1	360.0	93.0	490	PA66	Natural (NA)	50 pcs.	11	121-63519
	6.1	360.0	93.0	490	PA66HS	Natural (NA)	50 pcs.	11	121-63555
	6.1	360.0	93.0	490	PA66UV	Black (BK)	50 pcs.	11	121-63560
KR8/21	8.0	210.0	47.0	785	PA66HS	Natural (NA)	50 pcs.	11;13	121-82155
	8.0	210.0	47.0	785	PA66	Natural (NA)	50 pcs.	11;13	121-82119
	8.0	210.0	47.0	785	PA66UV	Black (BK)	50 pcs.	11;13	121-82160
KR8/33	8.0	337.0	86.0	390	PA12	Black (BK)	50 pcs.	11;13	121-83380
	8.0	337.0	86.0	785	PA66	Natural (NA)	50 pcs.	11;13	121-83319
	8.0	337.0	86.0	785	PA46	Grey (GY)	50 pcs.	11;13	121-83378
	8.0	337.0	86.0	785	PA66HS	Natural (NA)	50 pcs.	11;13	121-83355
	8.0	337.0	86.0	785	PA66UV	Black (BK)	50 pcs.	11;13	121-83360
KR8/43	8.0	426.0	105.0	785	PA66HS	Black (BK)	50 pcs.	11;13	121-74360
	8.0	426.0	105.0	785	PA66HS	Natural (NA)	50 pcs.	11;13	121-74359

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2

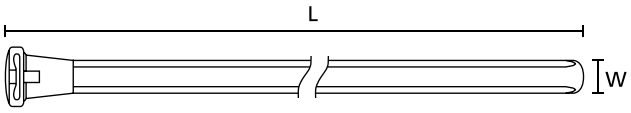
For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-68

Date of issue: September 2022

KR-Series, ultrasonic welded

Other dimensions are available on request.



KR-Series, ultrasonic welded

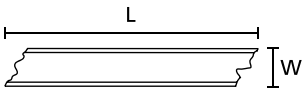


Cable Ties KR-Series.

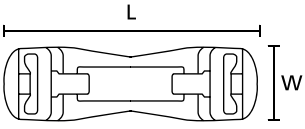
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Tools	Article-No.
KR8/50	8.0	500.0	152.0	785	PA66	Natural (NA)	50 pcs.	11;13	121-05019
KR8/60	8.0	600.0	184.0	785	PA66W	Black (BK)	50 pcs.	11;13	121-06060

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

KR-Series, endless



Cable tie KR8S1



Double-head KR8C5



KR-Series cable ties can be cut to any desired length and then be locked with separate cable tie heads.

TYPE	Width (W)	Length (L)	N	Material	Colour	Pack Cont.	Tools	Article-No.
KR8/S1	8.0	50.0 m	785	PA66HS	Natural (NA)	50.0 m	11;13	121-98151
	8.0	50.0 m	785	PA66W	Black (BK)	50.0 m	11;13	121-98160
KR8/C5	11.7	38.0	-	PA66HS	Natural (NA)	200 pcs.	11;13	121-58551
	11.7	38.0	-	PA66W	Black (BK)	200 pcs.	11;13	121-58560

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	11 KR6/8	13 KR8PNSE
	557	558

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-69

Endless cable ties with separate head and spacer

EL-TY-Series

These robust cable ties are particularly suitable for use with larger diameter cables, pipes and hoses. Designed originally for securing overhead catenary and cables, they are now used in many industries from the building sector, through to the chemical industry, to the installation of signs for traffic management. Separate spacers allow for a defined distance when bundling in parallel.

Features and benefits

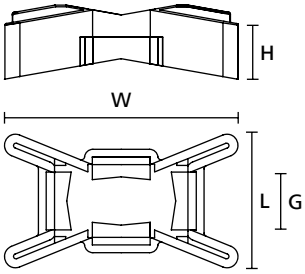
- Made of very strong Polyacetal (POM)
- System consists of endless strap, spacers and heads
- Head includes stainless steel pawls for a proper fixation
- Very secure fixing and good resistance to ageing and UV light
- Suits any bundle diameter and reduces inventory

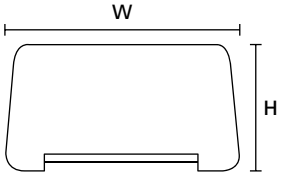


EL-TY straps can be cut to suit any bundle with application tool EVO9.

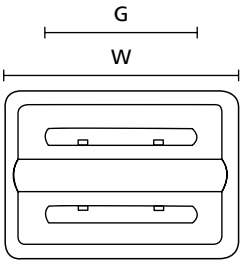
Material specification please see page 26.


Spacer.

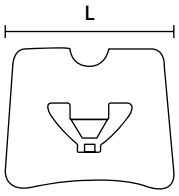




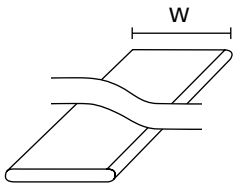
Head (Front View)



Head (Plain View)



Head (Side View)



Strap

TYPE	Width (W)	Length (L)	Height (H)	N	Strap Width max. (G)	Material	Colour	Content	Tools	Article-No.
EL-TY (TELS1)	12.7	15.2 m	-	1,115	-	POM	Black (BK)	15m Strap, 30 Heads	9	111-30000
EL-TY (TELSH)	20.3	15.8	12.4	1,115	12.7	POM	Black (BK)	25 Heads	-	111-31000
EL-TY (TELS-SPK2)	53.3	30.5	17.0	1,115	12.7	PP	Black (BK)	50 Spacer	-	111-32000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools	
	9 EVO9HT
	554

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-70

Cable ties inside serrated

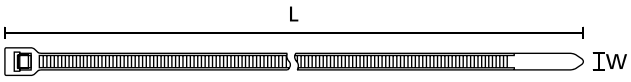
Used in a wide range of industries these releasable and reusable ties are ideal where changes are anticipated. This includes temporary installation and the addition or removal of elements. These releasable cable ties are commonly used to fix stage equipment, for cable management at outdoor events or prototype harnessing work. The extended pawl is simply pushed down with a finger to release the strap.



RELK releasable cable ties for temporary bundling.

Features and benefits

- Releasable and reusable cable tie
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- RELK cable ties are inside serrated
- Different lengths are available



RELK-, RLT-Series

www.HellermannTyton.co.uk/RELK-cat22

RELK-Series up to 200 N loop tensile strength

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RELK2R	4.6	200.0	50.0	200	PA66	Natural (NA)	100 pcs.	115-02202
RELK2M	4.6	250.0	65.0	200	PA66	Black (BK)	100 pcs.	115-02000
	4.6	250.0	65.0	200	PA66	Natural (NA)	100 pcs.	115-06729
RELK2I	4.6	300.0	81.0	200	PA66	Black (BK)	100 pcs.	115-06760
	4.6	300.0	81.0	200	PA66	Natural (NA)	100 pcs.	115-02101
RELK2L	4.6	350.0	95.0	200	PA66	Black (BK)	100 pcs.	115-02300
	4.6	350.0	95.0	200	PA66	Natural (NA)	100 pcs.	115-06919

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

RLT-Series up to 670 N loop tensile strength

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RLT120	7.6	340.0	90.0	535	PA66	Black (BK)	100 pcs.	111-70361
	7.6	340.0	90.0	535	PA66	Natural (NA)	100 pcs.	111-70319
RLT150	8.9	770.0	225.0	670	PA66	Black (BK)	50 pcs.	111-70110
	8.9	770.0	225.0	670	PA66	Natural (NA)	50 pcs.	111-70119
	8.9	770.0	225.0	670	PA66HS	Natural (NA)	50 pcs.	111-70159
	8.9	770.0	225.0	670	PA66W	Black (BK)	50 pcs.	111-70160

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-71

Cable ties inside serrated with tuckaway

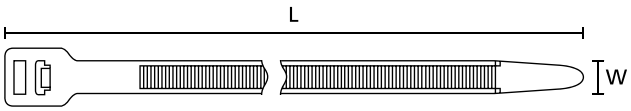
The RT250 is a releasable cable tie. Due to its minimum loop tensile strength of 1,115 N the cable tie is perfectly suited to fix larger and/or heavier bundles. RT250 can be opened and reused. UV-resistant cable ties manufactured from PA66W are recommended for outdoor applications. For shorter lengths REL250-Series can be offered.

Features and benefits

- Releasable and reusable cable tie
- Suitable for larger and/or heavier bundles
- Eyelet allows excess tail to be tucked neatly away
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- Protected trigger to avoid accidental release
- RT250 cable ties are inside serrated



Ideal for larger or heavier bundles these ties can be opened and reused.



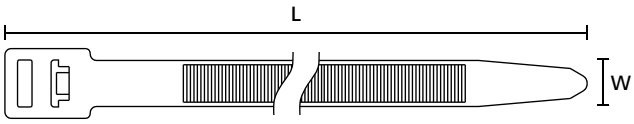
RT250-Series

Material specification please see page 26.

RT250-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
RT250M	12.5	565.3	150.0	1,115	PA66	Black (BK)	25 pcs.	131-75610
	12.5	565.3	150.0	1,115	PA66	Natural (NA)	25 pcs.	131-75619
	12.5	565.3	150.0	1,115	PA66W	Black (BK)	25 pcs.	131-75620
RT250XL	12.5	1,030.0	305.0	1,115	PA66	Black (BK)	25 pcs.	131-75510
	12.5	1,030.0	305.0	1,115	PA66	Natural (NA)	25 pcs.	131-75519

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



REL250-Series

REL250-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
REL250S	12.2	230.0	50.0	1,115	PA66HIR(S)	Black (BK)	50 pcs.	111-00074
REL250X	12.2	385.0	100.0	1,115	PA66HIR(S)	Black (BK)	50 pcs.	111-00075

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-72

Date of issue: September 2022

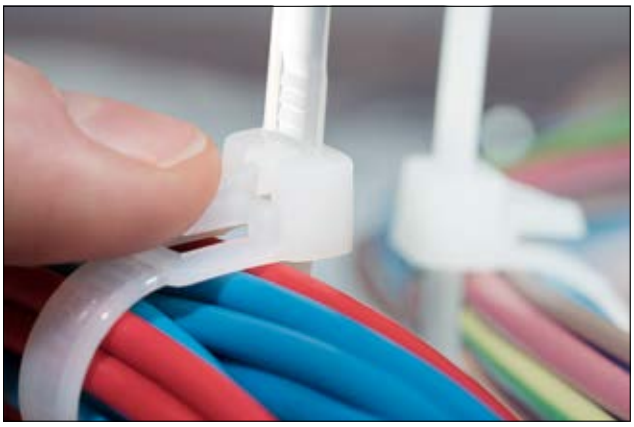
Cable ties inside serrated with kickdown lever

REL-Series

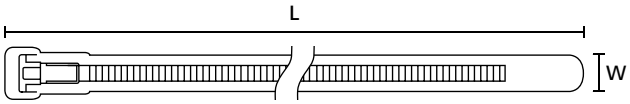
The REL-Series is ideally used in applications where changes are anticipated and a tie needs to be opened and closed repeatedly. The release mechanism of an REL cable tie allows simple and quick opening with only one hand. UV resistant cable ties manufactured from PA66W are recommended for outdoor applications.

Features and benefits

- Releasable and reusable cable tie for medium-weight loads
- Extremely easy-to-operate release mechanism
- Opens simply and quickly with only one hand
- Also available in PA66W for outdoor applications
- REL cable ties have their serration on the inside



Releasable and reusable cable tie, REL-Series.



REL-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
REL180	6.5	180.0	46.0	150	PA66	Black (BK)	100 pcs.	115-00027
REL100	6.7	100.0	21.0	180	PA66	Black (BK)	100 pcs.	131-21010
	6.7	100.0	21.0	180	PA66	Natural (NA)	100 pcs.	131-21019
REL140	7.6	150.0	35.0	200	PA66	Black (BK)	100 pcs.	131-21410
	7.6	150.0	35.0	200	PA66	Natural (NA)	100 pcs.	131-21419
REL250	7.6	250.0	68.0	200	PA66	Black (BK)	100 pcs.	131-22510
	7.6	250.0	68.0	200	PA66	Natural (NA)	100 pcs.	131-22519
	7.6	250.0	68.0	200	PA66W	Black (BK)	100 pcs.	131-22560

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

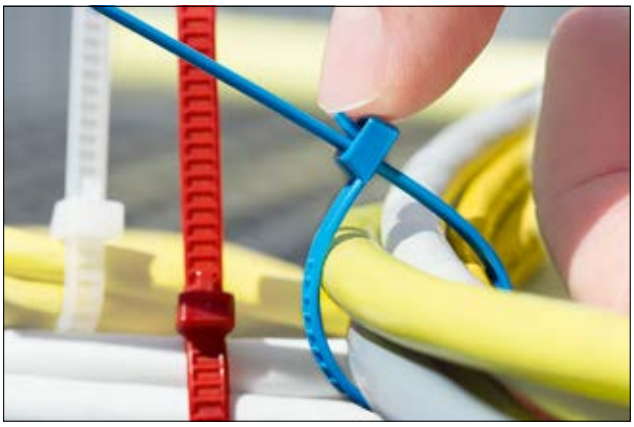
Add items to your watchlist!
www.HT.click/49-73

Cable ties outside serrated for marking, releasable

Releasable cable ties of our LR55-Series offer some extra benefits. Their serration is on the outside of the cable tie. This will minimise the risk of damage to cables or other elements. Additionally LR55 cable ties are available in different colours – optimally suited for temporary identification within logistic, packaging, cable harness production or for testing purposes. The strap is released when pushing the extended pawl upwards. The risk of opening the cable tie accidentally is minimised.

Features and benefits

- Releasable and reusable cable tie
- Various colours for applications needing colour coding
- Extended trigger for simple and quick release of ties
- Risk of accidental release is minimised
- Outside serration prevents damage to cable insulation

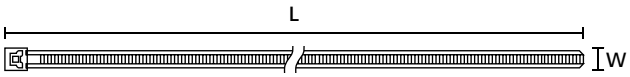


Releasable and outside serrated LR55 cable ties are ideal suited for colour coding.

Material specification please see page 26.

www.HellermannTyton.co.uk/LR55-cat22

LR55-Series

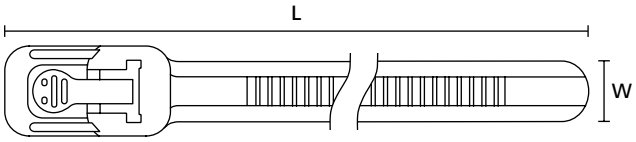


LR55 Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
LR55R	4.7	195.0	50.0	245	PA66	Blue (BU)	25 pcs.	115-00006
	4.7	195.0	50.0	245	PA66	Green (GN)	25 pcs.	115-00005
	4.7	195.0	50.0	245	PA66	Natural (NA)	25 pcs.	115-00008
	4.7	195.0	50.0	245	PA66	Red (RD)	25 pcs.	115-00003
	4.8	196.0	50.0	245	PA66	Yellow (YE)	25 pcs.	115-00004
	4.8	196.0	50.0	245	PA66HS	Black (BK)	25 pcs.	115-00002

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

ORF-Series



ORF-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
ORF150-S	4.7	150.0	36.0	135	PA66W	Black (BK)	100 pcs.	115-00161

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-74

Cable ties without serration in flexible TPU

The soft, flexible material makes these ties particulary suitable for use on sensitive wires, for instance fibre-optic cables. Additionally they are suitable for moving elements and vibrating applications. The double slotted head allows for parallel bundling.

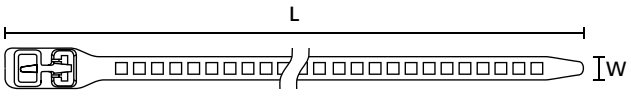
Features and benefits

- Elastic and flexible cable ties with rounded and smooth edges
- Releasable and reusable
- Double slotted head with fixation pawl
- Flexibility ensures steady and evenly distributed pressure
- Tight fixation even in vertical position: prevent sliding down or loosening bundle
- Suitable for moving elements and vibrating applications like windmills, machines, robotics, pulsating tubing and conduits
- Ideal use for temporarily fixation for presentations, concerts, theatres, exhibitions
- Long lifetime when used indoor
- Remains flexible even at cold temperatures (-20 °C)



The elasticity of the SOFTIX ties makes them suitable for use in many applications.

www.HellermannTyton.co.uk/Softfix-cat22



SRT- and SOFTFIX-Series



SOFTFIX ties available in small packaging units.

With 2nd loop to run bundles in parallel!

SRT-Series for industry quantities

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
SRT1807	7.0	180.0	45.0	57	TPU	Black (BK)	50 pcs.	115-07189
SRT2607	7.0	260.0	70.0	57	TPU	Black (BK)	50 pcs.	115-07269
SRT26011	11.0	260.0	65.0	123	TPU	Black (BK)	50 pcs.	115-11269
SRT34011	11.0	340.0	90.0	123	TPU	Black (BK)	50 pcs.	115-11349
SRT58028	28.0	580.0	150.0	360	TPU	Black (BK)	10 pcs.	115-28589
SRT88028	28.0	880.0	240.0	360	TPU	Black (BK)	180 pcs.	115-28889

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

SOFTFIX-Family

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
SOFTFIX XS	7.0	180.0	45.0	57	TPU	Black (BK)	16 pcs.	115-07190
SOFTFIX S	7.0	260.0	70.0	57	TPU	Black (BK)	12 pcs.	115-07270
SOFTFIX M	11.0	260.0	65.0	123	TPU	Black (BK)	8 pcs.	115-11270
SOFTFIX L	11.0	340.0	90.0	123	TPU	Black (BK)	6 pcs.	115-11350
SOFTFIX XL	28.0	580.0	150.0	360	TPU	Black (BK)	3 pcs.	115-28590
SOFTFIX XXL	28.0	880.0	240.0	360	TPU	Black (BK)	3 pcs.	115-28898

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-75

Cable ties inside serrated with one-hand release mechanism

REZ-Series

Perfect for use in the packaging industry as a bag closure where access to part of the bag content may be needed but the bag needs to be re-sealed later. Something that often occurs for instance in the catering or service industry. In addition the cable tie can be opened easily with only two fingers by simply pushing the wings of the unique head.

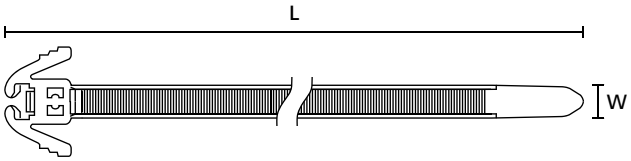
Features and benefits

- REZ-Series can be released and reused
- Unique head design for simple and rapid use
- Quick-release mechanism for one-hand operation
- Cable tie can be opened even when under tension
- Can still be released when working with gloves



The inside serrated REZ ties have a one-hand, simple release mechanism.

Material specification please see page 26.



REZ-Series

www.HellermannTyton.co.uk/REZ-cat22

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
REZ200	4.7	200.0	50.0	135	PA66	Black (BK)	100 pcs.	115-40200
	4.7	200.0	50.0	135	PA66	Fluorescent Pink (FLPK)	100 pcs.	115-00147
	4.7	200.0	50.0	135	PA66	Green (GN)	100 pcs.	115-00106
	4.7	200.0	50.0	135	PA66	Orange (OG)	100 pcs.	115-00132
REZ300	4.7	305.0	80.0	135	PA66	Black (BK)	100 pcs.	115-40300
	4.7	305.0	80.0	135	PA66	Fluorescent Pink (FLPK)	100 pcs.	115-00138
	4.7	305.0	80.0	135	PA66	Red (RD)	100 pcs.	115-00043

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-76

Cable ties for food industry, detectable, reusable

MCT-Series releasable, PA66MP

The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal-detecting equipment. Ideally suited for the installaton of cabling in and around the manufacturing process. The MCTRELK ties do have a releasable function thus they can be reopened and reused.

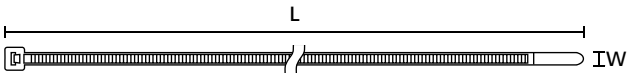


Detectable and reuseable Cable Ties for temporary closure.

Features and benefits

- Total metal dispersion throughout the tie
- Can be reopened and reused
- Supports quality processes around the production of food stuffs
- Blue colour most common for easy visual detection
- Greatly reduces risk of contamination
- Magnetic detectable (detection level depending on specific application)

Can support quality assurance in the production of food stuffs, for example HACCP.



MCT-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
MCTRELK2M	4.6	250.0	65.0	225	PA66MP	Blue (BU)	100 pcs.	111-00937

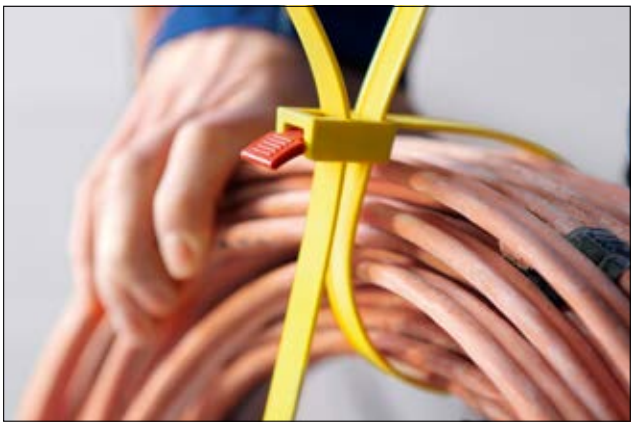
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Cable ties with quick release mechanism, parallel bundling

SpeedyTie

The versatility of the SpeedyTie means that it is suitable for a multitude of applications like electro installations, heating and ventilation, construction, exhibitions and trade fairs. Whether it is used for permanent or temporarily solutions the SpeedyTie is a very strong helping hand in every situation.

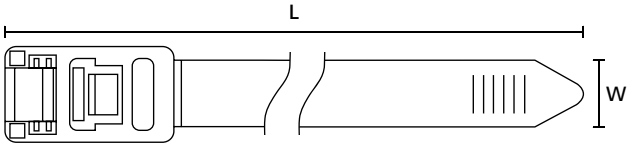


Excess Tails can be neatly tucked away.

Features and benefits

- Releasable and reusable cable tie
- Bears loads of up to 888 N (approx. 90 kg)
- 750 mm long for use in a wide variety of applications
- Can be used for parallel bundling
- Easy to handle when wearing work gloves
- Available in signal yellow and in black

Patented



SpeedyTie®

www.HellermannTyton.co.uk/SpeedyTie-cat22

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
SpeedyTie (RTT750HR)	13.0	752.0	210.0	888	PA66	Yellow (YE), Red (RD)	25 pcs.	115-00000
	13.0	752.0	210.0	888	PA66	Yellow (YE), Red (RD)	5 pcs.	115-00001
	13.0	752.0	210.0	888	PA66HIR(S)	Black (BK)	5 pcs.	115-00030

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-78

Hook and loop ties

TEXTIE-Series

The TEXTIE-Series offers a soft bundling method and is ideal for use on telephone cables, optical fibre and network cables. These cable ties can be reopened and reused up to 400 times. A perfect solution for temporary installations and cable management for stage equipment, at outdoor events or for prototype harnessing. Also suitable for use in private or office applications. TEXTIE cable ties are available in various colours and can be used to colour-code cables and/or wires.

Features and benefits

- Quick and simple to use without tools
- Reusable up to 400 times
- Various colours for easy identification
- For indoor and outdoor use
- Can be attached to the bundle permanently
- Resistant to ageing, no corrosion

www.HellermannTyton.co.uk/Textie-cat22

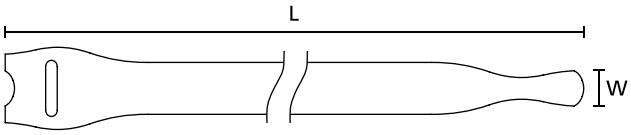
Material specification please see page 26.



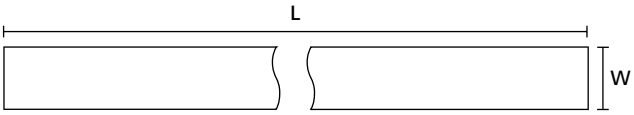
Due to the functional cable tie design the TEXTIE is fixed on the cable and can't get lost.



The TEXTIE-Series is available in different colours and lengths.



TEXTIE-Series



TEXTIE-Series 5 and 25 m

TYPE	Width (W)	Length (L)	Bundle Ø max.	Material Loop	Material Hook	Colour	Pack Cont.	Article-No.
TEXTIE S	12.5	150.0	45.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00012
TEXTIE M	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00013
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Blue (BU)	10 pcs.	130-00018
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Green (GN)	10 pcs.	130-00017
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Red (RD)	10 pcs.	130-00014
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	White (WH)	10 pcs.	130-00021
	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Yellow (YE)	10 pcs.	130-00016
TEXTIE L	12.5	330.0	100.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	10 pcs.	130-00019
TEXTIE 5M	12.5	5,000.0	-	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	1 pc.	130-00020
TEXTIE 25M	13.0	25,000.0	-	Polyamide 6.6 (PA66)	Polypropylene (PP)	Black (BK)	1 pc.	130-00022

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-79

Cable ties with ball-lock

MBT-Series, stainless steel 304

Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries. MBT ties are also suitable for machine building, construction and in the outside area of radio technology. Additionally MBT ties are ideal for securing lighting in theatres and exhibition halls.

Features and benefits

- Cable ties MBT, made from stainless steel 304
- Non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning



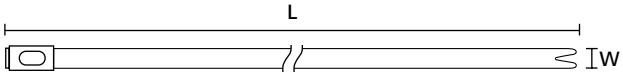
Stainless steel cable ties, uncoated, MBT_SS, MBT_HS.



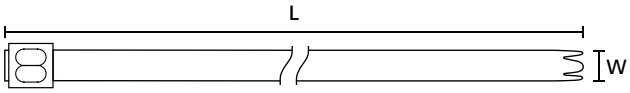
Stainless Steel Cable Ties, uncoated, MBT_XHS.

Can support quality assurance in the production of food stuffs, for example HACCP.

For hard, smooth surface applications, we recommend the use of our LFPC protective channels. More details please find on pages 36 and 89.



MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 12.3 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT5SS	4.6	127.0	12.0	25.0	900	SS304	100 pcs.	15-18	111-93058
MBT8SS	4.6	201.0	17.0	50.0	900	SS304	100 pcs.	15-18	111-93088
MBT14SS	4.6	362.0	17.0	102.0	900	SS304	100 pcs.	15-18	111-93148
MBT20SS	4.6	521.0	17.0	152.0	900	SS304	100 pcs.	15-18	111-93208
MBT27SS	4.6	685.0	17.0	203.0	900	SS304	100 pcs.	15-18	111-93278
MBT33SS	4.6	838.0	17.0	254.0	900	SS304	100 pcs.	15-18	111-93338
MBT8HS	7.9	201.0	17.0	50.0	2,000	SS304	50 pcs.	15-18	111-94088
MBT14HS	7.9	362.0	17.0	102.0	2,000	SS304	50 pcs.	15-18	111-94148
MBT20HS	7.9	521.0	17.0	152.0	2,000	SS304	50 pcs.	15-18	111-94208
MBT27HS	7.9	685.0	17.0	203.0	2,000	SS304	50 pcs.	15-18	111-94278
MBT33HS	7.9	838.0	17.0	254.0	2,000	SS304	50 pcs.	15-18	111-94338
MBT14XHS	12.3	362.0	17.0	102.0	2,700	SS304	50 pcs.	15-18	111-95148
MBT20XHS	12.3	521.0	17.0	152.0	2,700	SS304	50 pcs.	15-18	111-95208
MBT27XHS	12.3	681.0	17.0	203.0	2,700	SS304	50 pcs.	15-18	111-95278
MBT33XHS	12.3	838.0	17.0	254.0	2,700	SS304	50 pcs.	15-18	111-95338

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-80

Cable ties with ball-lock

MBT-Series, stainless steel 316

Metal ties are predestined for all areas with requirements for high holding force, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industry and on oil platform as well as in mass transit, shipbuilding and mining industry. MBT ties are also suitable for machine building, apparatus construction and in the outside area of radio technology. Additionally MBT ties are a good solution to fix lighting in theatres and exhibition halls.

Features and benefits

- MBT cable ties made from stainless steel 316
- Non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

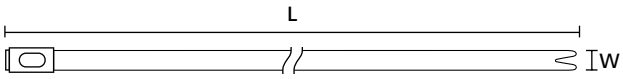


Stainless steel cable ties, uncoated, MBT_S, MBT_H.

Material specification please see page 26.

Can support quality assurance in the production of food stuffs, for example HACCP.

For hard, smooth surface applications, we recommend the use of our LFPC protective channels. More details please find on pages 36 and 89.



MBT-Series 4.6 mm and 7.9 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT5S	4.6	127.0	12.0	25.0	900	SS316	100 pcs.	15-18	111-93059
MBT8S	4.6	201.0	12.0	50.0	900	SS316	100 pcs.	15-18	111-93089
MBT14S	4.6	362.0	12.0	102.0	900	SS316	100 pcs.	15-18	111-93149
MBT20S	4.6	521.0	12.0	152.0	900	SS316	100 pcs.	15-18	111-93209
MBT27S	4.6	685.0	12.0	203.0	900	SS316	100 pcs.	15-18	111-93279
MBT33S	4.6	838.0	12.0	254.0	900	SS316	100 pcs.	15-18	111-93339
MBT8H	7.9	201.0	12.0	50.0	2,000	SS316	50 pcs.	15-18	111-94089
MBT14H	7.9	362.0	12.0	102.0	2,000	SS316	50 pcs.	15-18	111-94149
MBT20H	7.9	521.0	12.0	152.0	2,000	SS316	50 pcs.	15-18	111-94209
MBT27H	7.9	685.0	12.0	203.0	2,000	SS316	50 pcs.	15-18	111-94279
MBT33H	7.9	838.0	12.0	254.0	2,000	SS316	50 pcs.	15-18	111-94339

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

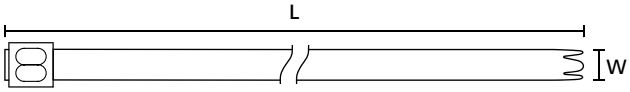
For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

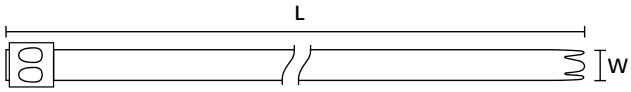
Add items to your watchlist!
www.HT.click/49-81

Cable ties with ball-lock

MBT-Series, stainless steel 316



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT14XH	12.3	362.0	12.0	102.0	2,700	SS316	50 pcs.	15-18	111-95149
MBT20XH	12.3	521.0	12.0	152.0	2,700	SS316	50 pcs.	15-18	111-95209
MBT27XH	12.3	681.0	12.0	203.0	2,700	SS316	50 pcs.	15-18	111-95279
MBT33XH	12.3	838.0	12.0	254.0	2,700	SS316	50 pcs.	15-18	111-95339
MBT14UH	16.0	362.0	12.0	102.0	4,100	SS316	50 pcs.	15;17	111-01301
MBT20UH	16.0	521.0	12.0	152.0	4,100	SS316	50 pcs.	15;17	111-01302
MBT27UH	16.0	681.0	12.0	203.0	4,100	SS316	50 pcs.	15;17	111-01303
MBT33UH	16.0	838.0	12.0	254.0	4,100	SS316	50 pcs.	15;17	111-01304
MBT43UH	16.0	1,092.0	12.0	330.0	4,100	SS316	25 pcs.	15;17	111-01305
MBT49UH	16.0	1,245.0	12.0	380.0	4,100	SS316	25 pcs.	15;17	111-01306

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-82

Date of issue: September 2022

Double wrap cable ties with ball-lock

MBTXHD- / MBTUHD-Series, stainless steel 316

The double wrap ties of the MBT-series are used in applications where a fixing requires an extraordinary high tensile strength.

Features and benefits

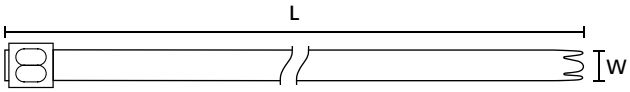
- Stainless steel MBT ties with double wrap operation
- Wraps around the bundle and passes through the head twice
- Very high tensile strength to carry enormous applied loads
- Head with two locking balls
- Resistant to arduous conditions and environments

Can support quality assurance in the production of food stuffs, for example HACCP.

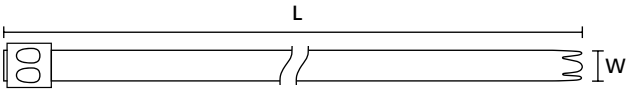
Material specification please see page 26.



Double wrap stainless steel cable ties, uncoated, MBT_UHD.



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT27XHD	12.3	681.0	17.0	100.0	5,000	SS316	50 pcs.	15-18	111-01307
MBT33XHD	12.3	838.0	17.0	120.0	5,000	SS316	50 pcs.	15-18	111-01308
MBT60XHD	12.3	1,524.0	17.0	230.0	5,000	SS316	25 pcs.	15-18	111-01311
MBT27UHD	16.0	681.0	25.0	100.0	7,000	SS316	50 pcs.	15;17	111-01312
MBT33UHD	16.0	838.0	25.0	120.0	7,000	SS316	50 pcs.	15;17	111-01313
MBT60UHD	16.0	1,524.0	25.0	230.0	7,000	SS316	25 pcs.	15;17	111-01316

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-83

Cable ties with ball-lock and coating

MBT-FC-Series, stainless steel 316

The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits. Fully coated ties can also be used to avoid any reflection. An important consideration for instance in the defence industry.

Features and benefits

- Fully coated MBT, made from type 316 stainless steel with polyester coating
- Non-releasable locking feature
- Coated cable tie with smooth edges
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application

The MBT-Series (up to 7.9 mm) can be used in combination with the stainless steel P-Mount. The mount is simple to install with a screw or bolt and ensures a durable fixing solution. Please see page 173.

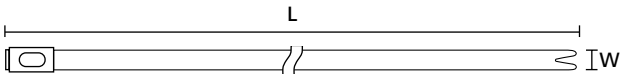
Material specification please see page 26.



Stainless steel cable ties, coated, MBT_SFC, MBT_HFC.



Stainless steel cable ties, coated, MBT_XHFC.



MBT-Series 4.6 mm and 7.9 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT5SFC	4.6	127.0	15.0	25.0	540	SP, SS316	100 pcs.	15-18	111-00288
MBT8SFC	4.6	201.0	17.0	50.0	540	SP, SS316	100 pcs.	15-18	111-00289
MBT14SFC	4.6	362.0	17.0	102.0	540	SP, SS316	100 pcs.	15-18	111-00290
MBT20SFC	4.6	521.0	17.0	152.0	540	SP, SS316	100 pcs.	15-18	111-00291
MBT27SFC	4.6	681.0	17.0	203.0	540	SP, SS316	100 pcs.	15-18	111-00292
MBT33SFC	4.6	838.0	17.0	254.0	540	SP, SS316	100 pcs.	15-18	111-00293
MBT8HFC	7.9	201.0	17.0	50.0	1,020	SP, SS316	50 pcs.	15-18	111-00294
MBT14HFC	7.9	362.0	17.0	102.0	1,020	SP, SS316	50 pcs.	15-18	111-00295
MBT20HFC	7.9	521.0	17.0	152.0	1,020	SP, SS316	50 pcs.	15-18	111-00296
MBT27HFC	7.9	681.0	17.0	203.0	1,020	SP, SS316	50 pcs.	15-18	111-00297
MBT33HFC	7.9	838.0	17.0	254.0	1,020	SP, SS316	50 pcs.	15-18	111-00298

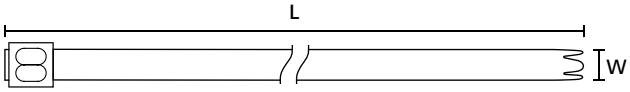
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

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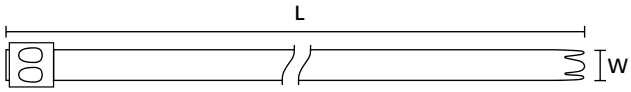
Add items to your watchlist!
www.HT.click/49-84

Cable ties with ball-lock and coating

MBT-FC-Series, stainless steel 316



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT14XHFC	12.3	362.0	17.0	102.0	1,620	SP, SS316	50 pcs.	15-18	111-00299
MBT17XHFC	12.3	434.0	17.0	125.0	1,620	SP, SS316	50 pcs.	15-18	111-01500
MBT20XHFC	12.3	521.0	17.0	152.0	1,620	SP, SS316	50 pcs.	15-18	111-00300
MBT23XHFC	12.3	575.0	17.0	168.0	1,620	SP, SS316	50 pcs.	15-18	111-01501
MBT27XHFC	12.3	681.0	17.0	203.0	1,620	SP, SS316	50 pcs.	15-18	111-00301
MBT30XHFC	12.3	754.0	17.0	225.0	1,620	SP, SS316	50 pcs.	15-18	111-01502
MBT33XHFC	12.3	838.0	17.0	254.0	1,620	SP, SS316	50 pcs.	15-18	111-00302
MBT43XHFC	12.3	1,092.0	17.0	330.0	1,620	SP, SS316	25 pcs.	15-18	111-01503
MBT49XHFC	12.3	1,245.0	17.0	380.0	1,620	SP, SS316	25 pcs.	15-18	111-01504
MBT14UHFC	16.0	362.0	25.0	102.0	2,500	SP, SS316	50 pcs.	15;17	111-01512
MBT17UHFC	16.0	434.0	25.0	125.0	2,500	SP, SS316	50 pcs.	15;17	111-01513
MBT20UHFC	16.0	521.0	25.0	152.0	2,500	SP, SS316	50 pcs.	15;17	111-01514
MBT23UHFC	16.0	575.0	25.0	168.0	2,500	SP, SS316	50 pcs.	15;17	111-01515
MBT27UHFC	16.0	681.0	25.0	203.0	2,500	SP, SS316	50 pcs.	15;17	111-01516
MBT33UHFC	16.0	838.0	25.0	254.0	2,500	SP, SS316	50 pcs.	15;17	111-01518
MBT43UHFC	16.0	1,092.0	25.0	330.0	2,500	SP, SS316	25 pcs.	15;17	111-01519

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

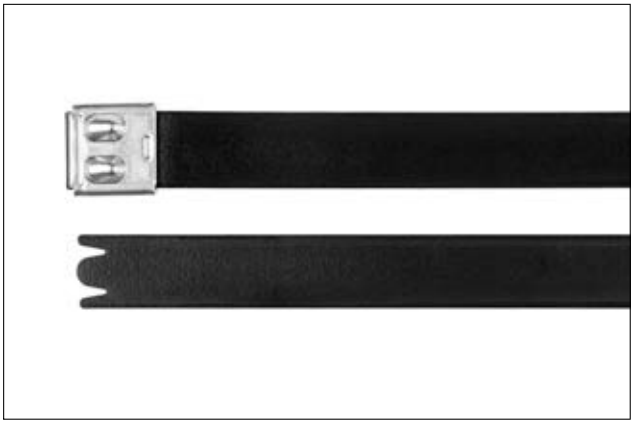
For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-85

Double wrap cable ties with ball-lock and coating

MBTXHDFC- / MBTUHDFC-Series, stainless steel 316

The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits. Fully coated ties can also be used to avoid any reflection. An important consideration for instance in the defence industry.

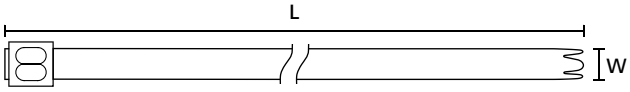


Stainless steel cable ties, coated, MBT_UHDFC.

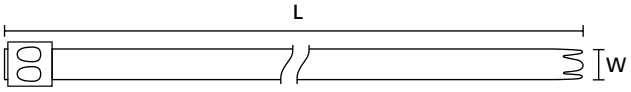
Features and benefits

- MBT cable ties, made from stainless steel SS316 with a polyester coating
- Non-releasable locking feature
- Double wrap operation
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

Material specification please see page 26.



MBT-Series 12.3 mm width



MBT-Series 16.0 mm width

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MBT27XHDFC	12.3	681.0	17.0	100.0	2,500	SS316, SP	50 pcs.	15-18	111-01505
MBT33XHDFC	12.3	838.0	17.0	120.0	2,500	SS316, SP	50 pcs.	15-18	111-01506
MBT27UHDFC	16.0	681.0	25.0	100.0	5,000	SS316, SP	50 pcs.	15;17	111-01521
MBT49UHDFC	16.0	1,245.0	25.0	180.0	5,000	SS316, SP	25 pcs.	15;17	111-01524

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools				
	15	16	17	18
	MK9SST	MK9PSST	HDT16	KST-STG200
	559	559	560	560

For more information on toolings please refer to the Application Tooling chapter.

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Add items to your watchlist!
www.HT.click/49-86

Cable ties with punch-locking mechanism

MST-Series, stainless steel 304

Stainless steel cable ties are designed for fixing loads and cables securely in hazardous industrial environments such as railway carriages, jet engines, inside power plants or on offshore drilling platforms, where exposure to extremes of weather, saltwater and temperature are common. The MST-Series tie with its new punch-locking mechanism is an excellent choice especially for environments which require high resistance to vibrations.

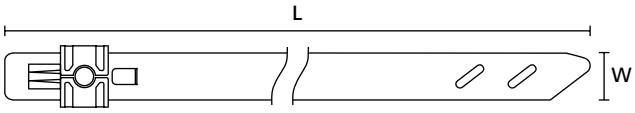
Features and benefits

- MST-Series cable ties are made from stainless steel 304
- No loosening after bundling
- Corrosion and weather resistant
- Significantly improved vibration resistance
- Outstanding chemical resistance
- Space saving solution
- Safe cut-off (no sharp edges)
- High temperature resistant
- Non-burning



Stainless Steel Cable Ties MST-Series.

The MST-Series (up to 8.9 mm) can be used in combination with the stainless steel P-Mount. The mount is simple to install with a screw or bolt and ensures a durable fixing solution. Please see page 173.



MST tie

Can support quality assurance in the production of food stuffs, for example HACCP.

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MST200S	5.9	207.0	5.0	50.0	900	SS304	100 pcs.	19	111-01549
MST360S	5.9	360.0	5.0	100.0	900	SS304	100 pcs.	19	111-01550
MST500S	5.9	500.0	5.0	145.0	900	SS304	100 pcs.	19	111-01551
MST700S	5.9	700.0	5.0	205.0	900	SS304	100 pcs.	19	111-01552
MST360M	8.9	369.0	8.0	100.0	1,500	SS304	50 pcs.	20	111-01631
MST500M	8.9	509.0	8.0	145.0	1,500	SS304	50 pcs.	20	111-01632
MST700M	8.9	700.0	8.0	205.0	1,500	SS304	50 pcs.	20	111-01633

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	19 MST6	20 MST9
	561	561

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-87

Cable ties with fold locking

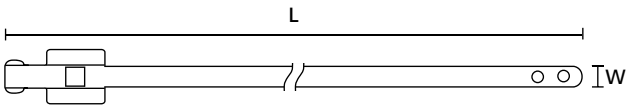
The MLT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.

Features and benefits

- Releasable stainless steel buckle tie
- Heavy duty type in stainless steel 316
- Can be re-opened and re-used
- Available also with polyester coating which prevents corrosion between dissimilar materials



MLT-Series. Releasable stainless steel buckle tie with and without coating.



MLT-Series

The MLT-Series (up to 10 mm) can be used in combination with the stainless steel P-Mount. The mount is simple to install with a screw or bolt and ensures a durable fixing solution. Please see page 173.

MLT-Series, stainless steel 316

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MLT8SS5	5.0	230.0	20.0	60.0	420	SS316	100 pcs.	17	111-94080
MLT12SS5	5.0	330.0	20.0	90.0	420	SS316	100 pcs.	17	111-94120
MLT24SS5	5.0	630.0	20.0	180.0	420	SS316	100 pcs.	17	111-91400
MLT8SS10	10.0	230.0	25.0	60.0	850	SS316	100 pcs.	17	111-95080
MLT12SS10	10.0	330.0	25.0	90.0	850	SS316	100 pcs.	17	111-95120

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

MLT-C-Series coated, stainless steel 316

TYPE	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Material	Pack Cont.	Tools	Article-No.
MLT8SSC5	5.3	230.0	20.0	60.0	420	SS316, SP	100 pcs.	17	111-91000
MLT12SSC5	5.3	330.0	20.0	90.0	420	SS316, SP	100 pcs.	17	111-91121
MLT16SSC5	5.3	430.0	20.0	120.0	420	SS316, SP	100 pcs.	17	111-91161
MLT24SSC5	5.3	630.0	20.0	180.0	420	SS316, SP	100 pcs.	17	111-91180
MLT8SSC10	10.3	230.0	25.0	60.0	850	SS316, SP	100 pcs.	17	111-91001
MLT12SSC10	10.3	330.0	25.0	90.0	850	SS316, SP	100 pcs.	17	111-91123
MLT16SSC10	10.3	430.0	25.0	120.0	850	SS316, SP	100 pcs.	17	111-91163
MLT24SSC10	10.3	630.0	25.0	180.0	850	SS316, SP	100 pcs.	17	111-91181

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools	
	17 HDT16
	560

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

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Add items to your watchlist!
www.HT.click/49-88

Protective channel for stainless steel ties

LFPC-Series

When used in conjunction with the MBT, MST, MLT and AMT range of stainless steel cable ties this channel gives the cable protection against chafing, vibration and shock. Ideal for use in arduous conditions such as those found on board ships, oil rigs or in nuclear power stations.

Features and benefits

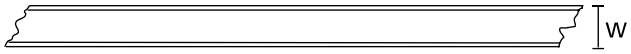
- LFPC channel, manufactured from Polyolefin
- Works with MBT-, MST-, MLT- and AMT-Series
- Smooth surface protects bundle against chafing caused by vibrations and shocks
- Can be cut from roll to any length
- Halogenfree
- Flame retardant



Cable tie MBTXH with LFPC Protective Channel.

Material specification please see page 26.

The fire protection properties of the material relate to the test performed on defined test samples. This is a test under laboratory conditions and not directly transferable to the product made from this material.



LFPC

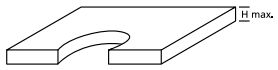
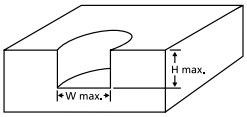
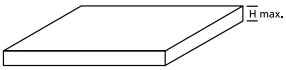
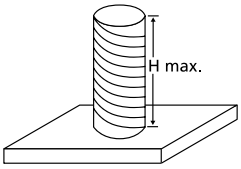
TYPE	Width (W)	For Ties	Material	Pack Cont.	Article-No.
LFPC70	7.0	MBTS	PO	25 m	111-93000
LFPC83	8.3	MBTH	PO	25 m	111-00257
LFPC103	10.3	MBTH	PO	25 m	111-94000
LFPC129	12.9	MBTXH	PO	25 m	111-00253
LFPC132	13.2	MBTXH	PO	25 m	111-00254
LFPC150	15.0	MBTXH	PO	25 m	111-95000
LFPC163	16.3	AMT, MBTUH	PO	50 m	111-00255

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

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Add items to your watchlist!
www.HT.click/49-89

Selection guide for fixing ties

Application	Arrowhead	Fir Tree Mount	Rivet Wall Plug	Screw Mount	EdgeClip	Weld Stud Mount
	●	●		●		
		●	●	●		
					●	
						●



Arrowhead

This fixing tie is based on an arrowhead offering high extraction forces. The arrowhead is securely in place when a click can be heard and felt by the user.



Arrowhead with disc

The disc minimises the ingress of dust, dirt and water. Furthermore a safe fixation inside the drill hole is assured that withstands pressure from various directions.



Arrowhead with supporting wings

Arrowhead fixings with supporting wings offer good and stable fixation in drilled holes. The supporting wings generate additional pressure to assure a firm and secure fixing while taking up any variation in panel thickness. These ties are also suitable in high vibration applications.



Arrowhead without supporting wings

The arrowhead design ensures good fixation and takes up minimal space.



Fir Tree Mount

Fir Tree Mounts can be pushed into pre-punched holes easily in panels or threaded, blind holes based on the low insertion forces. The design is ideally suited for a wide range of sheet thicknesses. The disc on top of the fir tree covers the hole and minimises the ingress of dust, dirt and water.

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Weld Stud Mount

Many of the HellermannTyton weld stud mounts can easily be attached by hand („soft push"). The design offers very low insertion forces that require no tools. The mounts can be removed by twisting to the left.



Weld Stud Fixings with lateral adjustment

The special oval shape of these mounts provides a 5 - 6 mm lateral adjustment to cater for any misalignment of the stud or incorrect positioning of ties on the cables. The bundle can therefore be moved when mounted.



EdgeClip

The EdgeClips are specifically designed to bundle and guide cable and wires on edges. Cost intensive drill holes for fixing are no longer required. EdgeClips are easily mounted by hand, the integrated metal clamp, securely keeping the clips on the edge.



EdgeClip twistable

Ideally suited for fixations where bundles need to be flexibly guided. Theses EdgeClips are available with facilities for 90° or 360° rotation.



Cable and Hose Attachment

Excellent solution for subsequent attachment of pipes and wires to installed tubes.



Heavy Duty Application

These sturdy fixing ties can withstand vibrations. They are easy to apply and give a secure alignment to the bundle. There will be high tighteining torque through metal bushing.



Two Piece Fixing Ties with Clip Coupler

The Coupler is an article to connect two cable ties for parallel bundling of tubes, harnesses or cables. Its design enables the cable ties to rotate up to 90° and allows flexible installations.

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1-piece fixing ties with arrowhead, with disc

1-piece fixing ties with arrowhead, with disc, for round holes

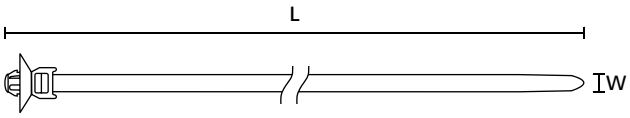
With a diverse range of fixing possibilities these ties are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building. This fastening solution is used to secure cable harnesses. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application.

Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises ingress of dust and dirt
- Cable tie head always situated in a defined position
- KSFT-types with specially rounded arrowhead minimise the assembly height

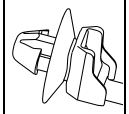
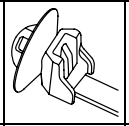
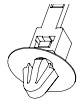
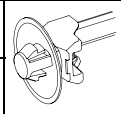
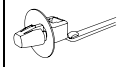
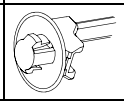


The disc at the head of the T50SOSSFT6.5E protects the bore against dirt and splashes.



T50SOSKSFT6.5S2-E

*** AS Anti-Slip Ties inhibit sideways movement on the bundle.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T50SOSS FT6.5E		6.3 - 6.7	1.9 - 2.5	4.6	158.8	30.0	225	16.0	PA66HS	BK	1-2;4-6;25	126-03102
T50SOSKS FT6.5E		6.3 - 6.7	0.7 - 1.3	4.6	156.0	35.0	180	16.0	PA66HS	BK	1-2;4-6;25	126-00081
T50SD6		6.3 - 7.5	0.6 - 1.8	5.0	160.0	31.0	225	18.0	PA66HS	BK	1;3;9-10;25	111-85350
T50SOSS FT5S-E		4.8 - 5.2	0.7 - 1.3	4.6	156.0	35.0	180	16.0	PA66HS	BK	1-2;4-6;25	126-00099
T50SOSKS FT5.4E		5.2 - 5.6	0.7 - 1.3	4.6	156.0	35.0	180	16.0	PA66HS	BK	1-2;4-6;25	126-00075
T50SST5		6.1 - 6.5	0.7 - 1.5	4.6	170.0	31.0	225	16.2	PA66	NA	1-2;4-6;25	126-02300
		6.1 - 6.5	0.7 - 1.5	4.6	170.0	31.0	225	16.2	PA66HS	BK	1-2;4-6;25	126-00017
T30SOS-AS-SFT6.5-E*		6.5 - 7.0	0.8 - 1.5	3.5	126.4	25.0	200	16.0	PA66HS	BK	1-2;4-6;25	126-00255
T50SOSKS FT6.5S2-E		6.3 - 6.7	1.7 - 2.3	4.6	157.5	35.0	225	16.0	PA66HS	BK	1-2;4-6;25	126-00086

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-92

2-piece fixing ties with arrowhead, with disc

2-piece fixing ties with arrowhead, with disc, for round holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear and white goods manufacturing.

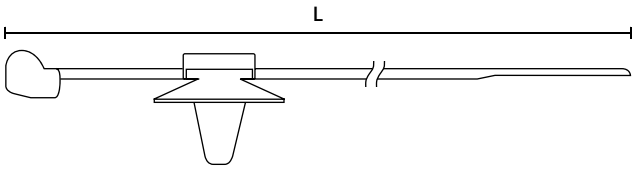
Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt

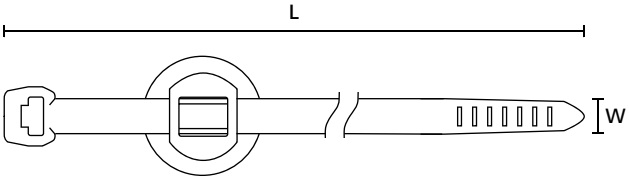


Being a two piece assembly allows the tie head to be located in the most convenient position.

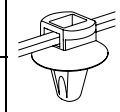
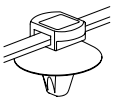
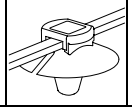
Material specification please see page 26.



T50ROSSFT6.5 16-3



T50ROSSFT6.5 16-3

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Colour	Material	Tools	Article-No.
T50ROSS FT6.5-16-3		6.3 - 6.7	2.5 - 3.5	4.6	200.0	45.0	225	16.0	BK	PA66HS, PA66HIRHS	1-2;4-6;25	150-37791
T50RS FT6.5 16-3		6.3 - 6.7	2.5 - 3.5	4.6	200.0	49.0	222	16.0	BK	PA66HS, PA66HIRHS	1-2;4-6;25	150-37792
T50SOSS FT6.5-D16-2		6.3 - 6.7	1.5 - 2.2	4.6	150.0	35.0	225	16.0	BK	PA66HS, PA66HIRHS	1-2;4-6;25	150-93130
T50RS FT6.5D18		6.5 - 6.8	0.4 - 1.6	4.6	200.0	45.0	200	18.0	BK	PA66HS, PA66HIRHS	1-2;4-6;25	150-37691
T50RS FT6.5		6.3 - 6.7	0.7 - 2.0	4.6	200.0	45.0	225	22.4	BK	PA66HS	1-2;4-6;25	156-01697

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-93

2-piece fixing ties for strong hold on smooth bundles

with arrowhead, with disc, for round holes

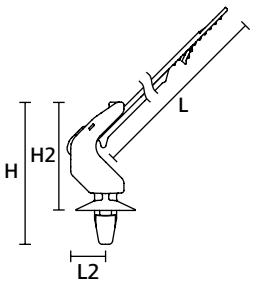
Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

Material specification please see page 26.



SGT100SAHD6.5S2.0



Soft Grip Cable Tie assembled with Soft Grip Mount for holes (arrowhead) and a hose for fluid management.



Soft Grip Cable Tie assembled with Soft Grip Mount for holes (arrowhead).

Please find more Soft Grip Products on page 67, 158 and 164.

TYPE	Hole Ø (FH)	Panel Thickness	Height (H)	Height (H2)	Length (L)	Length (L2)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SAHD6.5S2.0	6.3 - 6.7	1.7 - 2.3	38.7	29.5	140.0	9.5	25.4	PA66HS, TPE, PA66HS	Black (BK), Blue (BU), Black (BK)	8	156-04097

All dimensions in mm. Subject to technical changes.

Recommended Tools							
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	8 EVO9SG	25 EVOcut
	550	550	551	553	555	554	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-94

1-piece fixing ties for high temperature applications up to +240 °C

With arrowhead, with disc, for round holes

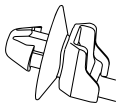
This fastening solution is especially suitable for high temperature areas like the engine bay or exhaust area. The outside serrated cable tie protects the insulation of cable bundles.

Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust, dirt and water
- Cable tie head always situated in a defined position
- Features Material PEEK
- -55 °C to +240 °C operating temperature
- Excellent resistance against chemicals and gamma radiation



One piece fixing tie with arrowhead, outside serrated.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
PT2ASFT6.5 **PT0.7-1.5-E**		6.3 - 6.7	0.7 - 1.5	3.4	112.7	20.0	230	16.0	PEEK	BGE	1-2;4-6;25	126-00183

All dimensions in mm. Subject to technical changes.

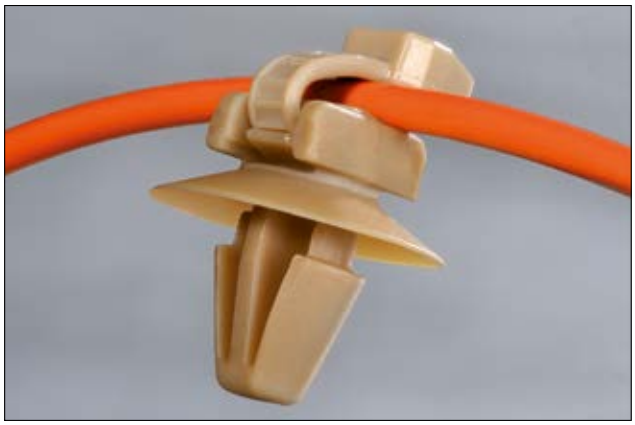
2-piece fixing ties for high temperature applications up to +240 °C

With arrowhead, with disc, for round holes

The ties with fixing element P1SFT6,5 or P2SFT6,5 are ideal when the requirement for temperature or chemical resistance is very high. They are used for cable harnesses in the automotive industry.

Features and benefits

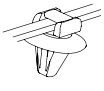
- -55 °C to +240 °C operating temperature
- Excellent resistance against chemicals and gamma radiation
- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt



PEEK fixing ties can be used for small diameters from 1.0 mm.

Application tools please see page 545.

Please find more PEEK products for your system solutions: PEEK Ties, see page 53, 62. Screw Mount CTAM, see page 172.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T50ROSP2SFT6.5		6.3 - 6.7	1.7 - 2.3	4.6	200.0	45.0	225	16.0	PA46, PEEK	GY, BGE	1-2;4-6;25	156-00456
PT2AP1SFT6.5		6.3 - 6.7	0.7 - 1.3	3.4	145.0	35.0	230	16.0	PEEK	BGE	1-2;4-6;25	156-01090
PT2AP2SFT6.5		6.3 - 6.7	1.7 - 2.3	3.4	145.0	35.0	230	16.0	PEEK	BGE	1-2;4-6;25	156-01091
PT2AP3SFT6.5		6.3 - 6.7	1.2 - 1.8	3.4	145.0	32.0	230	16.0	PEEK	BGE	1-2;4-6;25	156-01146

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-95

1-piece fixing tie with arrowhead, with disc

1-piece fixing tie with arrowhead, with disc, for round holes, releasable

With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace and panel building.

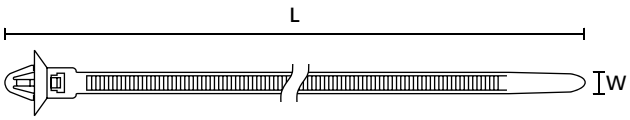
Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in a defined position
- Releasable and therefore reusable

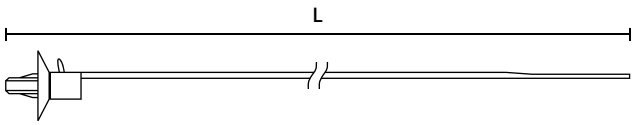


RT50SD6.

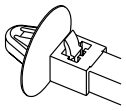
Material specification please see page 26.



RT50SD6



RT50SD6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
RT50SD6		6.3 - 7.5	0.6 - 1.8	5.0	160.0	31.0	225	18.0	PA66HS	Black (BK)	1;3;9-10;25	111-85480

All dimensions in mm. Subject to technical changes.

Recommended Tools					
	1 MK10-SB	3 MK21	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-96

1-piece fixing ties with arrowhead, with disc, sealed

1-piece fixing ties with arrowhead, with disc, for round holes, sealed

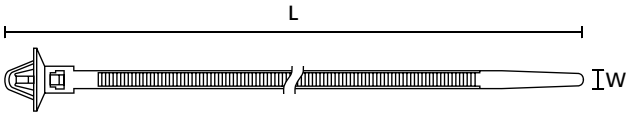
The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors . We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.



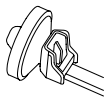
The additional seal protects against the ingress of moisture.

Features and benefits

- One-piece fixing ties with cellular rubber disc
- Especially suitable for door and tailgate harnesses used for car body applications
- Made from PA66 heat-stabilised material
- Cellular rubber disc minimises ingress of dust, dirt and splash water



One piece fixing tie with arrowhead and disc, standard design

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T50SOSS FT6.5E-MS-MD		6.25 - 6.75, 6.1 - 6.6 (hexagonal)	0.7 - 1.6	4.6	163.0	35.0	180	16.0	PA66HS	Natural (NA)	1-2;4-6;25	126-00065
T50XROSS FT6.5-E-MDL		6.25 - 6.75, 6.1 - 6.6 (hexagonal)	1.2 - 2.1	4.6	200.0	45.0	200	16.0	PA66HS	Black (BK)	1-2;4-6;25	156-00379
T50SOSS FT6.5E-MDL		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	16.0	PA66HS	Green (GN)	1-2;4-6;25	126-03100
		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	16.0	PA66HS	Black (BK)	1-2;4-6;25	156-00264
		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	16.0	PA66HS	Natural (NA)	1-2;4-6;25	156-00271

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-97

2-piece fixing ties with arrowhead, with disc, sealed

2-piece fixing ties with arrowhead, with disc, for round holes, sealed

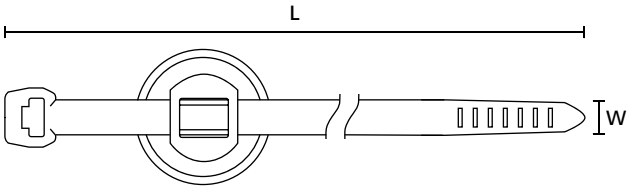
The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.



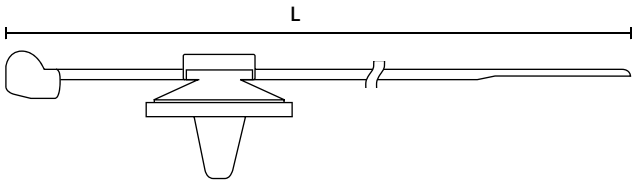
The additional seal protects against the ingress of moisture.

Features and benefits

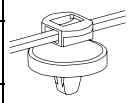
- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions
- Seal protects against splash water
- Versions „SRAH“ are coming with a seal made from thermoplastic elastomer (TPE)



T50ROSSFT6.5-16-2MOD-MD



T50ROSSFT6.5-16-2MOD-MD

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Material	Colour	Tools	Article-No.
T50ROSSFT6.5 16-3MD		6.1 - 7.0	2.5 - 3.0	4.6	200.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-37799
T50ROSSFT6.5-16-2MD-SHORT		6.3 - 6.7	0.7 - 1.2	4.6	200.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	155-42002
T50ROSSFT6.5-D16-2 MD		6.3 - 6.7	0.7 - 1.8	4.6	200.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-93100

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-98

Date of issue: September 2022

1-piece fixing ties with arrowhead, with disc

1-piece fixing ties with arrowhead, with disc, for round holes

With a diverse range of fixing possibilities these ties are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building. This fastening solution is used to secure cable harnesses. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application.

Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises ingress of dust and dirt
- Cable tie head always situated in a defined position



T30SOS-AS-SFT6.5x4E, 1 piece fixing tie with AntiSlip engraving for a round hole 6.5 mm or a square hole 6.5x4 mm.

Material specification please see page 26.

*** AS Anti-Slip Ties inhibit sideways movement on the bundle.**

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T30SOSASSFT6.5x4.0E*	6.5, 6.5 x 4.0	2.4 - 3.0	3.5	126.7	25.0	200	16.0	PA66HS	BK	1-2;4-6;25	126-00341

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-99

1-piece fixing ties with arrowhead, with wings

1-piece fixing ties with arrowhead, with wings, for round holes

For bundling and fixing of cable harnesses, pipes and hoses in many different industries, including automotive, aerospace, white goods manufacturing and panel building.

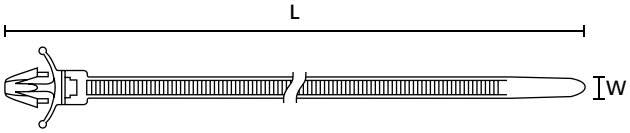
Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited

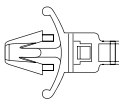
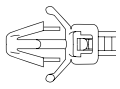
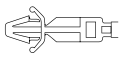
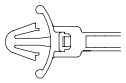


A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

Material specification please see page 26.



T50SSL5

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SSL5		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	200	PA66HS	BK	1-2;4-6;25	126-02204
		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	225	PA46	GY	1-2;4-6;25	111-85395
		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	225	PA66	NA	1-2;4-6;25	111-85339
T50SSFM		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	222	PA66	NA	1-2;4-6;25	111-85739
		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	222	PA66HS	BK	1-2;4-6;25	126-00032
		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	222	PA66HS	NA	1-2;4-6;25	126-01104
T50RSFM		6.0 - 6.6	0.7 - 3.0	4.6	205.0	45.0	225	PA66	NA	1-2;4-6;25	111-85729
OS130		6.8 - 7.2	0.6 - 2.6	5.0	130.0	20.0	147	PA66W	BK	1;3;9-10;25	126-00060
T50SAH		6.0 - 6.6	0.7 - 3.0	4.6	160.0	25.0	225	PA66HS	BK	1-2;4-6;25	126-00163
		6.0 - 6.6	0.7 - 3.0	4.6	160.0	25.0	225	PA66HS	NA	1-2;4-6;25	155-41102
T50SL8		8.0	0.8 - 1.5	4.6	165.0	35.0	225	PA66	BK	2;4-6	126-01900

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-100

1-piece fixing ties with arrowhead, with wings, for oval holes

1-piece fixing ties with arrowhead, with wings, for oval holes

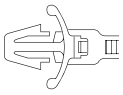
With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building.

Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited
- Versions for oval holes feature anti-twist protection



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T80RFT6X12		6.3 x 12.3	0.6 - 3.0	4.6	228.0	45.0	222	PA46	Grey (GY)	1-2;4-6;25	150-48397
		6.3 x 12.3	0.6 - 3.0	4.6	228.0	45.0	222	PA66	Black (BK)	1-2;4-6;25	150-48396

All dimensions in mm. Subject to technical changes.

2-piece fixing ties with arrowhead, for oval holes

2-piece fixing ties with arrowhead, with wings for oval holes

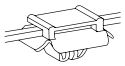
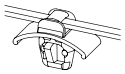
Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Versions for oval holes feature anti-twist protection



T50RFT6OVAL for oval holes 6,3 x 12,2 mm.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
One Click FERRO-T50ROSSFT725		7.0 x 50.0	1.0 - 2.0	4.6	200.0	50.0	225	PA66HS, PA66W	BK	1-2;4-6;25	156-01577
T50RFT6OVAL		6.3 x 12.2	0.6 - 3.0	4.6	202.0	45.0	222	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-37591
T50RFT62x122HR		6.3 x 12.2	0.6 - 3.0	4.6	202.0	45.0	225	PA46	GY	1-2;4-6;25	156-00446

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-101

1-piece fixing ties with arrowhead, with wings, releasable

1-piece fixing ties with arrowhead, with wings, releasable, for round holes

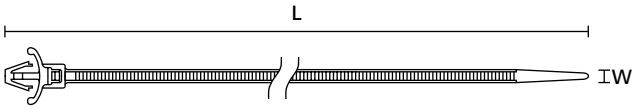
With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace and panel building.

Features and benefits

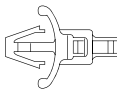
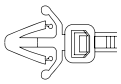
- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited
- Releasable and therefor reusable
- "Ladder style" types are very flexible



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.



RT50RSF

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
YQR10016		6.9 - 7.1	1.6 - 4.0	4.6	165.0	34.0	225	PA66	Grey (GY)	1-2;4-6;25	126-03000
RT50RSF		7.8 - 8.2	0.8 - 2.5	4.6	215.0	50.0	225	PA66	Black (BK)	1-2;4-6;25	115-07010
RT50SFK		6.4 - 7.0	0.8 - 3.0	5.0	225.0	50.0	225	PA66	Black (BK)	1;3;9-10;25	115-06960

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-102

1-piece fixing ties with arrowhead

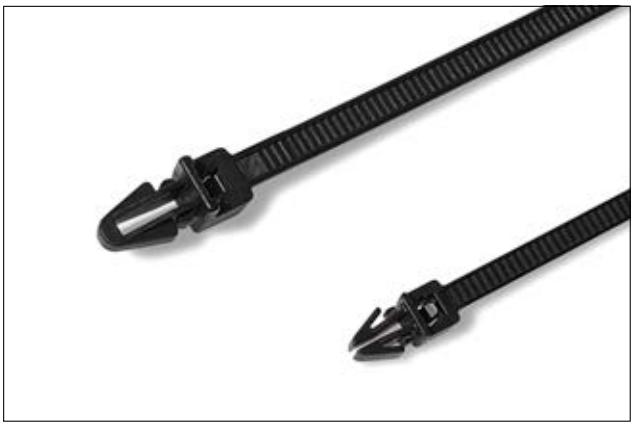
1-piece fixing ties with arrowhead, without wings and disc, for round holes

The arrowhead design is usefull in areas with limited space.

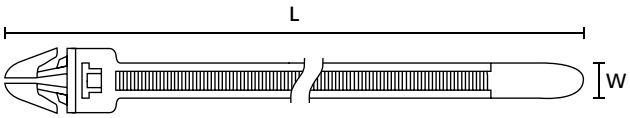
Features and benefits

- Easy to assemble without the need for a tool
- Fixing tie with arrowhead without wings
- Arrowhead simply locks into place
- Cable tie head always situated in defined position

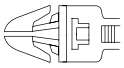
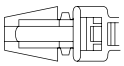
Material specification please see page 26.



The arrowhead design allows these fixing ties to be used in areas with limited space.



T30RSF(U)

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30RSF		4.7 - 5.6	0.9 - 2.4	3.6	158.0	32.0	135	PA66	Natural (NA)	1-2;4-6;25	126-00330
		4.7 - 5.6	0.9 - 2.4	3.6	158.0	32.0	135	PA66HS	Black (BK)	1-2;4-6;25	126-00329
T50RSF(E)		6.2 - 6.4	2.9 - 3.0	4.6	210.0	44.0	225	PA66	Natural (NA)	1-2;4-6;25	111-85799
		6.2 - 6.4	2.9 - 3.0	4.6	210.0	44.0	225	PA66	Black (BK)	1-2;4-6;25	126-01001

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-103

2-piece fixing ties with arrowhead, with disc

2-piece fixing ties with arrowhead, for round holes, for parallel routing

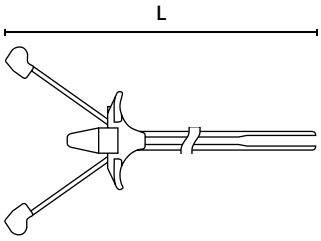
Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

Features and benefits

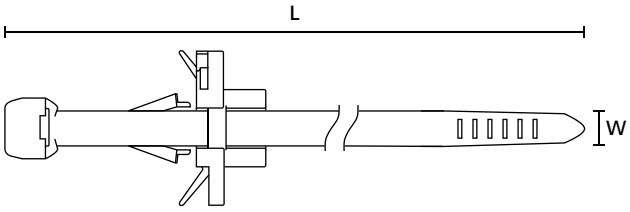
- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- DSFT-version for parallel rounting of two bundles



T50SOSDSFT6.5 for parallel routing.



T50SOSDSFT6.5



T50SOSDSFT6.5

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSDSFT6.5	6.3 - 6.7	0.7 - 1.5	4.6	150.0	15.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00133

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-104

1-piece fixing ties with fir tree, with disc, for round holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

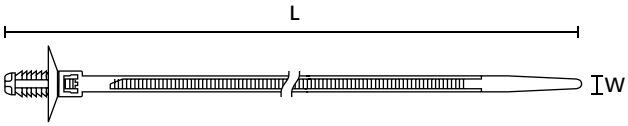
Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes

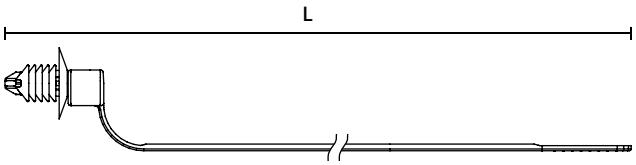


Fir tree foot parts can be used for a variety of panel thicknesses.

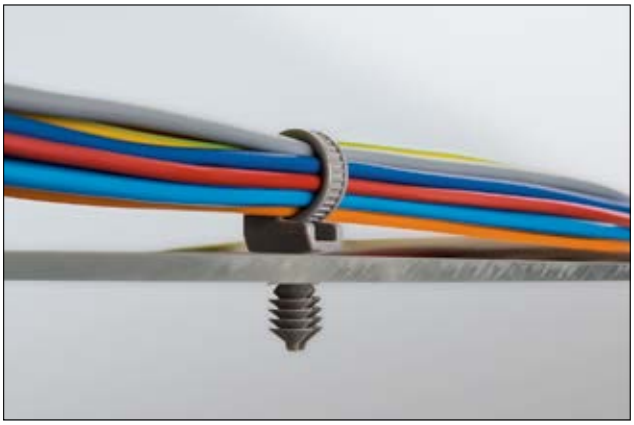
Material specification please see page 26.



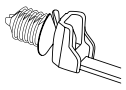
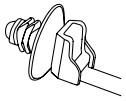
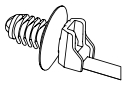
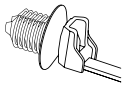
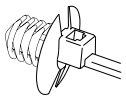
One piece fixing tie with fir tree mount, standard design



Special design without a gap between head and bundle; FT220DP7



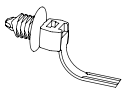
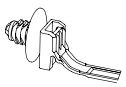
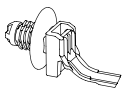
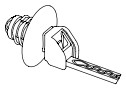
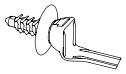
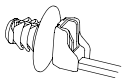
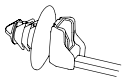
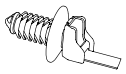
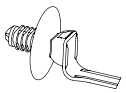
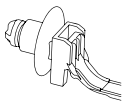
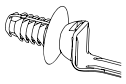
T50SOSFT6D10E - One piece fixing tie with fir tree foot part.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T50SOSFT6D10E		5.8 - 6.2	0.8 - 5.5	4.6	32.0	200	9.8	PA46	GY	1-2;4-6;25	157-00028
		5.8 - 6.2	0.8 - 5.5	4.6	32.0	225	9.8	PA66HS	BK	1-2;4-6;25	157-00045
T50SOSFT6E2		6.3 - 7.0	0.6 - 4.2	4.6	35.0	180	16.0	PA66HS	BK	1-2;4-6;25	157-00085
T50SOSFT6LGE		6.3 - 7.0	0.7 - 7.0	4.6	35.0	180	16.0	PA66HS	BK	1-2;4-6;25	157-00228
T50SOSFT8E		8.0 - 8.5	0.6 - 6.0	4.6	35.0	225	16.0	PA46	GY	1-2;4-6;25	157-00115
		8.0 - 8.5	0.6 - 6.0	4.6	35.0	225	16.0	PA66HS	BK	1-2;4-6;25	157-00072
T18RDP5		4.9 - 5.1	3.0 - 4.0	2.5	20.0	80	13.0	PA66	BK	1-2;4-6;25	150-55610

All dimensions in mm. Subject to technical changes.

1-piece fixing ties with fir tree, with disc, for round holes

*** AS Anti-Slip Ties inhibit sideways movement on the bundle.**

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
FT220DP7		6.8 - 7.2	0.8 - 5.0	4.7	40.0	225	16.0	PA66	BK	1-2;4-6;25	150-01700
OS160FT6HEX		6.35	0.7 - 5.0	5.3	30.0	200	16.0	PA66HS	BK	1;3;9-10;25	157-00081
		6.35 (hexagonal)	0.7 - 5.0	5.3	30.0	200	16.0	PA66	BK	1;3;9-10;25	157-00080
OS170-FT7-LH		6.8 - 7.2	0.6 - 4.5	5.3	30.0	147	16.0	PA66	BK	1;3;9-10;25	157-00019
T30SOS-AS-FT5-E*		4.8 - 5.2, M6	0.7 - 4.5	3.5	25.0	200	16.0	PA46	GY	1-2;4-6;25	157-00448
T30SOS-AS-FT6-E*		6.3 - 6.7	0.6 - 4.0	3.5	25.0	200	16.0	PA66HS	BK	1-2;4-6;25	157-00243
T50ROSFTQM6		M6	0.6 - 7.0	5.1	50.0	222	16.0	PA66HIRHSUV	BK	1;3;5;9-10;25	157-00506
T50SOSFT6E3		6.1 - 6.9	0.7 - 3.5	4.7	35.0	150	16.0	PA66HIRHS	BK	1-2;4-6;25	157-00241
T50SOSFT6E1		6.3 - 7.0	0.7 - 3.0	4.7	35.0	150	16.0	PA66HIRHS	BK	1-2;4-6;25	157-00033
		6.3 - 7.0	0.7 - 3.0	4.7	35.0	225	16.0	PA46	GY	1-2;4-6;25	157-00059
T50SOSFT6LG-E2		6.1 - 6.9, 6.1 - 6.6 (hexagonal)	0.6 - 8.3	4.6	35.0	180	16.0	PA66HIRHS	BK	1-2;4-6;25	157-00242
T50SOSFT6LG-E4		6.3 - 7.0	0.8 - 7.0	4.9	31.0	200	22.0	PA66HS	BK	1;3;9-10;25	157-00237
OS180FT7LH		6.5 - 7.0, 6.35 (hexagonal)	0.6 - 4.5	5.3	30.0	200	16.0	PA66	GY	1;3;9-10;25	157-00068
T50ROSFT6LGU		6.5 - 7.2	0.6 - 8.5	5.1	50.0	225	16.0	PA66HS	BK	1;3;9-10;25	157-00052

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

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1-piece fixing ties with fir tree, with disc

1-piece fixing ties with fir tree, with disc, for oval holes

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

Features and benefits

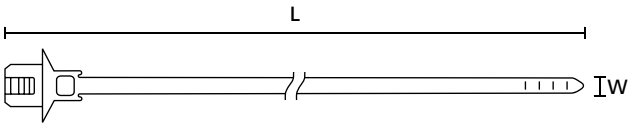
- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Versions for oval holes feature anti-twist protection



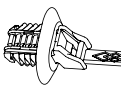
This 1-piece fixing tie with fir tree design for oval holes features anti-twist protection.

Material specification please see page 26.

*** AS Anti-Slip Ties inhibit sideways movement on the bundle.**



1-piece fixing tie with fir tree, with disc, for oval holes

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T50SOS-AS-DFTOVAL-E*		6.5 x 12.5	0.6 - 6.8	4.6	166.4	35.0	180	23.6 x 17.6	PA66HIRHS	Black (BK)	1-2;4-6;25	157-00414

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1	2	4	5	6	25
	MK10-SB	MK20	MK3PNSP2	EVO7i	MK7P	EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

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2-piece fixing ties with fir tree, with disc, for round holes

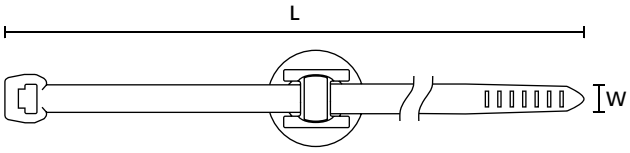
Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

Features and benefits

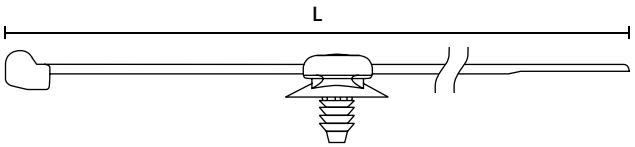
- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes



These fir tree fixings can also be used in threaded, blind holes.

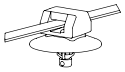


T50SOSFT5SD



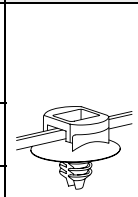
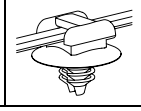
T50SOSFT5SD

Fir tree parts FT3

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T18RFT3		M3	1.5 - 3.0	2.5	20.0	80	13.0	PA66HSUV	BK	1-2;4-6;25	156-00338

All dimensions in mm. Subject to technical changes.

Fir tree parts FT5

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
T30RFT5		4.5 - 5.0	0.7 - 3.0	3.5	34.0	135	16.0	PA46	GY	1-2;4-6;25	156-01316
		4.5 - 5.0	0.7 - 3.0	3.5	34.0	135	16.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-55850
T50SOSFT5		4.5 - 5.0	0.7 - 3.0	4.6	35.0	225	16.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-06200
T50RFT5		4.5 - 5.0	0.7 - 3.0	4.6	45.0	225	16.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-00025
T18RFT5		4.5 - 5.0	0.7 - 3.0	2.5	22.0	80	16.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-01225
T50SOSFT5SD		4.5 - 5.0	0.7 - 3.0	4.6	35.0	225	16.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-00432

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

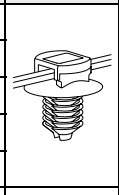
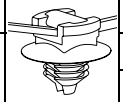
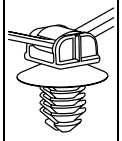
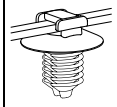
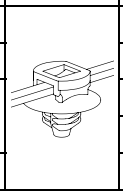
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2-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT6

Material specification please see page 26.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
PT2AFT6LG		6.4 - 7.1	0.8 - 6.0	3.4	145.0	35.0	PEEK, PA46	BGE, GY	1-2;4-6;25	156-01336
T30RFT6LG		6.5 - 7.0	0.8 - 6.0	3.5	150.0	30.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-31090
T50ROSFT6LG		6.5 - 7.0	0.8 - 6.0	4.6	200.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-31099
T50RFT6LG		6.5 - 7.0	0.8 - 6.0	4.6	202.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-31091
T80IFT6LG		6.5 - 7.0	0.8 - 6.0	4.7	305.0	75.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-31096
T30RFT6SD		6.4 - 7.1	0.8 - 3.0	3.5	150.0	35.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-52690
T50ROS FT6SD		6.4 - 7.1	0.8 - 3.0	4.6	200.0	45.0	PA46	GY	1-2;4-6;25	156-00085
		6.4 - 7.1	0.8 - 3.0	4.6	200.0	46.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-05902
T50R FT6LGSD-HEX		6.25 - 6.75, 6.1 - 6.6 (hexagonal)	0.7 - 5.0	4.6	202.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-01705
T50S FT6LG1SD		6.5 - 7.0	0.6 - 6.0	4.6	160.0	30.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-00154
T30RFT6		6.4 - 7.1	0.8 - 3.0	3.5	150.0	30.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-77950
T50ROSFT6		6.4 - 7.1	0.8 - 3.0	4.6	200.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-00076
T50RFT6		6.4 - 7.1	0.8 - 3.0	4.6	202.0	45.0	PA46	GY	1-2;4-6;25	156-01693
		6.4 - 7.1	0.8 - 3.0	4.6	202.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-77941
T50RDHFT6		6.4 - 7.1	0.8 - 3.0	4.7	210.0	19.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	150-77936

All dimensions in mm. Subject to technical changes.

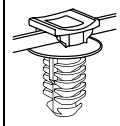
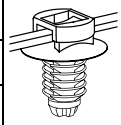
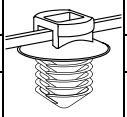
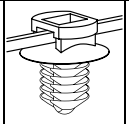
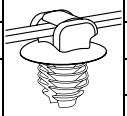
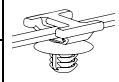
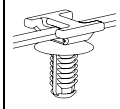
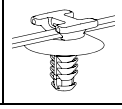
Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
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2-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT7 - FT10

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T120IFT9		9.0 - 10.6	5.0 - 11.0	7.6	300.0	80.0	PA66HIR(S)	BK	1;3;9-10;25	156-00200
T30RFT7		6.5 - 7.0	0.8 - 7.0	3.5	150.0	35.0	PA66HS	BK	1-2;4-6;25	156-00057
T50RFT7		6.5 - 7.0	0.8 - 7.0	4.6	202.0	45.0	PA66HS	BK	1-2;4-6;25	111-85871
T50IFT7		6.5 - 7.0	0.8 - 7.0	4.6	300.0	85.0	PA66HS	BK	1-2;4-6;25	150-00700
V150RFT10		9.7 - 10.0	0.8 - 5.0	3.3	150.0	35.0	PA66, PA66HS	BK	1-2;4-6;25	156-01233
T50ROSFT10		9.7 - 10.0	0.8 - 5.0	4.6	200.0	45.0	PA66HS	BK	1-2;4-6;25	156-00120
T50RFT10		9.7 - 10.0	0.8 - 5.0	4.6	200.0	45.0	PA66HS	BK	1-2;4-6;25	111-85810
T50RFT8		7.7 - 8.0	0.8 - 6.0	4.6	202.0	45.0	PA66HS	BK	1-2;4-6;25	111-85880
T50ROSFT8GSD		8.0 - 8.5	1.1 - 1.5	4.6	200.0	45.0	PA66HS, PA66W	BK	1-2;4-6;25	156-01484
T40RFT8GSD		8.0 - 8.5	1.5 - 4.0	4.0	180.0	40.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	156-00104
T50RFT8GSD		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	PA46	GY	1-2;4-6;25	156-00235
		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	PA66HS, PA66HIRHS	BK	1-2;4-6;25	133-00034
T120RFT9A		8.7 - 9.2	1.0 - 6.5	7.6	380.0	105.0	PA66HIRHSUV	BK	1;3;9-10;25	156-00067
WSSFT9A		8.7 - 9.2	1.0 - 6.5	12.7	228.0	57.0	PA66HIRHSUV	BK	3;5;7;9-10	156-00068
T120RFT9B		8.7 - 9.2	1.0 - 15.8	7.6	380.0	105.0	PA66HIRHSUV	BK	1;3;9-10;25	156-00071
T50RFT7HD		6.2 - 7.2	0.8 - 7.0	4.6	202.0	50.0	PA46	BN	1-2;4-6;25	156-00457

All dimensions in mm. Subject to technical changes.

Recommended Tools										
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	7 EVO9	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-110

Date of issue: September 2022

1-piece fixing ties with disc, for round holes, releasable

1-piece fixing ties with fir tree, with disc, for round holes, releasable

This Fir Tree design is ideal for use in thick panels and threaded, blind holes. The additional disc avoids the intrusion of dust and dirt.

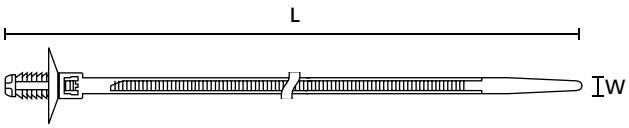
Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Suitable for use within threaded holes
- Reusable - Less waste and less pollution of the environment

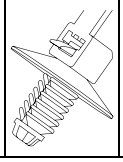


Ideal for use in deep panels and threaded, blind holes.

Material specification please see page 26.



One piece fixing tie with fir tree mount, standard design

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Disc Ø	Material	Colour	Tools	Article-No.
REL30SDP6		6.3 - 7.1	3.0 - 7.0	5.0	170.0	31.0	135	22.0	PA66	Black (BK)	1;3;9-10;25	150-55500

All dimensions in mm. Subject to technical changes.

Recommended Tools					
	1 MK10-SB	3 MK21	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-111

1-piece fixing ties with fir tree, with disc, with stand-off, for round holes

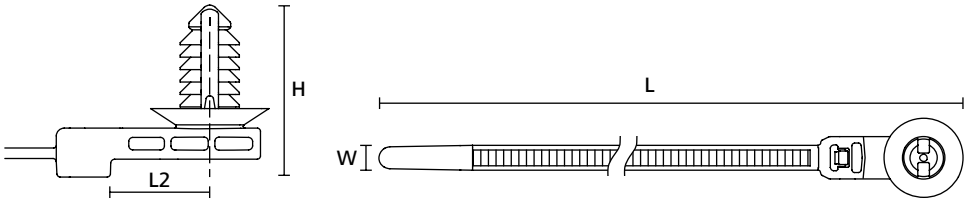
With offset 12.5 and 25.0 mm

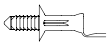
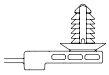
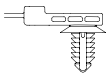
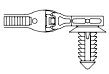
Features and benefits

- Bundling and fixing solution
- Ideal combination of materials and design
- Different positions of the fixing anchor are available to fit installation space



T50ROSFT6S25SO and T50ROSFT612.5SO.



TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Length (L2)	N	Material	Colour	Tools	Article-No.
T50ROS FT6S25SO		6.1 - 6.9	0.6 - 3.8	5.1	242.2	25.0	225	PA66HIRHSUV	Black (BK)	1;3;9-10;25	157-00197
T50ROS FT825SO		7.6 - 8.4	0.6 - 6.0	5.1	245.1	25.0	225	PA66HIRHSUV	Black (BK)	1;3;9-10;25	157-00196
T50ROS FT6SO25A		6.1 - 6.9, 6.35 (hexagonal)	0.6 - 6.7	5.1	230.0	25.0	225	PA46	Brown (BN)	1;3;9-10;25	157-00158
		6.1 - 7.0, 6.35 (hexagonal)	0.5 - 6.7	5.1	230.0	25.0	225	PA66HIRHS	Grey (GY)	1;3;9-10;25	157-00119
T50ROS FT6SO12.5A		6.1 - 7.0, 6.35 (hexagonal)	0.6 - 6.7	5.1	215.9	12.5	225	PA66HIRHS	Grey (GY)	1;3;9-10;25	157-00130
		6.1 - 7.0, 6.35 (hexagonal)	0.6 - 6.7	5.1	215.9	12.5	225	PA66HIRHSUV	Black (BK)	1;3;9-10;25	157-00145
T50ROS FT8SO25A		7.6 - 8.4	0.6 - 6.7	5.1	230.0	25.0	225	PA66HIRHS	Grey (GY)	1;3;9-10;25	157-00120
T50ROS FT6SO25B		6.1 - 7.0, 6.35 (hexagonal)	0.6 - 6.7	5.1	230.0	25.0	225	PA66HIRHSUV	Black (BK)	1;3;9-10;25	157-00169
T50ROS FT8SO25B		7.6 - 8.4	0.6 - 5.0	4.6	230.0	25.0	225	PA66HIRHSUV	Black (BK)	1-2;4-6;25	157-00170
T50ROS FTM6SO12.5B		M6	0.5 - 6.7	4.6	215.9	12.5	222	PA66HIRHSUV	Black (BK)	1-2;4-6;25	157-00131
T50ROS FTM6SO25B		M6	0.6 - 5.5	4.6	230.0	25.0	222	PA66HIRHSUV	Black (BK)	1-2;4-6;25	157-00172
T50ROS FT6SO25R		6.1 - 7.0, 6.35 (hexagonal)	0.6 - 8.3	5.1	237.7	25.0	222	PA66HIRHSUV	Black (BK)	1;3;9-10;25	157-00164

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-112

2-pieces fixing ties with deep hole anchor, with disc, for round holes

Deep hole anchor DHA5.5 - DHA8.4

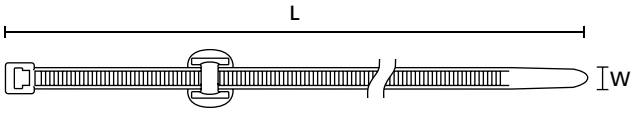
Features and benefits

- Pre-assembled 2-piece fixing tie with deep hole anchor
- The high ‚pull off' forces are due to the integrated metal clamp
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Suitable for use within blind holes with or without thread

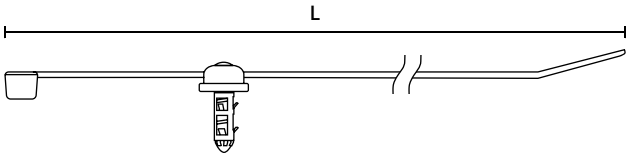


DHA5.5x15 and DHA8.4x20 for blind hole applications.

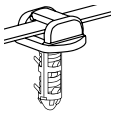
Material specification please see page 26.



Fixing tie with deep hole anchor



Fixing tie with deep hole anchor

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50RDHA5.5x15		5.4 - 5.6	15.0	4.6	202.0	45.0	225	PA46	Grey (GY)	1-2;4-6;25	156-01203
T50RDHA8.4x20		8.3 - 8.5	20.0	4.6	202.0	45.0	225	PA46	Grey (GY)	1-2;4-6;25	156-01155

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Arrowhead cradle

SF/TM-Series

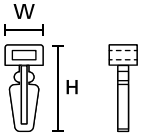
Offering simple and easy methods of securing cables or pipes, these fixing accessories have many applications within a wide range of industries.

Features and benefits

- Arrowhead fixing for use in pre-drilled or punched holes
- Ideal for applications with limited space and restricted access
- Parts with disc protect against dirt and dust

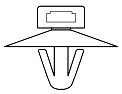
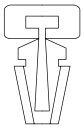


TM1SF for secure fixing of cables into pre-drilled or pre-punched holes.



SFC

Material specification please see page 26.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Article-No.
SFC2		6.0	0.8 - 1.0	6.0	-	14.5	5.3	PA66	Natural (NA)	151-02000
SFC3		6.3	0.8 - 1.8	22.0	15.5	15.5	8.6	PA66	Black (BK)	151-01907
		6.3	0.8 - 1.8	22.0	15.5	15.5	8.6	PA66	Natural (NA)	151-01909
SFC		6.0	3.0 - 3.2	11.0	18.0	18.0	5.3	PA66	Natural (NA)	151-01600
TM1SF		6.35	3.3 - 3.4	10.2	15.8	15.6	5.0	PA66	White (WH)	151-40119

All dimensions in mm. Subject to technical changes.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-114

Date of issue: September 2022

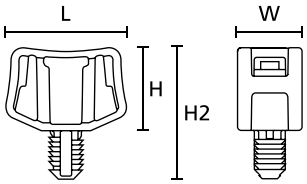
Fixing elements with fir tree, for distance routing

Saddle mount

These heavy duty fixing offers excellent performance for ship building and the truck and construction vehicle industries.

Features and benefits

- For parallel routing of four bundles
- Secure alignment to the bundle due to H-design
- For cable ties up to 12.7 mm wide
- Pre-fixing of tie with integrated nose



Fir Tree Saddle Mounts



The mount can secure up to 4 separate bundles, providing parallel spacing between the frame rail and adjacent bundles.

TYPE	Bundle Ø max.	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
S3STM50	127.0	12.7 - 13.7	1.9 - 13.0	22.0	50.0	35.0	55.0	PA66HIRHSUV	Black (BK)	100 pcs.	151-29500

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

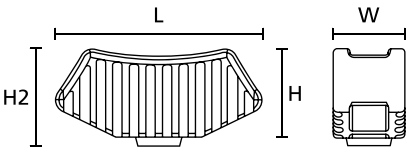
Fixing elements for BHT-ties for distance routing

MSBT120

These heavy duty fixing offers excellent performance for ship building and the truck and construction vehicle industries.

Features and benefits

- For parallel routing of three bundles
- Retainer is fixed in the hole with BHT-tie
- Socket centres retainer in the hole and can protect tie from sharp edges



MSBT120



Saddle Mount MSBT120.

TYPE	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
MSBT120	11.2 - 20.8	4.1 - 19.1	16.5	48.3	20.6	22.2	PA66HIRHS	Black (BK)	500 pcs.	151-29301

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-115

Automatic bundling

Clips to fix cables and harnesses in the automotive and white goods industries.

Features and benefits

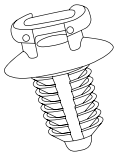
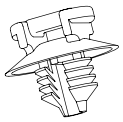
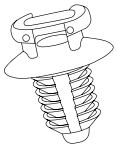
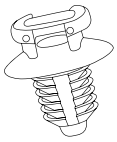
- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool 2000 family and Autotool System 3080

Material specification please see page 26.



Fixing elements for automatic bundling.

Fir tree clips for automatic cable tying systems

TYPE	Drawing	Hole Ø (FH)	Material	Colour	Article-No.
ATSFT5LG		4.5 - 5.0	PA66HIRHS	Black (BK)	102-67050
ATSFT6		6.3 - 7.0	PA66HIRHS	Black (BK)	102-67067
ATSFT6LG		6.5 - 7.1	PA66HIRHS	Black (BK)	102-67062
ATSFT8GSD		8.0 - 8.5	PA66HIRHS	Black (BK)	102-67081

All dimensions in mm. Subject to technical changes.

Can be used with Automatic Cable Tying Systems on page 538.

Fir tree clips for oval holes for automatic cable tying systems

TYPE	Drawing	Hole Ø (FH)	Material	Colour	Article-No.
ATS62x122-2DOP90		6.2 x 12.2	PA66HIRHS	Black (BK)	102-67040
ATS62x122-2DOP		6.2 x 12.2	PA66HIRHS	Black (BK)	102-67042

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-116

Date of issue: September 2022

Fixing elements for T-slotted aluminium frames

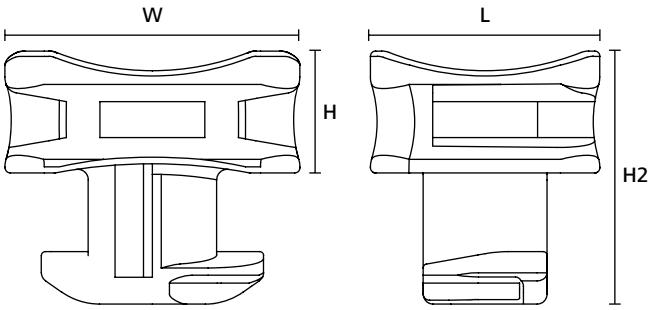
The Aluminium Clip Frame Mounts (ACFM-Series) are specifically designed for use with aluminium construction profiles. Installation and handling is seamless - simply twist the mounts 90 degrees to secure them firmly into position at the desired positions along the profile. These mounts can also be loosened and repositioned easily for quick adjustment and the ongoing maintenance of cables. The range of aluminium frame mounts are suitable for use with various aluminium construction profiles from a range of manufacturers.



The Aluminium Clip Frame Mounts (ACFM) are special designed for Aluminium Construction Profiles.

Features and benefits

- Quick and easy to install (quarter-turn fixing)
- 2-way cable tie entry, allowing cables to be fixed lengthways or sideways to the profile
- Curved design ensures that cables are supported centrally to the mount
- Secure fixing once installed
- Suitable for cable ties up to 8 mm wide



TYPE	Panel Thickness	Groove Width	Width (W)	Length (L)	Height (H)	Height (H2)	Product Family	Material	Colour	Article-No.
ACFM4W8PT2.2	2.2 - 2.2	8.0	22.5	17.5	9.3	15.0	For Bosch Rexroth Strut profiles slot 8	PA66/6HIRHS	Black (BK)	151-03176
ACFM8W6.2PT2.75	2.8 - 2.8	6.2	22.5	17.5	9.3	15.3	For ITEM 6 frame	PA66/6HIRHS	Black (BK)	151-03248
ACFM1W13PT3.5	3.5 - 3.5	13.0	22.5	17.5	13.3	20.8	For Ziegler profile 13	PA66/6HIRHS	Black (BK)	151-02942
ACFM5W8PT4,5	4.5 - 4.5	8.0	22.5	17.5	9.3	17.3	For ITEM 8 frame	PA66/6HIRHS	Black (BK)	151-03192
ACFM7W10PT5.3	5.3 - 5.3	10.0	22.5	17.5	9.3	18.6	For ITEM10 frame	PA66/6HIRHS	Black (BK)	151-03193
ACFM2W10PT6	6.0 - 6.0	10.0	22.5	17.5	9.3	19.3	For Bosch Rexroth Strut profiles slot 10	PA66/6HIRHS	Black (BK)	151-02858

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-117

Wire push in clips

WPC-Series

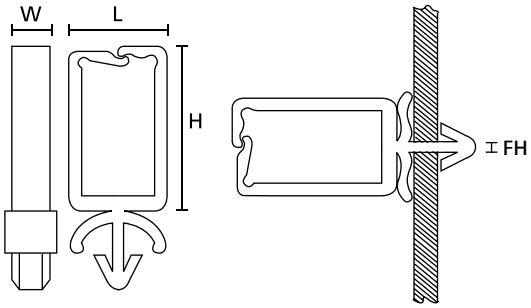
With the increased complexitiy of electronic and electrical installations the use of WPC Clips enables cables to be installed using a minimum amount of space. A perfect solution for the frame/rails of controll cabinets or the white goods industry.

Features and benefits

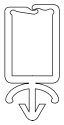
- Accept single or multiple wires
- Simply push wires into place
- Arrowhead design for simple and secure installation
- Access to panel only needed from one side



WPC – Wire Push In Clip.



WPC Wire Push In Clip (side view, front view, in application)

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
WPC5		4.7	0.8 - 4.0	5.3	15.0	12.7	PA66	Natural (NA)	151-75059
WPC10		4.7	0.8 - 4.0	5.3	15.0	17.7	PA66	Natural (NA)	151-75109
WPC15		4.7	0.8 - 4.0	5.3	15.0	22.7	PA66	Natural (NA)	151-75159
WPC20		4.7	0.8 - 4.0	5.3	15.0	27.7	PA66	Natural (NA)	151-75209

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-118

Fixing elements for tubes and harnesses

KSFT6.5OC with low arrowhead

These fixing elements can be used in a wide range of applications where space saving work is necessary.

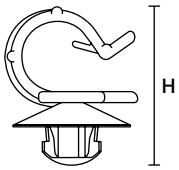
Features and benefits

- Fixing part with rounded arrowhead to minimise assembly height
- Ideal for applications where space is limited
- Simply clip on a wire or hose
- Bundle diameter is defined
- Suitable for post-installation of bundles

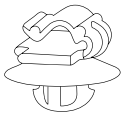
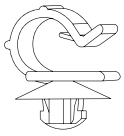


The very low arrowhead is specially designed for narrow installation spaces.

Material specification please see page 26.



KSFT6.5 OC 7-9

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Height (H)	Material	Colour	Article-No.
KSFT6.5OC1-3		6.3 - 6.7	2.3 - 2.7	1.0 - 3.0	14.4	PA66HIRHS	Black (BK)	151-01843
KSFT6.5OC7-9		6.3 - 6.7	2.3 - 2.7	7.0 - 9.0	21.6	PA66HIRHS	Black (BK)	151-01844

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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www.HT.click/49-119

Fixing elements for tubes and harnesses with automatic locking feature

with arrowhead, for round holes

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

Features and benefits

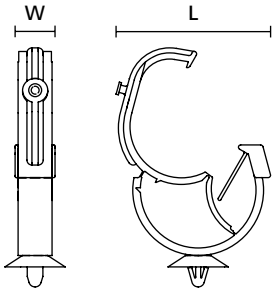
- Push and click closure for fixing of wires
- Clip is clicked into a specific hole
- AHC( )SS und AHC( )SB can be pushed onto a 5.0 mm stud



Automatic Harness Clip open.

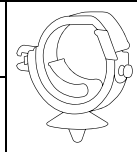
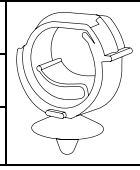


Automatic Harness Clip closed.



AHC( )AH *AHC( )AH*

Material specification please see page 26.

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Disc Ø	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
IAHC3AH		28.0	13.5	40.0	24.0	6.2 - 6.7	0.7 - 2.7	PA66HIRHS	Black (BK)	151-00378
IAHC4AH		36.0	13.5	53.0	24.0	6.2 - 6.7	0.7 - 3.0	PA66HIRHS	Black (BK)	151-00382
AHC1AH		13.0	10.0	26.2	20.0	6.2 - 6.7	0.7 - 3.0	PA66HIRHS	Black (BK)	151-02874
AHC2AH		20.0	10.0	32.5	20.0	6.2 - 6.7	0.7 - 3.0	PA66HIRHS	Black (BK)	151-02881
AHC4AH		41.5	15.9	60.5	24.0	6.5	0.8 - 2.7	PA66HIRHS	Black (BK)	151-00374

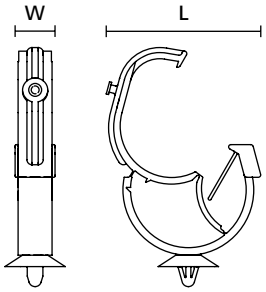
All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

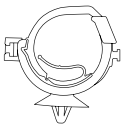
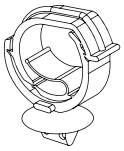
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Fixing elements for tubes and harnesses with automatic locking feature

with arrowhead, for oval holes



AHC( )AH *AHC( )AH*

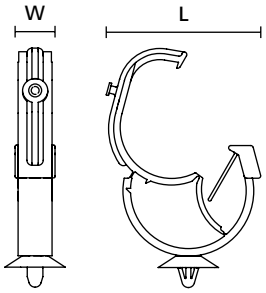
TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Disc Ø	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
IAHC5BH		45.0	13.5	64.0	24.0	6.2 x 12.2	0.5 - 2.5	PA66HIRHS	Black (BK)	151-00384
IAHC3CH		28.0	10.0	50.0	24.0	6.2 x 12.2	0.7 - 2.0	PA66HIRHS	Black (BK)	151-00381
AHC2BH		20.0	10.0	32.5	20.0	6.2 x 12.2	0.5 - 3.0	PA66HIRHS	Black (BK)	151-02882
AHC3BHR		28.0	14.0	47.4	24.0	6.2 x 12.2	0.7 - 3.0	PA66HIRHS	Black (BK)	151-00370
AHC3CHR		28.0	10.0	40.0	24.0	6.2 x 12.2	1.0 - 2.7	PA6HIR	Black (BK)	151-00371
AHC45BHG2		37.5	14.0	50.0	22.0	6.2 x 12.2	1.0 - 3.0	PA46	Grey (GY)	151-01377

All dimensions in mm. Subject to technical changes.

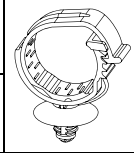
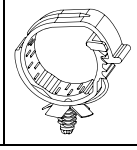
Add items to your watchlist!
www.HT.click/49-121

Fixing elements for tubes and harnesses with automatic locking feature

with fir tree for round holes



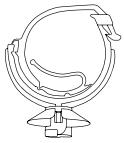
AHC( )AH *AHC( )AH*

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Disc Ø	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
AHC25FT6LG		22.0	10.0	34.5	20.0	6.4 - 7.0	0.7 - 4.0	PA66HIRHS	Black (BK)	151-01198
AHC223FT6LG		23.0	10.0	35.0	20.0	6.4 - 7.0	0.7 - 4.0	PA66HIRHS	Black (BK)	151-01078
AHC336FT6LG		37.5	14.0	50.0	22.0	6.4 - 7.0	0.7 - 4.0	PA66HIRHS	Black (BK)	151-01376

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses with automatic locking feature

For aluminium frames with T-slot

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Disc Ø	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
AHC3EH2		28.0	11.0	44.2	24.0	6.2 x 12.2	1.8 - 4.8	PA66HIRHS	Black (BK)	151-00928
IAHC3EH		28.0	10.0	50.0	24.0	6.2 x 12.2	1.5 - 3.1	PA66HIRHS	Black (BK)	151-00489

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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Fixing elements for tubes and harnesses with automatic locking feature, connectable

IAHC-Series, connectable

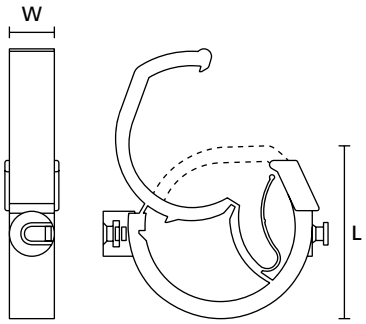
Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.



IAHC( )AH in combination with an IAHC( )T.

Features and benefits

- Push and click closure
- Coupling elements of the IAHC variants allow parts to connect
- IAHC( )T can only be connected with another IAHC element
- Vibration resistant, rattlefree and secure hold of bundle
- In case of maintenance easy replacement of bundle possible
- 360 degree rotatable for guiding bundles in different directions



IAHC( )T *IAHC( )T*

Material specification please see page 26.

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Material	Colour	Article-No.
IAHC1T		13.0	10.0	23.0	PA66HIRHS	Black (BK)	151-02883
IAHC2T		20.0	10.0	30.0	PA66HIRHS	Black (BK)	151-00199
IAHC3T		28.0	10.0	40.0	PA66HIRHS	Black (BK)	151-02884
IAHC4T		36.0	13.5	47.0	PA66HIRHS	Black (BK)	151-00207
IAHC5T		45.0	13.5	57.0	PA66HIRHS	Black (BK)	151-00195

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-123

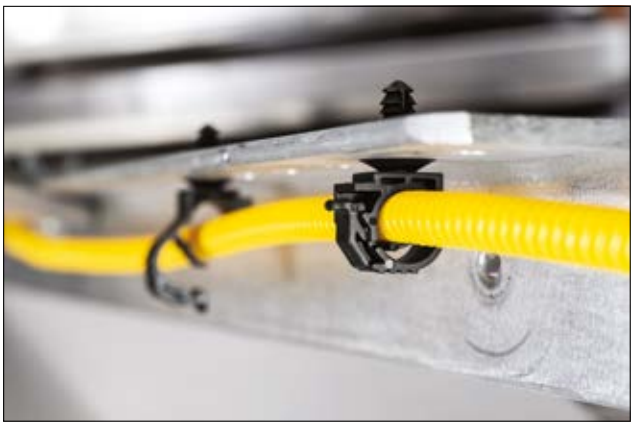
Fixing elements for tubes and pipes

with fir tree for round holes and cover, LOC-Series

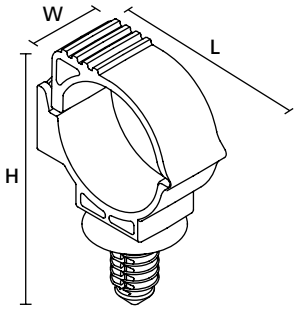
These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

Features and benefits

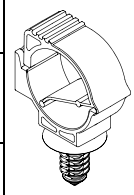
- For fixing and bundling convoluted tubes and pipes
- Vibration resistant, rattle-free and secure hold of bundle
- In case of maintenance easy replacement of bundle possible



The locking clamps of the LOC-Series offer fast and easy bundling of convoluted tubes and pipes.



Reference drawing for dimensions only.

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Material	Colour	Article-No.
LOC5-9FT6LG		12.0	23.7	37.1	6.35 (hexagonal), 6.1 - 6.9	0.6 - 8.3	9.0	PA66HIRHSUV	BK	151-01017
LOC10-14FT6LG		12.0	27.6	41.7	6.35 (hexagonal), 6.1 - 6.9	0.6 - 8.3	14.0	PA66HIRHSUV	BK	151-01166
LOC15-19FT6LG		12.0	31.6	47.5	6.35 (hexagonal), 6.1 - 6.9	0.6 - 8.3	19.0	PA66HIRHSUV	BK	151-01022

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-124

Fixing elements for tubes and pipes

with fir tree for oval holes and cover, LOC-Series

These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

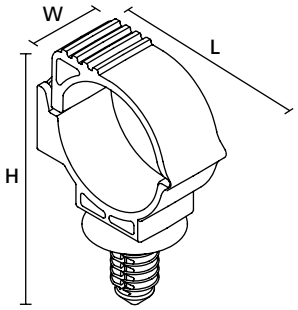
Features and benefits

- For fixing and bundling convoluted tubes and pipes
- Vibration resistant, rattle-free and secure hold of bundle
- In case of maintenance easy replacement of bundle possible

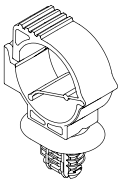
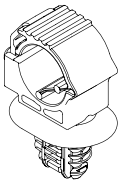
Material specification please see page 26.



Open Pipe Clip LOC15-19FTOVAL.



Reference drawing for dimensions only.

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Material	Colour	Article-No.
LOC15-19FTOVAL		12.0	31.6	49.5	6.2 x 12.2, 6.5 x 12.5, 6.5 x 13.0, 7.0 x 12.0	0.6 - 6.8	19.0	PA66HIRHSUV	BK	151-01049
LOC5-9FTOVAL		12.0	25.5	34.2	6.2 x 12.2, 6.5 x 12.5, 6.5 x 13.0, 7.0 x 12.0	0.6 - 6.8	9.0	PA66HIRHSUV	BK	151-01306

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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www.HT.click/49-125

Fixing Elements for Tubes and Harnesses

With Fir Tree

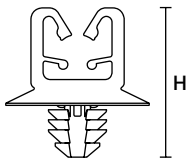
This Fixing Element is pressed into a hole by hand and locked into place with a hearable click. Cable bundles can be applicated afterwards.

Features and benefits

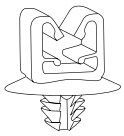
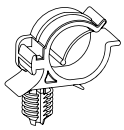
- Easy to install without the need for a tool
- Types with disc cover the hole and protect against dirt and dust ingress
- Rattlefree and secure hold of bundles due to retaining collar
- Suitable for post-installation of bundles
- Easy replacement of bundles in case of maintenance



The HC48FT6 is designed for Bundle diameter 4.3 - 5.2 mm.



HC48FT6

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Height (H)	Material	Colour	Article-No.
HC48FT5		4.5 - 5.0	0.7 - 3.0	4.3 - 5.2	21.0	PA66HIRHS	Black (BK)	151-01405
HC48FT6		6.5 - 7.0	0.7 - 2.8	4.3 - 5.2	20.8	PA66HIRHS	Black (BK)	151-00680
CTCFT6		6.3 - 6.7	0.7 - 4.5	15.0	18.5	PA66HIRHS	Black (BK)	151-00783

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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www.HT.click/49-126

Fixing elements for corrugated tubing, with arrowhead

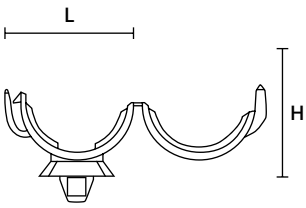
These holders are used in the automotive industry, in the production of cable harnesses and in the electrical industry. Their quick and easy mounting is the reason for their universal success wherever corrugated tubing and pipes have to be fixed quickly and securely.

Features and benefits

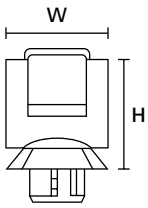
- Clamps for corrugated tubing for a variety of nominal diameters
- Arrowhead simply locks into place
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp
- CTCLPROFILE clamp can also fastened to a metal edge



Simple and secure installation of pipes or hoses to panels.

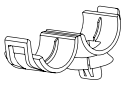


RCC D21, D24, D28



RCC D21, D24, D28

Material specification please see page 26.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Nominal Ø	Width (W)	Length (L)	Height (H)	Material	Colour	Article-No.
RCC D21		6.2 x 12.2	0.7 - 2.5	21.0	22.0	31.0	30.0	PA66HIRHS	Black (BK)	150-92300
RCC D24		6.2 x 12.2	0.7 - 2.5	24.0	22.0	33.0	33.0	PA66HIRHS	Black (BK)	151-02266
CTCLPROFILE		7.8 - 8.2	2.3 - 2.7	31.2	12.0	64.5	59.5	PA66HIRHS	Black (BK)	151-00026

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-127

Fixing elements for corrugated tubing, with fir tree

CTC-Series

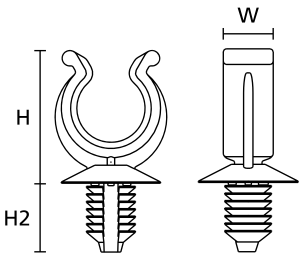
CTC clamps are used for example in the automotive, harness making, electrical industry and wherever corrugated tubing has to be quickly and firmly fixed.

Features and benefits

- CTC clamps for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



The tubing clips into the CTC clamp and is held firmly.



CTC10FT6LG

Material specification please see page 26.

TYPE	Drawing	Width (W)	Height (H)	Height (H2)	Hole Ø (FH)	Panel Thickness	Nominal Ø	Disc Ø	Material	Colour	Article-No.
CTC10FT6LG		8.0	21.4	11.1	6.5 - 7.0	0.8 - 6.0	10.0	16.0	PA66HIRHS	Black (BK)	151-00018
CTC13FT6LG		8.0	25.2	11.1	6.5 - 7.0	0.8 - 6.0	13.0	16.0	PA66HIRHS	Black (BK)	151-00019
CTC4.5FT6LG		8.0	16.1	11.1	6.5 - 7.0	0.8 - 6.0	4.5	16.0	PA66HIRHS	Black (BK)	151-14314
CTC7.5FT6LG		8.0	18.6	11.1	6.5 - 7.0	0.8 - 6.0	7.5	16.0	PA66HIRHS	Black (BK)	151-14313
CTC7.5FT9		8.0	19.9	12.2	8.7 - 9.0	3.0 - 5.0	7.5	23.0	PA66HIRHS	Black (BK)	155-31602
CTC10FT6		8.0	21.4	7.5	6.5 - 7.0	0.8 - 3.0	10.0	16.0	PA66HIRHS	Black (BK)	151-14311
CTC10FT9		8.0	22.7	12.2	8.7 - 9.0	3.0 - 5.0	10.0	23.0	PA66HIRHS	Black (BK)	155-17801
CTC13FT6		8.0	25.2	7.5	6.5 - 7.0	0.8 - 3.0	13.0	16.0	PA66HIRHS	Black (BK)	151-14312
CTC22FT9		8.0	37.7	12.2	8.7 - 9.0	3.0 - 5.0	22.0	23.0	PA66HIRHS	Black (BK)	155-25201

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

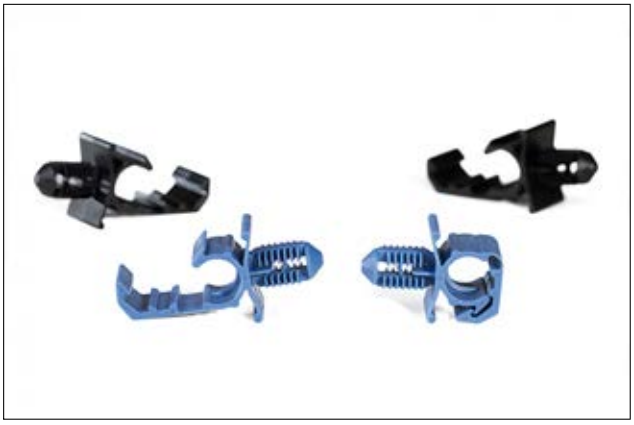
Add items to your watchlist!
www.HT.click/49-128

Fixing elements for corrugated tubing, with fir tree

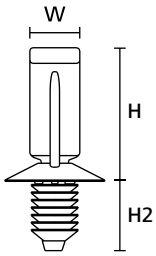
CTC clamps are used in the automotive, harness making and electrical industries and wherever corrugated tubing has to be quickly and firmly fixed.

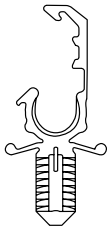
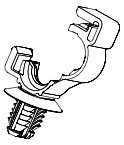
Features and benefits

- Available for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately, clipping into place
- Movement is prevented by the inside profile of the clamp



CNCTC8FT6.5LG Clamps.



TYPE	Drawing	Width (W)	Height (H)	Height (H2)	Hole Ø (FH)	Panel Thickness	Disc Ø	Material	Colour	Article-No.
CNCTC8FT6.5LG		10.0	32.5	11.4	6.5 - 6.7	1.0 - 6.0	-	PA66HIRHS	Black (BK)	151-01038
LC9FTOVAL		10.0	37.7	13.2	6.2 x 12.2, 6.5 x 12.5, 6.5 x 13.0, 7.0 x 12.0	0.6 - 6.8	23.6x 17.6	PA66HIRHS	Black (BK)	151-01880

All dimensions in mm. Subject to technical changes.

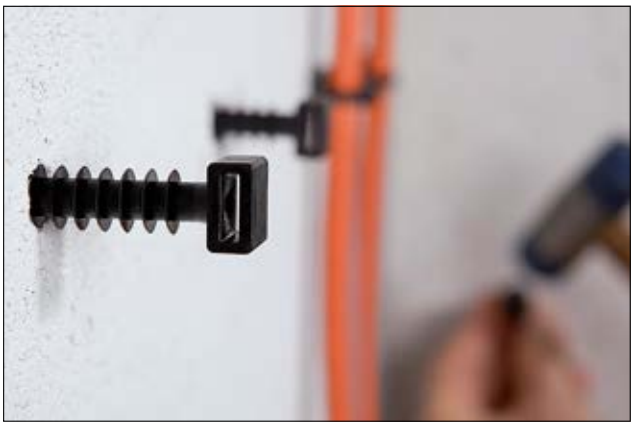
Date of issue: September 2022

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Fixing base

LOK-Series

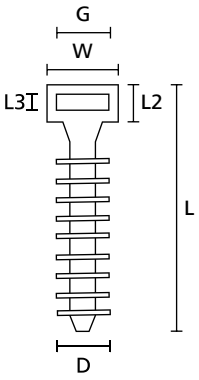
The LOK mounts, in conjunction with a cable tie, can be used either indoors or outdoors for a diverse range of applications from holding climbing plants, to securing cables running between buildings.



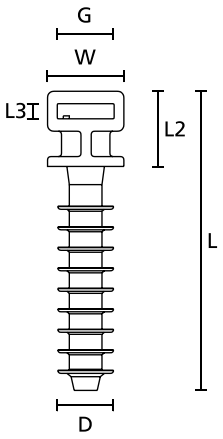
LOK01 fixing bases for indoor and outdoor use.

Features and benefits

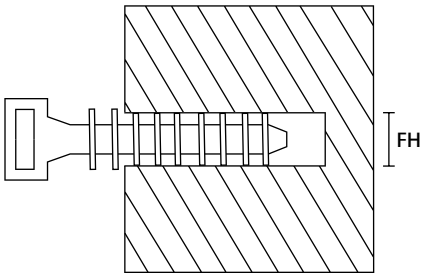
- LOK01 – LOK05 usable with any cable ties up to 9 mm wide
- Suitable for a wide range of materials, including concrete, brick, block and wood
- Installed by knocking into 7 mm or 8 mm diameter hole
- LOK01B is designed for soft brickwork and 6 mm holes
- Elongated head of LOK05 for setting bundles at a distance from brickwork



LOK01 fixing base (front view)



LOK05 fixing base (front view)



LOK01 pushed into a wall bore hole

TYPE	Width (W)	Length (L)	Length (L2)	Length (L3)	Ø (D)	Strap Width max. (G)	Hole Ø (FH)	Material	Colour	Article-No.
LOK01B	12.0	30.0	6.5	2.5	7.2	9.0	6.0	PA6HIR	Black (BK)	151-80500
LOK01	12.0	44.0	6.5	2.5	9.2	9.0	7.0 - 8.0	PA11	Black (BK)	151-01277
	12.0	44.0	6.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80110
LOK05	12.0	49.0	12.5	2.5	9.2	9.0	7.0 - 8.0	PA6HIR	Black (BK)	151-80700

All dimensions in mm. Subject to technical changes.

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Rivet mount

TY5-Series

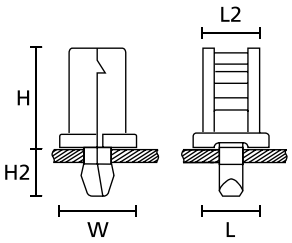
The TY Fixings are ideal for use where a high pull out force is required (eg. in the aircraft industry). The two piece ‚wedge' ensures that once installed the mounts will not come away from the panel. Particularly designed for areas with restricted access.

Features and benefits

- Quick installation
- Two-piece wedge
- Easy insertion
- Firmly fixes wide variety of cable ties

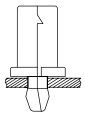
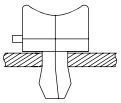
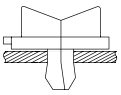
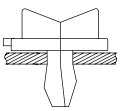
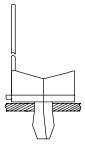
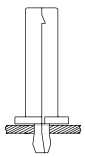


Rivet Mount TY5 is usable with a wide variety of our cable ties.



TY5K1 Rivet Mount

Material specification please see page 26.

TYPE	Drawing	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Strap Width max. (G)	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
TY5K1		14.8	15.0	11.0	18.3	9.5	5.4	5.0 - 5.3	1.0 - 3.0	PA66HS	Natural (NA)	152-51059
TY5K2		12.0	14.0	10.0	7.8	9.5	5.5	4.9 - 5.3	1.0 - 5.0	PA66HS	Natural (NA)	152-11209
TY5K3/5		22.0	18.0	14.0	10.0	9.5	9.3	4.9 - 5.3	1.0 - 5.0	PA66HS	Natural (NA)	152-11359
TY5K3		22.0	18.0	14.0	10.0	12.5	9.3	5.9 - 6.4	2.0 - 8.0	PA66HS	Natural (NA)	152-11309
TY5K4		22.0	14.0	10.0	175.0	12.5	4.7	5.9 - 6.4	2.0 - 8.0	PA66HS	Natural (NA)	152-11409
TY5K5		17.8	18.0	11.0	38.3	9.5	5.8	5.0 - 5.3	1.0 - 3.0	PA66HS	Natural (NA)	152-55059

All dimensions in mm. Subject to technical changes.

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Plastic rivets

TY-Series

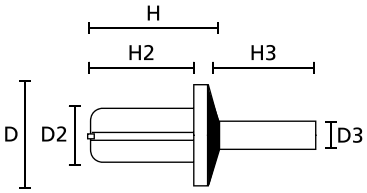
These simple to use plastic rivets are ideal for improving productivity in the working environment, saving time and money over more conventional jointing methods. Ideal for joining panels, or components to panels in a wide range of industries from automotive to panel building.

Features and benefits

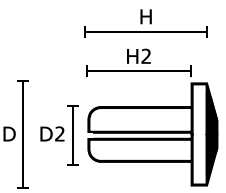
- One Piece
- Simply push pin into body of rivet
- TY3P1 and TY8P1 pins inserted using rivet placement tool
- TY8P2 has ‚mushroom' head so pin is simply hammered in
- TY8P2 consists of two unattached parts



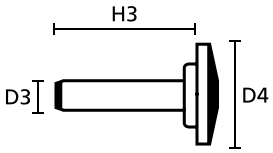
Plastic Rivet TY8P1 in application.



Plastic Rivet TY3P1 / 8P1



Plastic Rivet TY8P2, 1st piece



TY8P2 pin, 2nd piece

TYPE	Height (H)	Height (H2)	Height (H3)	Ø (D)	Ø (D2)	Ø (D3)	Ø (D4)	Material	Colour	Article-No.
TY3P1	7.5	6.0	5.3	6.0	3.0	1.7	-	PA66	Black (BK)	241-11310
	7.5	6.0	5.3	6.0	3.0	1.7	-	PA66	Natural (NA)	241-11319
TY8P1	10.0	8.0	7.5	8.0	4.0	2.6	-	PA66	Black (BK)	241-11810
	10.0	8.0	7.5	8.0	4.0	2.6	-	PA66	Natural (NA)	241-11819
TY8P2-SET	10.0	8.0	11.5	8.0	4.0	2.6	8.0	PA66	Black (BK)	241-11820
	10.0	8.0	11.5	8.0	4.0	2.6	8.0	PA66	Natural (NA)	241-11829

All dimensions in mm. Subject to technical changes.

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Blind plugs

Our Plugs were developed especially for the automotive industry. Application in trunks, doors, wheel housing and dash panels. Whenever needed to secure a hole against dirt or dust. Sometimes even used for optical reasons.

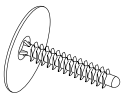
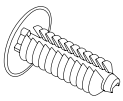
Features and benefits

- Easy assembly without the need of a tool
- Disc covers the hole and minimises ingress of dust, dirt and water
- Types „TRIM PLUG 5 and „PLUGSFT8.4“: with additional retainer to fix panel or cover



Blindplugs are available in different dimensions and materials.

Material specification please see page 26.

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Material	Colour	Article-No.
TRIM PLUG 5		5.0	4.0 - 4.5	PA66HIR	Natural (NA)	151-00333
PLUG5.5		5.0 - 5.5	2.5 - 26.0	PA6HIR	Grey (GY)	151-00401
BPFT6XXL		6.3 - 7.0	6.0 - 17.0	PA66HIRHS	Natural (NA)	151-01160
PLUGFT6XL		6.5 - 7.0	0.7 - 18.0	PA66HIR	Black (BK)	241-00002
		6.5 - 7.0	0.7 - 18.0	PA66HIR	Grey (GY)	241-00001

All dimensions in mm. Subject to technical changes.

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Bundling clips

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Bundling clips for edges

Features and benefits

- Easy assembly, just shuffle manually
- Designed for edges of 1 - 3 mm, 1.5 - 4 mm and 3 - 8 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- ATS fixing elements can be tied automatically with Autotool 2000 family and Autotool System 3080



Cables and leads can be fastened with a cable tie or adhesive tape to the bars of the mounting element.



EC17 - Cables and leads can be fastened with adhesive tape to the bar of the mounting element.

Bundling clips for weld studs, lateral adjustment

Features and benefits

- Very flat bundling clip for 5.0 mm weld stud
- Horizontal length tolerance compensation
- Suitable for cables of reduced weight and diameter



TCSB5CYCC: Tapebar, Stud Retainer and ConnectorClip in just one article.



The slim line BC series is particularly compact and flexible.

Bundling Clips for round and oval holes

Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Holding tabs prevent the tie slipping sideways
- ATS fixing elements can be tied automatically with the ATS3080 tool



Designed for defined distance of bundles to the hole.



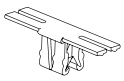
COW Clip used as tape-on clip.

Date of issue: September 2022

Other product variants are available in our Automotive catalogue.

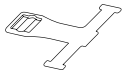
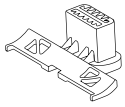


Bundling clips for edges

TYPE	Drawing	Length (L)	Panel Thickness	Material	Colour	Article-No.
EC14		40.0	1.0 - 3.0	PA66HIRHS	Black (BK)	151-03404

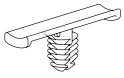
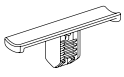
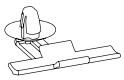
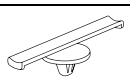
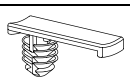
All dimensions in mm. Subject to technical changes.

Bundling clips for weld studs, lateral adjustment

TYPE	Drawing	Stud Ø	Length (L)	Material	Colour	Article-No.
BC30		5.0	55.0	PA66HIRHS	Black (BK)	151-00016
BCUWS5-D5-25		5.0	50.0	PA66HIRHS	Natural (NA)	151-00851

All dimensions in mm. Subject to technical changes.

Bundling Clips for round and oval holes

TYPE	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Material	Colour	Article-No.
TC4FT6LG		6.3 - 7.0	0.6 - 5.1	37.0	PA66HIRHS	Black (BK)	151-00215
WICKELCLIP-VDS		6.3 x 9.0, 6.3 x 10.0	0.6 - 2.5	40.0	PA66HIRHS	Black (BK)	155-16301
STAND-OFF-CLIP-2		6.5 - 6.8	0.4 - 1.6	40.0	PA66HIRHS	Black (BK)	155-01600
BCSFT6.5 16-3MD		6.3 - 6.7	1.5 - 3.0	55.0	PA66HIRHS	Black (BK)	155-11601
BCOWFT6M		6.5 - 7.0	0.6 - 3.5	27.3	PA66HIRHS	Natural (NA)	151-02227

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
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Automatic bundling

Bundling clips for automatic cable tying systems

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

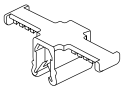
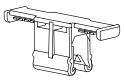
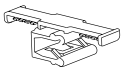
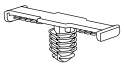
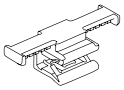
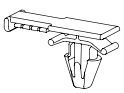
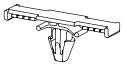
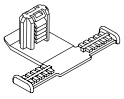
- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool 2000 family and Autotool System 3080



Bundling Clip for Automatic Cable Tying Systems.

Material specification please see page 26.

Can be used with Automatic Cable Tying Systems on page 538.

TYPE	Drawing	Panel Thickness	Hole Ø (FH)	Colour	Material	Article-No.
ATSBCEC35		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68355
ATSBCSFT6.5		2.3 - 3.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69066
ATSBCSFT6.5-MD		2.0 - 3.0	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69065
ATSBCEC36		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68365
ATSBCEC37		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68375
ATSBCFT6LG		0.6 - 5.1	6.3 - 7.0	Black (BK)	PA66HIRHS	102-67066
ATSBCEC38		1.5 - 4.0	-	Black (BK)	PA66HSW	102-68385
ATSBCKSFT6.5		0.7 - 1.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69067
ATSBC2KSFT6.5		1.7 - 2.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69068
ATSBCOWSFT6.5		2.3 - 3.3	6.3 - 6.7	Grey (GY)	PA46	102-69080
ATSBCOW2SFT6.5		2.3 - 3.3	6.3 - 6.7	Grey (GY)	PA46, PA46	102-69079
ATSBCSFT6.5PT2.3-3.3		2.3 - 3.3	6.3 - 6.7	Grey (GY)	PA46	102-69089
ATSBCSOC6.2x12.2		0.6 - 6.0	6.0 x 12.2	Black (BK)	PA66HIRHS	151-01882

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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HellermannTyton

Giving your cable routing the decisive edge – today and tomorrow!

EdgeClips are ideal for securing wiring when holes or adhesive mounts are not an option but you have an available edge. Customisation of this highly versatile part to specific requirements is not a problem – it's part of our daily business.

www.HellermannTyton.co.uk/20yearsEdgeClips

MADE FOR REAL®



20 Years EdgeClip HellermannTyton

Date of issue: September 2022

2-piece fixing ties for parallel separation

twistable up to 90°

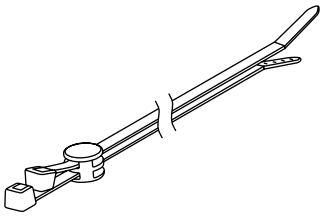
Features and benefits

- Pre-assembled 2-piece fixing tie with coupler
- Cable tie head can be moved after bundling
- Easy addition of cables after assembly
- For parallel routing of bundles that can be twisted 90° even after installation

Material specification please see page 26.



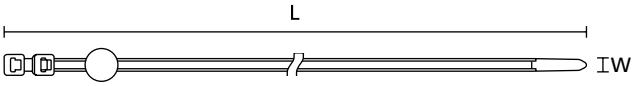
T50RCOUPLER for parallel routing.



T120RCoupler



Fixing Element - Coupler



TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50RCOUPLER	4.6	202.0	47.0	225	PA46	Grey (GY)	1-2;4-6;25	156-00382
	4.6	202.0	47.0	225	PA66HIRHS, PA66HIR(S)	Black (BK)	1-2;4-6;25	156-00276
T50RSINGLECOUPLER	4.6	202.0	47.0	225	PA66HIRHS	Black (BK)	1-2;4-6;25	156-01134
T120RCOUPLER	7.6	390.0	105.0	535	PA66HIRHS, PA66HIR(S)	Black (BK)	1;3;9-10;25	156-00275
	7.6	390.0	105.0	535	PA46	Grey (GY)	1;3;9-10;25	156-02416

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

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Fixing elements for parallel routing, twistable

DSWS-Series

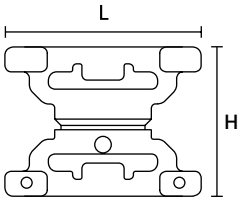
These fixing element for parallel routing can be used where bundles need separation from each other combined with the necessary functionality to support moving harnesses.

Features and benefits

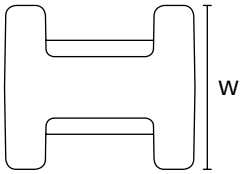
- For parallel routing of bundles that can be twisted 360° even after setting
- Secure alignment to the bundle due to H-design
- Cable tie head can be moved after bundling
- For cable ties up to 12.7 mm wide
- For post-installation of bundles



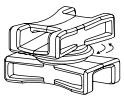
The spacers can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle.



DSWS4



DSWS4

TYPE	Drawing	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Material	Colour	Pack Cont.	Article-No.
DSWS4		6.0	76.0	20.3	23.6	18.0	PA66HS, POM	Black (BK)	50 pcs.	151-00644
		6.0	76.0	20.3	23.6	18.0	PA66HS, POM	Black (BK)	2,200 pcs.	151-06500
DSWS5		16.0	152.0	25.4	40.6	23.6	PA66HS	Black (BK)	50 pcs.	151-06502

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Fixing base

LOK04-Series, spacer for parallel routing

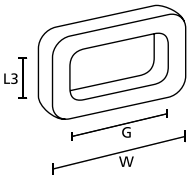
The LOK04 spacer is ideal whenever two or more cables are routed in parallel.

Features and benefits

- For routing bundles over a distance in parallel
- Can be used with cable ties up to 9 mm cable tie width



LOK04 ring for parallel routing.



LOK04

The LOK04 fixing base can ideally be combined with cable ties up to 9 mm cable tie width.

TYPE	Width (W)	Length (L3)	Strap Width max. (G)	Material	Colour	Article-No.
LOK04	16.0	4.0	9.0	PA66	Black (BK)	151-80400

All dimensions in mm. Subject to technical changes.

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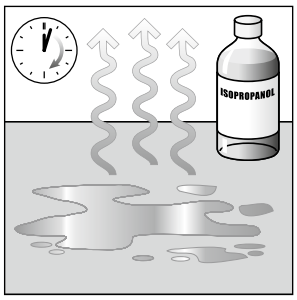
Information and installation instructions for self-adhesive mounting bases

HellermannTyton uses different types of adhesives for self-adhesive bases: acrylate and synthetic rubber. These differ in the operating temperature range and the 'pull off' force of the adhesive. Synthetic rubber has an excellent initial grip, allowing for almost immediate use.

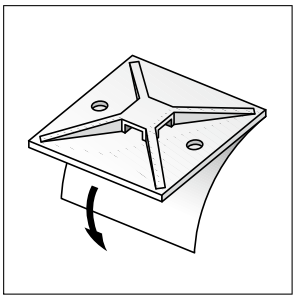
Acrylate adhesive has less initial grip, so there might be a need to wait for a few hours before use (depending on the surface), but has a higher, "pull off' force" than synthetic rubber. This enables a permanent fixing lasting months or even years.

Instructions for use

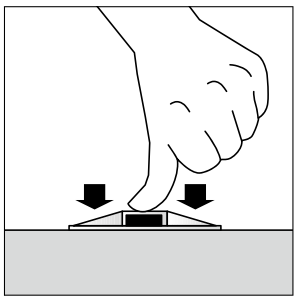




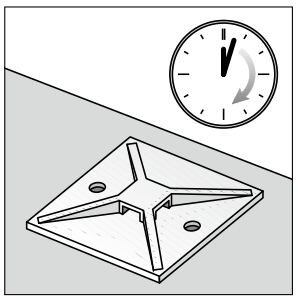
1. The surface must be dry, free from dust, oil, oxides, parting agents and other impurities. The surface to be glued should be cleaned using a clean cloth and isopropanol/water (50/50). When using other appropriate cleaning agents, ensure that they do not attack the surface nor leave any residues. After cleaning allow the surface to air-dry completely.



2. Peel off protective backing and ensure the adhesive area is not touched.



3. Press down firmly on the base with the thumbs for several seconds.



4. Depending on the type of adhesive, wait for several minutes (synthetic rubber) or hours (acrylate) so that the adhesive can bond completely with the surface.

We will be happy to send you on request an up-to-date technical datasheet for whichever adhesive you are using.

Date of issue: September 2022

Paste adhesive mount

PMB mount for uneven surfaces

PMB-Series offers a fixing solution wherever screw fixing is not allowed. Due to the design the mounts can even be installed onto uneven surfaces. PMB paste mounts are used in the railway industry as well as in the renewable energy industry. Further applications are in the electrical industry and the production of switching cabinets. PMB-Series is suitable for fixings with paste/liquid adhesive.

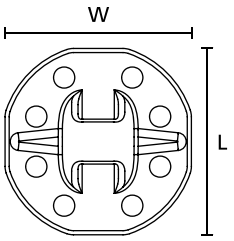


PMB5 mount with paste adhesive.

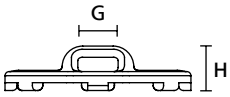
Features and benefits

- PMB-Series for fixings with paste / liquid adhesive
- Mount geometry offers a good form closure with cured adhesive
- Can even be installed onto uneven surfaces
- PMB3 can also be applied in combination with hot-melt adhesive, as mount is made of heat resistant PA66
- PMB5 is made of flame-retardant material PA666V0

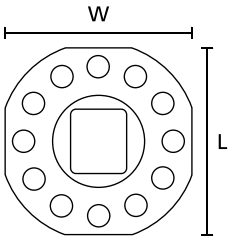
Material specification please see page 26.



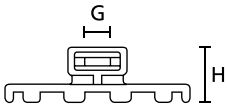
PMB3 Mount (plan view)



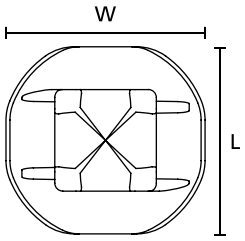
PMB3 Mount (front view)



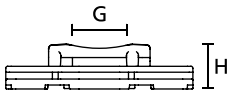
PMB5 Mount (plan view)



PMB5 Mount (front view)



PMB8 Mount (plan view)



PMB8 Mount (front view)

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Article-No.
PMB3	22.6	22.6	5.4	4.7	PA666V0	Black (BK)	151-02575
PMB5	36.0	36.0	10.7	4.8	PA66HS	Black (BK)	151-02255
PMB8	47.0	50.0	11.2	13.0	PA66/6HIRHS	Black (BK)	151-03196

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-141

Cable tie mounts with high performance adhesive

FlexTack-Series FMB for round and angled surfaces

FlexTack cable tie mounts can be successfully applied to a variety of high- and low-energy surfaces such as glass, metals (including painted, varnished or powder-coated surfaces) as well as plastics. FlexTack provides a reliable fixing solution where it is impractical to use screws or bolts. The unique design in combination with the special acrylate adhesive makes professional cable management easy.

Features and benefits

- Flexible Mount for round and angled surfaces
- FMB mounts with homogeneous system of acrylic adhesive
- Allows greater design freedom and offers uniform stress distribution along with weight reduction
- Adhesive with high cohesive strength combined with good weathering resistance
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off
- Temperature resistance up to +105 °C
- 4-way entry for cable tie for quicker and more flexible installation
- FMB4APT-I is also suitable for high energy surfaces like metal or glass

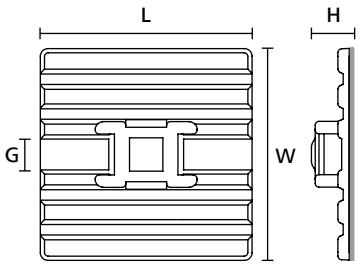


Flexible cable tie mount, FlexTack in use on a concaved surface.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Adhesive	Acrylate with base of acrylic foam
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)

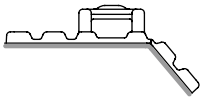
HF ✓ RoHS ✓

www.HellermannTyton.co.uk/FlexTack-cat22

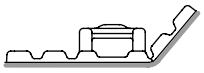


Flexible Adhesive Mount FMB4APT-A (plan view)

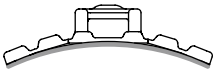
Flexible Adhesive Mount FMB4APT-A (side view)



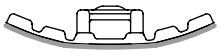
Flexible Adhesive Mount FMB4APT-A (down angled, side view)



Flexible Adhesive Mount FMB4APT-A (up angled, side view)



Flexible Adhesive Mount FMB4APT-A (convex, side view)



Flexible Adhesive Mount FMB4APT-A (concave, side view)

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
FMB4APT-A	28.0	28.0	6.3	5.4	PA66HS	Black (BK)	mod. Acrylate	100 pcs.	151-02219

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-142

Cable tie mounts with high performance adhesive

SolidTack-Series QM

Q-mounts are ideally suited for holding our innovative Q-ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required. With its SolidTack adhesive Q-mounts offer an innovative fixing solution especially for low energy surfaces or if drilling a hole is not possible. Suitable for a wide range of applications on varnished or plastic or metal surfaces in many areas like electrical cabinet, railway, aerospace, automotive and agriculture machinery.

Features and benefits

- Q-mounts with homogeneous system of acrylic adhesive
- Perfect for combination with Q-ties
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces
- Q-Mount base locks Q-tie in vertical position, means the hands are free to apply cables

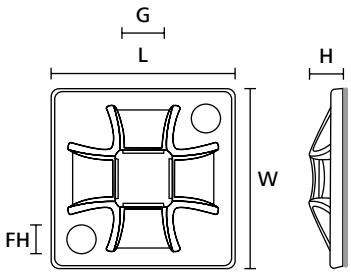


SolidTack-Series QM - Cable Tie Mounts with high performance adhesive; screwable or self adhesive versions. Perfect for combination with T-series cable ties.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Acrylate with base of acrylic foam
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)

HF ✓ RoHS ✓

www.HellermannTyton.co.uk/QMounts-cat22



Q-Mount (plan view) *Q-Mount (side view)*

For more information on the types of adhesive please see page 140.

Please find more Q-Series products for your system solution on page 54.

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
QM30APT-A	30.0	30.0	4.5	5.1	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-02974

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

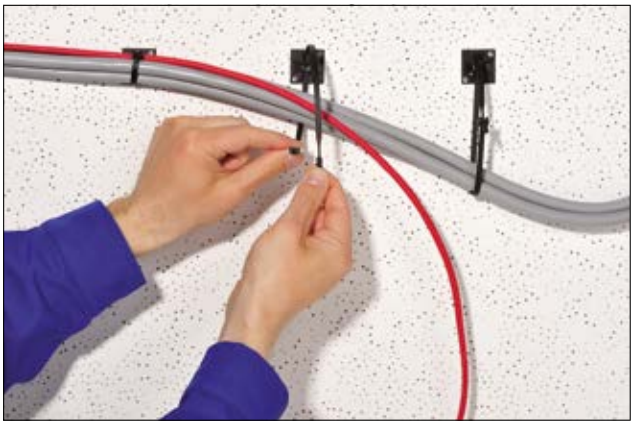
Cable tie mounts Q-Series

Q-Mount Series QMA, self-adhesive

Q-mounts are ideally suited for holding our innovative Q-ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required. Self adhesive versions of our Q-Mounts are suitable for applications where using screws, nuts, bolts or drilling holes to fix cables is problematic, or not the first choice.

Features and benefits

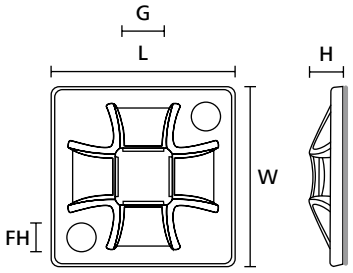
- Screwable or self adhesive versions
- Perfect for combination with Q-ties
- 4-way entry for cable ties
- Adhesive with high pull-off force
- Locks cable tie in vertical position, means the hands are free to apply cables



Q-ties can be used for both temporary and final cable installation.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Synthetic rubber with base of polyethylene foam
Operating Temperature	-40 °C to +60 °C
Flammability	UL 94 V2 (excluding adhesive)

HF ✓ RoHS ✓



Q-Mount (plan view) *Q-Mount (side view)*

Please find more Q-Series products for your system solution on page 54.

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
QM20A	20.0	20.0	3.7	4.0	PA66	Black (BK)	Synthetic rubber	100 pcs.	151-10914
	20.0	20.0	3.7	4.0	PA66	Natural (NA)	Synthetic rubber	100 pcs.	151-10904
QM30A	30.0	30.0	4.5	5.1	PA66	Black (BK)	Synthetic rubber	100 pcs.	151-10915
	30.0	30.0	4.5	5.1	PA66	Natural (NA)	Synthetic rubber	100 pcs.	151-10905
QM40A	40.0	40.0	5.5	8.4	PA66	Black (BK)	Synthetic rubber	50 pcs.	151-10916
	40.0	40.0	5.5	8.4	PA66	Natural (NA)	Synthetic rubber	50 pcs.	151-10906

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
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Cable tie mounts with high performance adhesive

SolidTack-Series MB

SolidTack MB Series mounts have a square design and are fairly common in areas like electrical cabinet, railway, aerospace, automotive and agriculture machinery. The premium self-adhesive bonds well on high and low-energy surfaces like plastics, metal, varnish or paint and is suitable for a wide range of applications.

Features and benefits

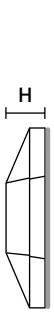
- MB mounts with homogeneous system of acrylic adhesive
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off



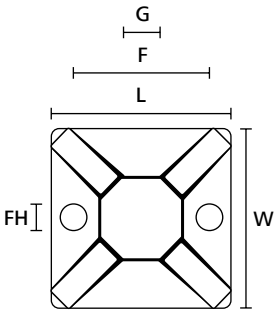
SolidTack MB Series mounts with square design - screwable, self-adhesive - suitable for a wide range of applications like fastening of cables in the automotive machinery.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Acrylate with base of acrylic foam
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)

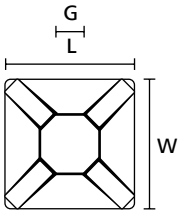
HF ✓ RoHS ✓



MB3-MB5 (side view)



MB3-MB5 (plan view)



Cable Tie Mounts MB2A

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
MB2APT-A	13.0	13.0	4.1	2.7	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-02243
MB3APT-A	19.0	19.0	3.8	4.4	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-02244
	19.0	19.0	3.8	4.4	PA66	White (WH)	mod. Acrylate	100 pcs.	151-02978
MB4APT-A	28.0	28.0	4.7	5.6	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-02245
MB5APT-A	38.0	38.0	6.4	10.0	PA66	Black (BK)	mod. Acrylate	100 pcs.	151-02247

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-145

Cable tie mounts

MB-Series square design, self-adhesive

Where speed, simplicity and a firm fixing base are required these self adhesive clips are ideal. Particularly suitable for use in control cabinets, telecoms equipment or domestic appliances where the use of holes, screws, or nuts and bolts is impractical or undesirable.

Features and benefits

- Simple to instal
- Excellent security, particularly in areas of high vibration
- Maximum surface area with adhesive to achieve high pull-off force
- 4-way entry for cable tie for quicker and more flexible installation

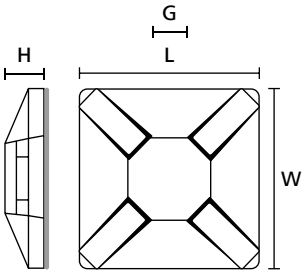


MB-Series Mounts with square design.

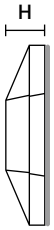
For more information on the types of adhesive please see page 140.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Synthetic rubber with base of polyethylene foam
Flammability	UL 94 V2 (excluding adhesive)

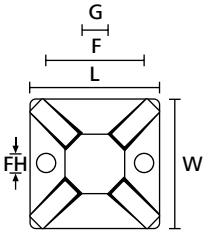
RoHS



Cable Tie Mount MB2A (side and plan view)



MB3-MB5 (side view)



Cable Tie Mounts MB3, MB4, MB5 (plan view)

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Operating Temperature	Pack Cont.	Article-No.
MB2A	13.0	13.0	4.1	2.7	PA66	BK	-40 °C to +60 °C	50 pcs.	151-01800
	13.0	13.0	4.1	2.7	PA66	WH	-40 °C to +60 °C	100 pcs.	151-01802
MB3A	19.0	19.0	3.8	4.1	PA66	BK	-40 °C to +60 °C	100 pcs.	151-28320
	19.0	19.0	3.8	4.1	PA66	WH	-40 °C to +60 °C	100 pcs.	151-28349
MB4A	28.0	28.0	4.7	5.4	PA66	BK	-40 °C to +60 °C	100 pcs.	151-28412
	28.0	28.0	4.7	5.4	PA66	WH	-40 °C to +60 °C	100 pcs.	151-28469
MB4CA	29.0	29.0	5.7	5.4	PA66	NA	-40 °C to +60 °C	100 pcs.	151-28459
MB4CAS	29.0	29.0	5.7	5.4	PA66	NA	-40 °C to +60 °C	100 pcs.	151-28449
MB5A	37.7	37.7	7.1	8.9	PA66	BK	-40 °C to +85 °C	100 pcs.	151-28602
	37.7	37.7	7.1	8.9	PA66	WH	-40 °C to +85 °C	100 pcs.	151-28529

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-146

Flat ribbon and round cable mounts

FKH-Series, self-adhesive

These clips are ideal for use in applications which are difficult to access, or for areas where a self adhesive solution is the only possible fixing method (for example 'holes' would be unacceptable). The FKH clips are designed to retain flat ribbon cables - ideal for use in computer equipment, gaming machines and domestic appliances. Available as a self-adhesive mount or screw mount.

Features and benefits

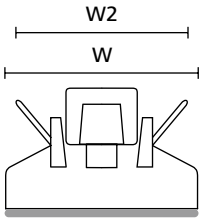
- One-piece fixing mount for flat ribbon and round cables
- Increased mounting area ensures proper bonding
- Quick and easy installation
- Can be released and re-used easily
- Cable is gently fastened due to soft wings



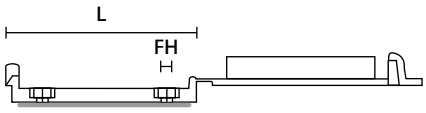
Perfect solution to route cables along the office desk.

MATERIAL	Polyamide 6.6, high impact modified (PA66HIR)
Adhesive	Acrylate with base of polyurethane foam
Operating Temperature	-40 °C to +80 °C
Flammability	UL94 HB (excluding adhesive)

RoHS



Flat Ribbon Cable Mount (front view)



Flat Ribbon Cable Mount (side view)

TYPE	Width (W)	Length (L)	Width (W2)	Hole Ø (FH)	Material	Colour	Adhesive	Article-No.
FKH25A	25.0	31.0	22.0	3.1	PA66HIR	Black (BK)	Acrylate	151-15250
FKH30A	25.0	35.0	22.0	3.1	PA66HIR	Black (BK)	Acrylate	151-15300
FKH50A	25.0	56.5	22.0	3.1	PA66HIR	Black (BK)	Acrylate	151-15500
FKH80A	25.0	86.0	22.0	3.1	PA66HIR	Black (BK)	Acrylate	151-15800

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-147

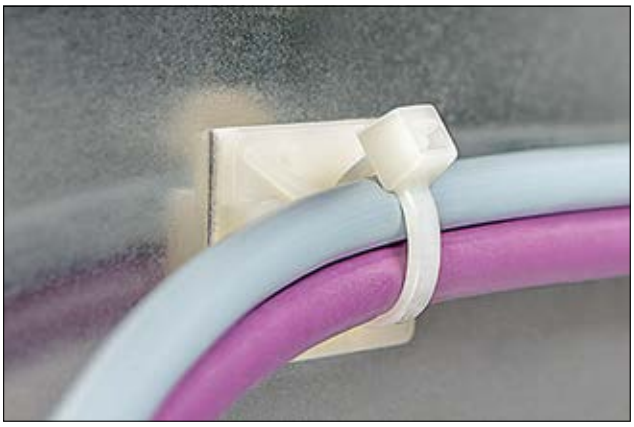
Cable tie mounts

TY-Series rectangle design, self-adhesive

Where speed, simplicity, and a firm fixing base are required these self adhesive clips are ideal. Particularly suitable for use in control cabinets, telecoms equipment or domestic appliances where the use of holes, screws, or nuts and bolts is impractical or undesirable.

Features and benefits

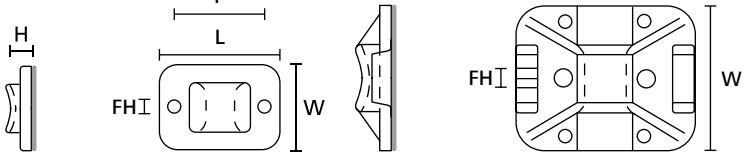
- 2-way mounting base for safe guiding of cables and conduits
- Suitable for applications with minimal space
- Mounted before cable installation



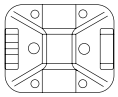
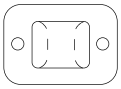
TY-Series mounts with rectangle design.

MATERIAL	Polyamide 6.6 (PA66)	Polyamide 6.6, UV-resistant (PA66W)
Adhesive	Acrylate with base of polyurethane foam	
Operating Temperature	-40 °C to +85 °C	
Flammability	UL 94 V2 (excluding adhesive)	

HF ✓ RoHS ✓



TY3G1S (side view) *TY3G1, TY3G1S (plan view)* *TY8G1S (side view)* *TY8G1, TY8G1S (plan view)*

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Adhesive	Pack Cont.	Article-No.
TY8G1S		25.0	32.0	5.5	8.0	PA66	Natural (NA)	Acrylate	100 pcs.	151-11819
		25.0	32.0	5.5	8.0	PA66W	Black (BK)	Acrylate	100 pcs.	151-11810
TY3G1S		14.0	20.0	3.7	4.0	PA66	Natural (NA)	Acrylate	100 pcs.	151-11319
		14.0	20.0	3.7	4.0	PA66W	Black (BK)	Acrylate	100 pcs.	151-11310

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-148

Mounts with cable clip, self-adhesive

RA-Series

These mounts are ideal for use in applications which are difficult to access or for areas where self adhesive is the only possible fixing method and fixing holes would be unacceptable. The self adhesive mounts can be used without cable ties. Offering process optimization in industries like automotive, bus and truck, construction vehicles or industrial building.

Features and benefits

- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Designed to hold wires, cables or hoses
- Different sizes for various bundle diameters available
- Two types of adhesive can be offered

For more information on the types of adhesive please see page 140.

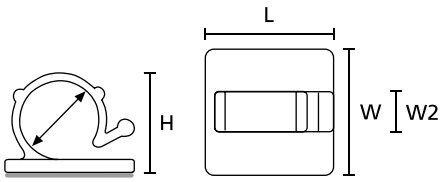


Self adhesive one piece fixing mounts RA6 (l) and RB5 (r).

MATERIAL	Polyamide 6.6 (PA66)	
Adhesive	Acrylate with base of acrylic foam	Synthetic rubber with base of polyethylene foam
Operating Temperature	-40 °C to +85 °C	-40 °C to +60 °C
Flammability	UL 94 V2 (excluding adhesive)	

HF ✓ RoHS ✓

RoHS ✓



RA3-18 Series (side view)

RA3-18 Series (plan view)

TYPE	Width (W)	Width (W2)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Adhesive	Article-No.
RA3	13.0	5.0	13.0	5.0	3.0	PA66	Natural (NA)	Synthetic rubber	151-13018
RA6	19.0	5.0	19.0	9.0	6.0	PA66	Natural (NA)	Synthetic rubber	151-13019
RA9	19.0	7.5	19.0	12.5	9.0	PA66	Natural (NA)	Synthetic rubber	151-13020
RA13APT-I	25.0	10.0	25.0	16.5	13.0	PA66	Natural (NA)	mod. Acrylate	151-01636
RA13	25.0	10.0	25.0	16.5	13.0	PA66	Natural (NA)	Synthetic rubber	151-13021
RA18	28.5	10.0	28.5	23.0	18.0	PA66	Natural (NA)	Synthetic rubber	151-13119

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-149

Mounts with cable clip, self-adhesive

RB-Series

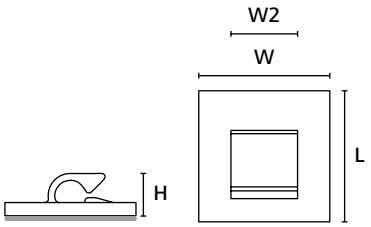
RB-Series self adhesive mounts offer greater routing freedom and also reduce the risk of corrosion compared to screw fixing mounts. They are ideally suited for tool-free installation and can be re-opened and reused easily when cables need to be replaced. These mounts can be used without the need for additional cable ties. Offering process optimization in a variety of applications.

Features and benefits

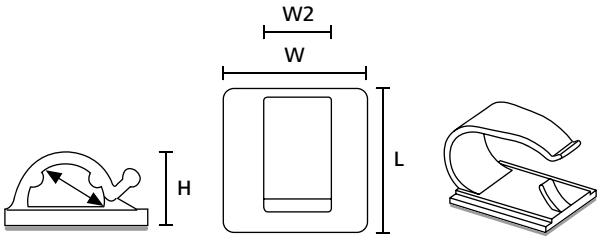
- Flat design to use in applications with limited space
- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Different sizes for various bundle diameters available
- Cost effective with easy application on smooth, clean surfaces



Self adhesive one piece fixing mounts RB20 (l) and RB14 (r).



RB5-Series (side view) *RB5-Series (plan view)*



RB5-14 Series (side view) *RB5-14 Series (plan view)* *RB20*

MATERIAL	Polyamide 6.6 (PA66)	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
Adhesive	Synthetic rubber with base of polyethylene foam	
Operating Temperature	-40 °C to +60 °C	
Flammability	UL 94 V2 (excluding adhesive)	UL 94 HB

HF ✓ RoHS ✓

RoHS ✓

TYPE	Width (W)	Width (W2)	Length (L)	Height (H)	Bundle Ø max.	Material	Colour	Adhesive	Article-No.
RB5	19.0	9.7	19.0	6.0	5.0	PA66	Natural (NA)	Synthetic rubber	151-14059
RB8	25.0	12.7	25.0	11.5	8.0	PA66	Black (BK)	Synthetic rubber	151-13601
	25.0	12.7	25.0	11.5	8.0	PA66	Natural (NA)	Synthetic rubber	151-13606
RB20	27.0	18.0	33.0	25.0	20.0	PA66HIRHS	Black (BK)	Synthetic rubber	151-00831
RB14	27.4	23.0	33.2	16.0	14.0	PA66	Black (BK)	Synthetic rubber	151-00502
	27.4	23.0	33.2	16.0	14.0	PA66	Natural (NA)	Synthetic rubber	151-00505

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-150

Mounts with flexible cable clip, self-adhesive

SAC-Series

These clips are ideal for use in applications which are difficult to access, or for areas where a self adhesive solution is the only possible fixing method and holes would be unacceptable. Typical applications include domestic appliances and trailers.

Features and benefits

- Bendable metal tongue for any shape or configuration of wires or cables
- Cost effective with easy application on smooth, clean surfaces

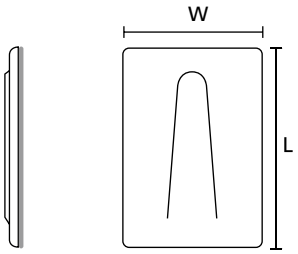


Malleable tongue allows for a variety of sizes per clip.

For more information on the types of adhesive please see page 140.

MATERIAL	Steel (ST)
Adhesive	Acrylate with base of polyethylene foam
Operating Temperature	-40 °C to +60 °C

RoHS



SAC-Series Self Adhesive Clip

SAC-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Adhesive	Article-No.
SAC1	20.0	30.0	4.0	ST	White (WH)	Acrylic	151-00100
SAC2	25.0	35.0	8.0	ST	White (WH)	Acrylic	151-00200
SAC3	31.0	43.0	12.0	ST	White (WH)	Acrylic	151-00300

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-151

Connector accessories

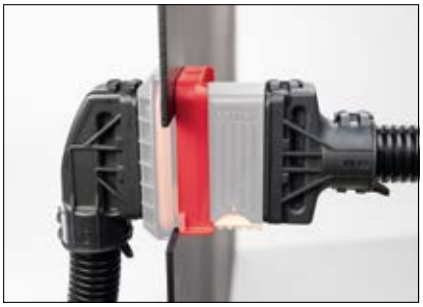
These connector accessories have been designed for electronic cables and cable sets for the automotive, Truck, agriculture and construction vehicle industry.

NEW

CTCS (Compact Transportation Connection Systems)

Features and benefits

- Useable for Aptiv SP and XP Series
- 5 Groups for different connector sizes (2-18 pins)
- Offered in non-VO and VO material (passenger transportation)
- Simple installation by hand
- Products are marked to avoid any mix-up
- Installed in cabs, chassis, engine compartments and on-engine applications
- Vibration resistant



Backshells and Fixing slider applicated.

Connector clips for edges

Features and benefits

- Connectors are mounted simply by pushing them into retainer
- Connector can be removed without damage
- Fastened to an edge, the EdgeClip ensures snug fit almost all types of connector



EdgeClip EC6mod.

Connector clips for round holes

Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- One fir tree foot part can be used for a variety of panel thicknesses
- Disc covers the hole to prevent dust and dirt gaining access
- For twist protection: Variants with additional stick



ConnectorClips are available for many different connector types and fixing varieties.

Date of issue: September 2022



Other product variants are available in our Automotive catalogue.

CTCS (Compact Transportation Connection Systems)



Backshell "Group D" NW13 90°.

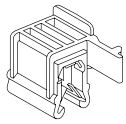
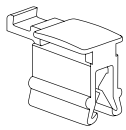


Protection Cap with sealing.



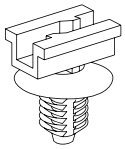
Fixing Slider Group A for 2.5 mm panel thickness.

Connector clips for edges

TYPE	Drawing	Panel Thickness	Material	Colour	Article-No.
EC42		1.5 - 4.0	PA66HIRHS	Black (BK)	151-00429
EC6mod		1.0 - 3.0	PA66HIRHS	Black (BK)	151-00464

All dimensions in mm. Subject to technical changes.

Connector clips for round holes

TYPE	Drawing	Hole Ø (FH)	Height (H)	Disc Ø	Panel Thickness	Material	Colour	Article-No.
FT6LG-AMP		6.5 - 7.0	20.5	16.0	0.7 - 6.0	PA66HIRHS	Black (BK)	155-03800

All dimensions in mm. Subject to technical changes.

Material specification please see page 26.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-153

1-piece fixing ties for weld studs

For cable routing above the stud

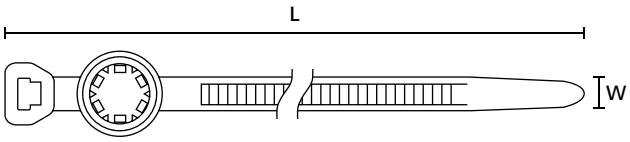
Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Bundle runs directly above weld stud with defined stand-off from the panel

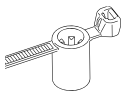


The T50SSBS5OT-E / T50SSBS6OT-E allows very precise routing of cable bundles.



T50SSBS6OT-E

Material specification please see page 26.

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SSBS5OT-E		5.0	4.6	160.0	35.0	200	PA66HS	Black (BK)	1-2;4-6;25	155-30602
T50SSBS6OT-E		6.0	4.6	160.0	35.0	200	PA66HS	Black (BK)	1-2;4-6;25	157-00083

All dimensions in mm. Subject to technical changes.
N/A

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-154

1-piece fixing ties for weld studs

For cable routing alongside the stud

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Bundles are routed very close to stud



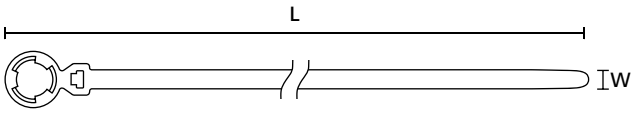
T50SOSSBD-M8/10.



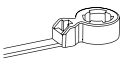
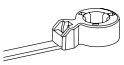
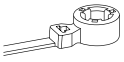
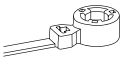
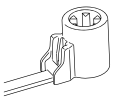
T50SOSSBU-M8/10 for bundles which run below the stud.



This outside serrated cable tie with weld stud mounting keeps the cables close to the fixing stud.



T50SOSSBD-M8/M10

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSSBU-M6		M6	5.7	175.0	30.0	150	PA66HSUV	Grey (GY)	1;3;9-10;25	157-00065
T50SOSSBD-M10		M10	5.7	175.0	30.0	150	PA66HSW	Black (BK)	1;3;9-10;25	157-00040
T50SOSSBD-M8		M8	5.7	175.0	30.0	150	PA66HSW	Black (BK)	1;3;9-10;25	157-00039
T50SOSSBU-M10		M10	5.7	175.0	30.0	150	PA66HSW	Grey (GY)	1;3;9-10;25	157-00067
T50SOSSBU-M8		M8	5.7	175.0	30.0	150	PA66HSW	Grey (GY)	1;3;9-10;25	157-00066
T50SOSSBS5E-2		5.0	4.7	161.0	35.0	225	PA66HS	Black (BK)	1-2;4-6;25	157-00252

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
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1-piece fixing ties for weld studs, lateral adjustment

T50SOSWSP5E-2 for 5 mm studs, retainer height 3.5 mm

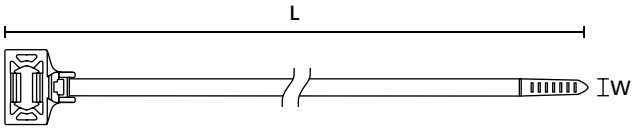
Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Provides 5 – 6 mm lateral adjustment
- Very low profile, stackable design
- For parallel routing of several bundles



T50SOSWSP5E, parallel installation using two fixing ties.



T50SOSWSP5E-2

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSWSP5E-2	5.0, 6.0	4.6	162.6	35.0	225	PA66HS	Black (BK)	1-2;4-6;25	133-01553

All dimensions in mm. Subject to technical changes.

1-piece fixing fies for weld studs, for heavy duty applications

WS-Series for threaded studs

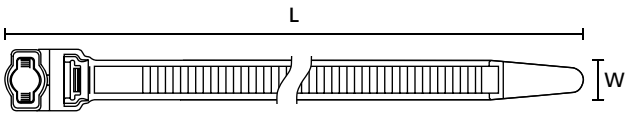
Wide strap stud-mounted cable ties are primarily designed for use in the automotive or truck industry.

Features and benefits

- Very flexible strap provides minimum pinching of soft hoses and convoluted tubing
- Low profile head for compact bundling
- Clamping rails to increase grip on round bundles
- Flexible hinge



The wide strap stud mount cable tie minimizes pinching on soft bundles.



Wide Strap Heavy Duty Stud Mount Cable Ties

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
WSS8MM	M8	12.7	246.4	57.1	535	PA66HIRHS	Black (BK)	9-10	157-00034
WSI8MM	M8	12.7	322.6	82.5	535	PA66HIRHSUV	Black (BK)	9-10	157-00035

All dimensions in mm. Subject to technical changes.

Recommended Tools								
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-156

1-piece fixing ties for weld studs, for heavy duty applications, for parallel routing

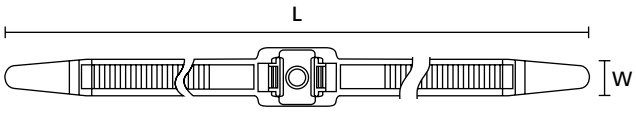
Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

Features and benefits

- Parallel seperation between hoses, wires, cables and tubing
- Abrasion protection
- Optional mounting hole for securing bundles along the Chassis of trucks, trails and heavy duty equipment



DCT products are made for parallel routing of harnesses with stud fixing.



Dual Clamp Ties

TYPE	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
DCT11	M6	12.7	487.7	58.0	667	PA66HIRHSUV	Black (BK)	9-10	115-31100
DCT9	M6	12.8	331.0	33.0	667	PA66HIRHSUV	Black (BK)	9-10	115-00034

All dimensions in mm. Subject to technical changes.

2-piece fixing ties for weld studs, for parallel routing

2-piece fixing ties for weld studs, for parallel routing

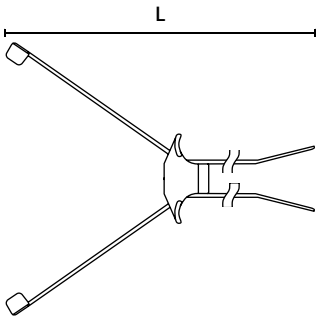
Widely used for securing cables pipes and hoses in the automotive and truck building industries, the mounting base is simply pushed onto a 5 mm diameter stud or bolt.

Features and benefits

- Pre-assembled 2-piece fixing tie with stud retainer
- For parallel routing of cables, hoses or harnesses
- Cable tie head can be moved after bundling
- Easy to install without the need for a tool
- For 5 mm studs or 5 mm ISO threaded studs

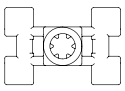


Parallel fixation of two cables.



DSBS5

Material specification please see page 26.

TYPE	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SDSBS5		5.0	4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-56193
T50ROSDSBS5		5.0	4.6	200.0	45.0	222	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-56199

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-157

2-piece fixing ties for strong hold on smooth bundles

for weld studs, for parallel routing

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

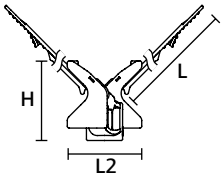


The Soft Grip Tie in combination with the Soft Grip Mount for studs (weld studs) for parallel guidance of hoses in fluid management.

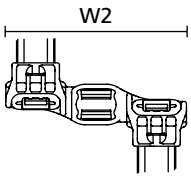


Soft Grip Cable Tie assembled with Soft Grip Mount for studs (weld stud).

Material specification please see page 26.



SGT100SDSB5-6



SGT100SDSB5-6

Please find more Soft Grip Products on page 67, 94 and 164.

TYPE	Stud Ø	Width (W2)	Length (L)	Length (L2)	Height (H)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SDSB5-6	M5, M6, T5, T6	59.8	140.0	27.6	29.5	25.4	PA66HS, TPE, PA66HIRHS	Black (BK), Blue (BU), Black (BK)	8	156-04098

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	8 EVO9SG
	554

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-158

Fixing elements for weld studs

SB-Series

Many industries (but specifically the automotive market) are using weld studs as the standard method of attaching components. Simply hammered onto the stud these parts provide ideal fixing bases for attaching cables, pipes or hose.

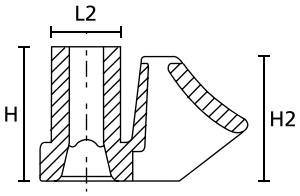
The use of weld studs avoids the problems with holes (ingress of moisture, corrosion etc).

Features and benefits

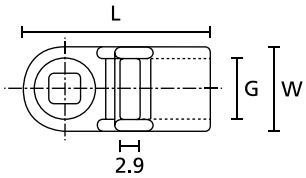
- Simple and quick method of fixing
- SBH types simply hammered onto the stud
- SBH1 and SBH3 allow cables to run across the panel
- SBH2 allow cables to run at 90° to the panel



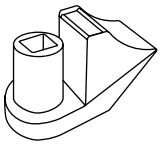
SBH2 allow cables to run at 90° to the panel.



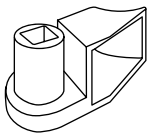
SBH1, SBH3



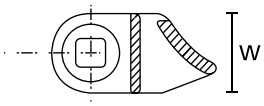
Cable tie base SBH1,3



SBH1, SBH3



SBH2



Cable tie base SBH2

TYPE	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Stud Ø	Strap Width max. (G)	Material	Colour	Article-No.
SBH1	12.5	26.8	9.0	13.9	15.9	5.0	8.5	PA66	Black (BK)	151-02260
SBH3	12.5	26.8	9.0	18.0	15.9	5.0	8.5	PA66	Black (BK)	151-02279
SBH2	12.5	26.8	9.0	14.0	12.5	5.0	8.5	PA66	Black (BK)	151-26250

All dimensions in mm. Subject to technical changes.

Fixing elements for weld studs

CT-Series

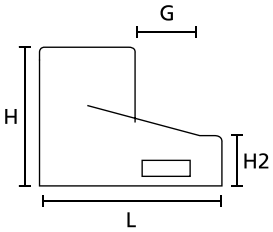
In areas with limited space these mounting bases allow the cable to be slightly offset from the fixing stud, and can be installed in the equipment prior to the cable installation. A major cost saving can be made using these products as they will allow the use of many different sizes of standard cable ties without the need to stock a wide range of specific fixing ties.

Features and benefits

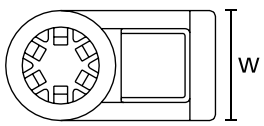
- Ideal for cable ties up to 4.8 mm wide
- Simply pushed by hand onto an ISO or Fir Tree stud



Fixing Element CTMS5 allows bundles to be routed alongside the stud.



CTMS5



Cable tie base CTMS5

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Stud Ø	Strap Width max. (G)	Material	Colour	Article-No.
CTMS5	10.0	19.0	14.5	5.3	5.0	5.0	PA66	Black (BK)	151-03301

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses with automatic locking feature

for weld studs

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

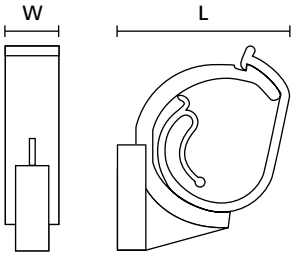
Features and benefits

- Push and click closure for fixation of wires
- AHC( )SS und AHC( )SB can be pushed onto a 5.0 mm stud

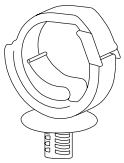
Material specification please see page 26.



Automatic Harness Clip closed.



AHC( )SS *AHC( )SS*

TYPE	Drawing	Bundle Ø max.	Width (W)	Length (L)	Material	Colour	Article-No.
AHC3SB		28.0	10.0	43.0	PA66HIRHS	Black (BK)	151-00372

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-160

Fixing elements for corrugated tubing, for weld studs

CTC-Series for weld studs

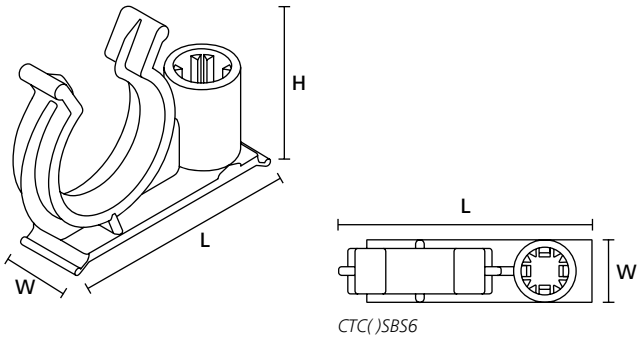
These holders are used in the automotive industry, in the production of cable harnesses and in the electrical industry. Their quick and easy mounting is the reason for their universal success wherever corrugated tubing and pipes have to be fixed quickly and securely.



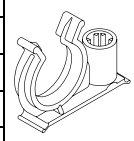
The tubing clips into the CTC clamp and is held firmly.

Features and benefits

- Fixing elements for corrugated tubing for nominal diameters from 4.5 - 17.0 mm
- For M6 weld studs
- Soft-Push mechanic for simple assembly, without tool
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp
- Clamp can be unscrewed and removed from the weld stud



CTC( )SBS6

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Nominal Ø	Stud Ø	Material	Colour	Article-No.
CTC4.5SBS6		11.0	28.6	18.7	4.5	6.0	PA66HIRHS	Black (BK)	151-00700
CTC7.5SBS6		11.0	31.8	19.4	7.5	6.0	PA66HIRHS	Black (BK)	151-00701
CTC10SBS6		11.0	35.3	22.2	10.0	6.0	PA66HIRHS	Black (BK)	151-00702
CTC13SBS6		11.0	37.0	26.5	13.0	6.0	PA66HIRHS	Black (BK)	151-00703
CTC17SBS6		11.0	44.6	33.2	17.0	6.0	PA66HIRHS	Black (BK)	151-00010

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-161

1-piece fixing ties with mounting head for screws

This range of one piece cable ties have a built in mounting hole and once fastened around the cables the bundle can be simply secured to the panel with a screw or bolt.

The tie is fitted to the panel first and then the cables can be added.

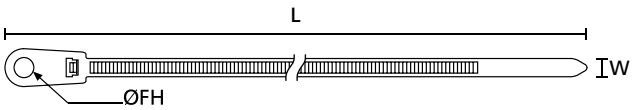
Features and benefits

- One-piece bundling and fixing tie
- Quick and easy installation

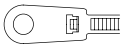


The mounting head ties can be easily screwed onto a panel.

Material specification please see page 26.



T( )MR Series with Mounting Head for Screw fixing

TYPE	Drawing	Hole Ø (FH)	N	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T18MR		3.1	80	2.5	110.0	20.0	PA66	Black (BK)	1-2;4-6;25	113-01810
		3.1	80	2.5	110.0	20.0	PA66	Natural (NA)	1-2;4-6;25	113-01819
T30MR		4.3	135	3.5	160.0	32.0	PA66	Natural (NA)	1-2;4-6;25	113-03019
		4.3	135	3.5	160.0	32.0	PA66	Black (BK)	1-2;4-6;25	113-03010
T50MR		5.4	225	4.7	215.0	45.0	PA66	Black (BK)	1-2;4-6;25	113-05010
		5.4	225	4.7	215.0	45.0	PA66	Natural (NA)	1-2;4-6;25	113-05019
		5.4	225	4.7	215.0	45.0	PA66W	Black (BK)	1-2;4-6;25	113-05060
T50ML		5.5	225	4.7	390.0	100.0	PA66	Natural (NA)	1-2;4-6;25	113-05419
T120MR		6.5	535	7.6	395.0	102.0	PA66	Black (BK)	1;3;9-10;25	113-12020
		6.5	535	7.6	395.0	102.0	PA66	Natural (NA)	1;3;9-10;25	113-12029
		6.5	535	7.6	395.0	102.0	PA66W	Black (BK)	1;3;9-10;25	113-12060

All dimensions in mm. Subject to technical changes.

Recommended Tools									
	1 MK10-SB	2 MK20	3 MK21	4 MK3PNSP2	5 EVO7i	6 MK7P	9 EVO9HT	10 MK9P	25 EVOcut
	550	550	550	551	553	555	554	556	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-162

Date of issue: September 2022

2-piece fixing ties for heavy duty applications, for screws

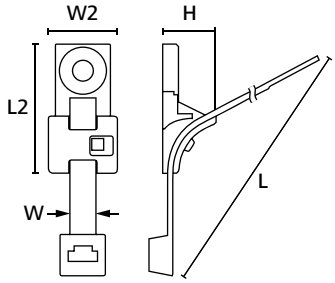
Used in the automotive and truck industry for harness fixing in the engine body, these parts offer solutions in many other industrial applications with difficult environment.

Features and benefits

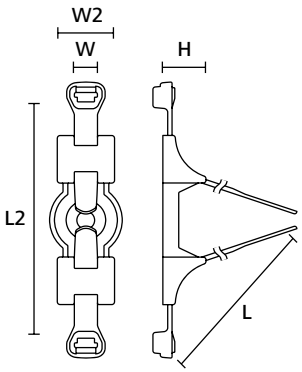
- Pre-assembled 2-piece fixing tie
- Cable tie head can be moved after bundling
- Secure alignment to the bundle due to H-design
- A suitable alternative for metal clamps
- Withstands vibrations and displacement forces
- High tightening torque through metal bushing



These HDM are suitable for assembling on screws.



HDM with cable tie (L = length of the tie"flat")



DHDM with cable tie (L = length of the tie"flat")



DHDM (Double heavy duty mount) for parallel routing of bundles.

HDM-Series

TYPE	Width (W2)	Length (L2)	Height (H)	Mounting Screw Type	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T120SHDM8	20.0	38.0	15.6	M8 Screw	7.6	225.0	55.0	PA46	Grey (GY)	1;3;9-10;25	156-00429
T50RHDM6	20.0	37.5	16.0	M6 Screw	4.6	200.0	50.0	PA66HIRHS	Black (BK)	1-2;4-6;25	156-00410
T120RHDM6	20.0	37.5	16.0	M6 Screw	7.6	390.0	105.0	PA46	Grey (GY)	1;3;9-10;25	156-00407
	20.0	37.5	16.0	M6 Screw	7.6	390.0	105.0	PA66HIRHS	Black (BK)	1;3;9-10;25	156-00406
T50RHDM8	20.0	37.5	16.0	M8 Screw	4.6	200.0	50.0	PA66HIRHS	Black (BK)	1-2;4-6;25	156-00412
T120RHDM8	20.0	37.5	16.0	M8 Screw	7.6	390.0	105.0	PA46	Grey (GY)	1;3;9-10;25	156-00409
	20.0	37.5	16.0	M8 Screw	7.6	390.0	105.0	PA66HIRHS	Black (BK)	1;3;9-10;25	156-00408
X120RHDM65x160	32.0	40.2	15.5	M6 Screw	7.7	369.0	100.0	PA66HIRHS	Black (BK)	1;9-10;25	156-01466

All dimensions in mm. Subject to technical changes.

DHDM-Series for parallel routing

TYPE	Width (W2)	Length (L2)	Height (H)	Mounting Screw Type	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T120ROSDHDM6	25.4	59.4	15.5	M6 Screw	7.6	385.0	105.0	PA66HS, PA66W	Black (BK)	1;3;9-10;25	156-01485
X120RDHDM6	25.4	59.4	15.5	M6 Screw	7.7	369.0	100.0	PA66HIRHS	Black (BK)	3;5;7;9-10	156-01096
X120RDHDM8	25.4	59.4	15.5	M8 Screw	7.7	369.0	100.0	PA66HIRHS	Black (BK)	3;5;7;9-10	156-01097

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-163

2-piece fixing ties for strong hold on smooth bundles

for screws

Soft Grip mounts are especially designed for use with Soft Grip ties. The versatile combinations provide a variety of flexible fastening options for fluid management / cooling systems in vehicles. The Soft Grip Series is a unique semi-customised part solution and designed to save time, money and development effort. The foot parts of the mounts can be adjusted to individual customer requirements.

In the event of maintenance, the cable tie can be easily removed using a screwdriver. Only the cable tie then needs to be replaced, not the whole fixing element.

Features and benefits

- Suitable for a variety of fastening requirements thanks to different foot parts (for holes, for studs, for screw fixings)
- Soft Grip cable ties assure high protection of sensitive harnesses and fluid system tubes
- Soft TPE inner layer inhibits lateral movements of the bundle, especially on smooth tubing
- Pre-locking feature holds the cable tie in place before it is tensioned
- Soft Grip cable ties can be removed with a screwdriver for maintenance
- EVO9SG application tool with adjusted nose piece available

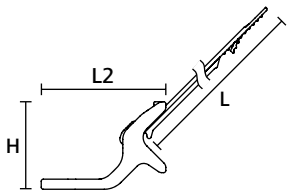
Please find more Soft Grip Products on page 67, 94 and 158.



Soft Grip Cable Tie assembled with Soft Grip Mount for screw fixing e.g. for fluid management / air conditioning pipes.



Soft Grip Cable Tie assembled with Soft Grip Mount for screw fixing.



SGT100SM6O

TYPE	Mounting Screw Type	Height (H)	Length (L)	Length (L2)	Bundle Ø max.	Material	Colour	Tools	Article-No.
SGT100SM6O	M6	29.7	140.0	42.0	25.4	PA66HS, TPE, PA6GF30	Black (BK), Blue (BU), Black (BK)	8	156-04096

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	8 EVO9SG
	554

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-164

Cable tie mounts Q-Series

Q-Mount Series QM, screwable

Q-mounts are ideally suited for holding our innovative Q-ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required.

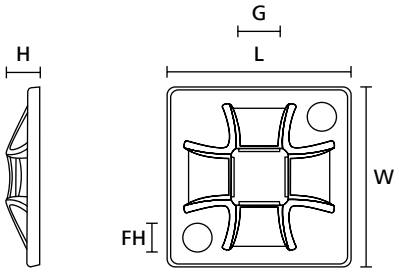
Features and benefits

- Screwable versions
- Perfect for combination with Q-ties
- 4-way entry for Q-tie
- Q-Mount base locks Q-tie in vertical position, means the hands are free to apply cables



Mounting bases Q-Mount.

Material specification please see page 26.



Q-Mount (side view) *Q-Mount (plan view)*

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
QM20	20.0	20.0	3.7	3.1	4.0	PA66	Natural (NA)	100 pcs.	151-10901

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-165

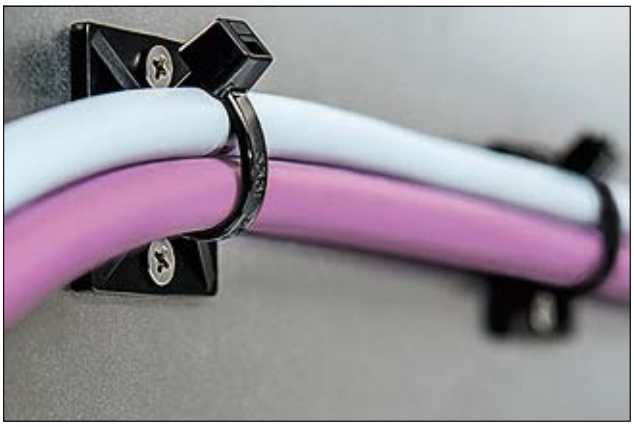
Screw fixing cable tie mounts

MB-Series square design, screwable

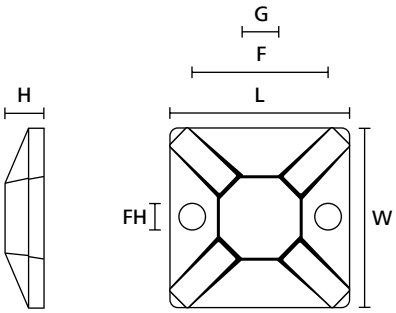
Designed specifically for holding heavier cable bundles these mounting bases can be used in many industries from Agriculture to Truck manufacture, they offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 8mm wide.

Features and benefits

- Screwable or self-adhesive versions
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Maximum surface area with adhesive to achieve high pull-off force
- 4-way entry for cable tie for quicker and more flexible installation



MB-Series Mounts with square design.



MB3-MB5 (side view)

MB3-MB5 (plan view)

Material specification please see page 26.

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
MB3	19.0	19.0	3.8	3.1	4.1	13.2	PA66	White (WH)	100 pcs.	151-28359
MB4	28.0	28.0	4.7	4.0	5.4	20.0	PA66	White (WH)	100 pcs.	151-28479
MB5	37.7	37.7	6.2	4.8	8.9	25.3	PA66	White (WH)	100 pcs.	151-00324

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-166

Date of issue: September 2022

Cable tie mounts for food industry, detectable

MCMB-Series, screwable

MCMB mounts are ideally suited for holding MCT-Series cable ties in position, even in areas of high vibration such as food manufacturing equipment and automated packaging machines.

Features and benefits

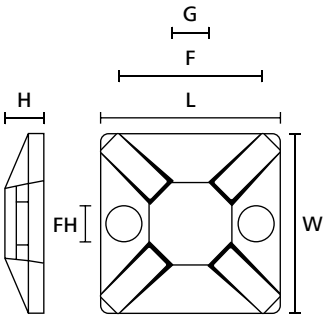
- Distinctive blue colour for easy visual detection
- Simple to install with a screw or bolt
- Provides a secure fixing solution for routing cables, tubes and hoses
- 4-way entry for the cable tie leads to a quicker and more flexible installation
- Magnetic detectable – perfect for use with food and pharmaceutical grade detection equipment
- Total metal dispersion provides consistent detectability, even for small cut-off pieces
- Greatly reduces risk of contamination within food products
- Can support quality assurance in the production of food stuffs, for example HACCP



Detectable fixing solution containing of MCMB mount and MCT cable tie.

Can support quality assurance in the production of food stuffs, for example HACCP.

The MCMB mount can ideally be combined with MCT cable ties on page 60.



MCMB Mount (side and plan view)

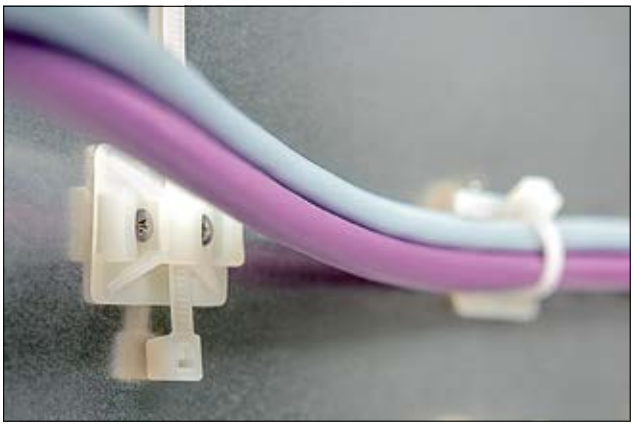
TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
MCMB4	28.0	28.0	4.7	4.0	4.7	20.0	PA66MP	Blue (BU)	100 pcs.	151-01170

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Screw fixing cable tie mounts

TY-Series rectangle design, screwable

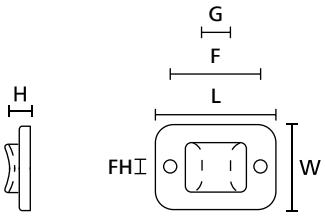
These products are designed for simple yet robust installation in a wide variety of applications. TY-Series mounts with a rectangular design are commonly used in telecoms equipment, switchgear and control cabinets. With its small and compact design TY3G1 offers an easy and rapid assembly for many different applications.



TY-Series mounts with rectangle design.

Features and benefits

- Screwable or self-adhesive versions
- Concave design to support larger diameter cables and bundles
- 2-way mounting base for safe guiding of cables and conduits
- Suitable for applications with minimal space
- Mounted before cable installation
- Usable with standard cable ties



TY3G1 (side view)

TY3G1, TY3G1S (plan view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Fixing Hole Centres (F)	Material	Colour	Pack Cont.	Article-No.
TY3G1	14.0	20.0	3.7	2.2	4.0	15.0	PA66	Natural (NA)	100 pcs.	151-21319

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-168

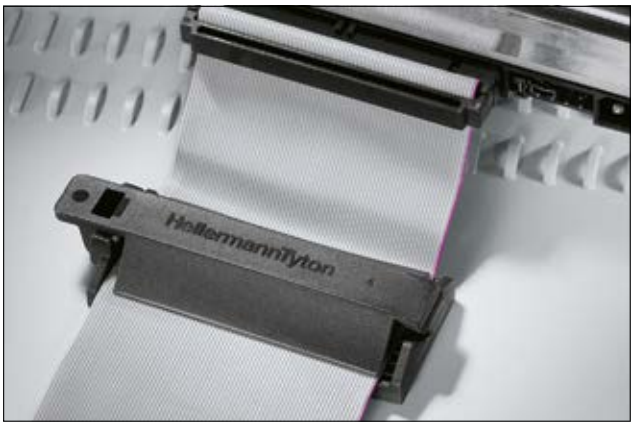
Flat ribbon and round cable mounts

FKH-Series, screw fixing

The FKH mounts are designed to retain flat ribbon cables. Ideal for use in computer equipment, gaming machines and domestic appliances. As each installation scenario is individual, FKH mounts are available in different dimensions and can be supplied as self adhesive and/or screwable versions.

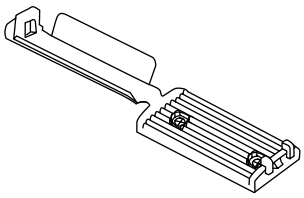
Features and benefits

- One-piece fixing mount for flat ribbon cables
- Increased mounting area offers high strength
- Quick and easy installation
- Can be released and re-used easily
- Flat cable is gently fastened due to soft wings

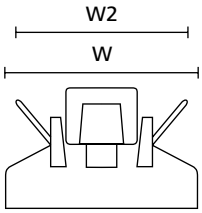


Based on extremely soft wings any flat cable is gently fastened.

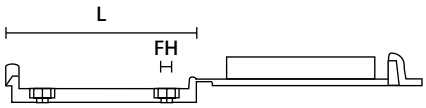
Material specification please see page 26.



Fixing can be realised with M3/M5 screws or acrylic adhesive backing



Flat Ribbon Cable Mount (front view)



Flat Ribbon Cable Mount (side view)

TYPE	Width (W)	Length (L)	Width (W2)	Hole Ø (FH)	Material	Colour	Article-No.
FKH25	25.0	31.0	22.0	3.1	PA66HIR	Black (BK)	151-16250
FKH50	25.0	56.5	22.0	3.1	PA66HIR	Black (BK)	151-16500

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-169

Screw fixing cable tie mounts CTQM for limited space

Q-Mount series CTQM

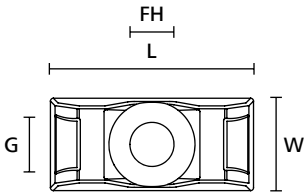
CTQM mounts are ideally suited for holding our innovative Q-ties in place. They would perfectly fit to all applications where a reliable and durable fixation is required and where space is limited.

Features and benefits

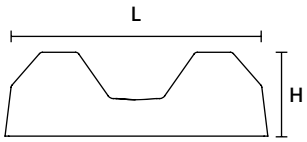
- 2-way mounting base for safe guiding of cables and conduits
- For cable ties up to 5 mm width
- Uses screw with countersunk head (max. ø of head: 8.0 mm)
- Perfect for combination with Q-ties
- Pre-assembly feature in combination with cable tie
- Holds the cable tie in vertical mounting position



Q-Mount, CTQM 2-way entry, screwable.



CTQM-Series (plan view)



CTQM-Series (side view)

Material specification please see page 26.

Please find more Q-Series products for your system solution on page 54.

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTQM5	9.5	21.0	6.7	4.5	5.0	PA66	Natural (NA)	100 pcs.	151-10920
	9.5	21.0	6.7	4.5	5.0	PA66	Black (BK)	100 pcs.	151-10930

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-170

Date of issue: September 2022

Screw fixing mounts

Cable tie mounts with curved design

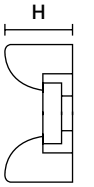
Designed specifically for holding heavier cable bundles these mounting bases can be used in many industries from agriculture to truck manufacturing. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 8.3 mm width.

Features and benefits

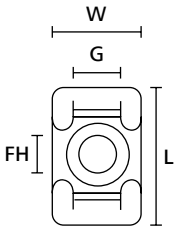
- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Mounts are available in various sizes and materials



Cable Tie Mounts KR6G5, KR8G5 and CTM.



KR6G5, KR8G5 and CTM (side view)



KR6G5, KR8G5 and CTM (plan view)

The KR-E/TFE mounts can ideally be combined with the E/TFE-cable ties on page 49.

Can support quality assurance in the production of food stuffs, for example HACCP.

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTM0	9.4	14.7	6.9	3.8	5.0	PA66	Black (BK)	100 pcs.	151-30300
	9.4	14.7	6.9	3.8	5.0	PA66	White (WH)	100 pcs.	151-30303
CTM1	9.4	14.7	6.9	4.8	5.0	PA66	Black (BK)	100 pcs.	151-30400
	9.4	14.7	6.9	4.8	5.0	PA66	White (WH)	100 pcs.	151-30404
KR6G5	11.8	17.8	8.8	4.5	6.4	E/TFE	Blue (BU)	100 pcs.	151-00653
MCKR6G5	11.8	17.8	8.8	4.5	6.4	PA66MP+	Blue (BU)	100 pcs.	151-00950
KR6G5	12.0	18.0	9.0	4.5	6.0	PA66	Natural (NA)	100 pcs.	151-24619
	12.0	18.0	9.0	4.5	6.0	PA66W	Black (BK)	100 pcs.	151-24660
KR8G5	14.3	24.8	12.1	6.5	8.3	E/TFE	Blue (BU)	100 pcs.	151-00654
MCKR8G5-5	14.5	24.8	12.0	5.1	8.3	PA66MP+	Blue (BU)	100 pcs.	151-01020
KR8G5	14.5	25.0	12.0	6.5	8.0	PA66	Natural (NA)	100 pcs.	151-24819
	14.5	25.0	12.0	6.5	8.0	PA66HS	Black (BK)	100 pcs.	151-24850
CTM2	15.5	21.8	9.4	4.6	7.9	PA66	Black (BK)	100 pcs.	151-30500
	15.5	21.8	9.4	4.6	7.9	PA66	White (WH)	100 pcs.	151-30504
CTM3	15.5	21.8	9.4	5.1	7.9	PA66	Black (BK)	100 pcs.	151-30600
	15.5	21.8	9.4	5.1	7.9	PA66	White (WH)	100 pcs.	151-30605
CTM4	15.8	21.8	9.4	6.4	7.9	PA66	Black (BK)	100 pcs.	151-30700
	15.8	21.8	9.4	6.4	7.9	PA66	White (WH)	100 pcs.	151-30703

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-171

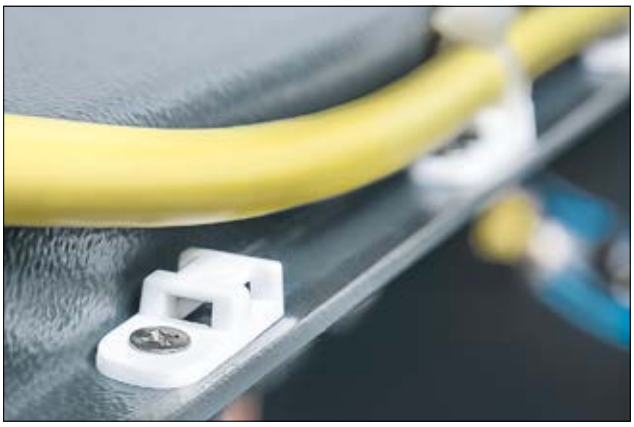
Screw fixing mounts

CTAM-Series for applications where space is limited

Each of these products offers particular benefits, but all are designed for simple yet robust installation in a wide variety of applications. Particularly used in telecoms equipment, switchgear and control cabinets these cable tie mounts are also used within the aerospace and railway industry.

Features and benefits

- Suitable for applications with minimal space
- Mounted before cable installation and in line with cable
- CTAM has 4-way entry design for use in line or at 90° angle to cable run
- CTAM mounts are available in different sizes and materials

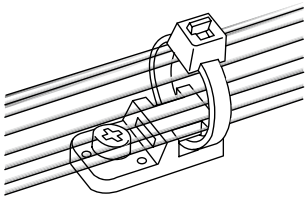


CTAM mounts for applications with limited space.

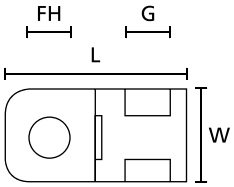
The CTAM mounts made of PA66MP+ are the ideal complement for MCTS ties on page 59.

The CTAM mounts made of PEEK are the ideal complement for the PEEK tie on page 53 and 62.

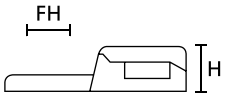
Can support quality assurance in the production of food stuffs, for example HACCP.



CTAM-Series in application



CTAM-Series (plan view)



CTAM-Series (side view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
CTAM1	10.2	20.4	5.1	4.3	5.0	PA66	White (WH)	100 pcs.	151-31103
CTAM2	10.2	20.4	5.1	5.2	5.0	PA66	White (WH)	100 pcs.	151-31203
CTAM1	10.2	20.5	5.5	4.3	5.0	PEEK	Beige (BGE)	100 pcs.	151-00757
CTAM2	10.2	20.5	5.5	5.2	5.0	PEEK	Beige (BGE)	100 pcs.	151-00758
MCCTAM1	10.3	20.7	5.1	4.3	5.0	PA66MP+	Blue (BU)	100 pcs.	151-00997

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-172

Date of issue: September 2022

Screw fixing mounts

Stainless Steel 316 mounts

Suitable for the secure fixing of cables, tubing, conduits and pipes within the most arduous of environments. Providing a complete fastening and fixing solution when used in conjunction with stainless steel ties up to 10.0 mm width. SSPC metal cable tie mounts are ideal for use within shipbuilding, oil and gas (offshore), industrial machinery and vehicles, food and beverage, power, renewable energy or process industries.

Features and benefits

- 2-way fixing for metal cable ties
- High performance stainless steel 316 material
- Heavy duty design
- Robust and durable solution
- Resistant to a range of chemicals in challenging environments
- Quick and easy to install
- Safe and secure solution for cables, tubing, conduits and pipes

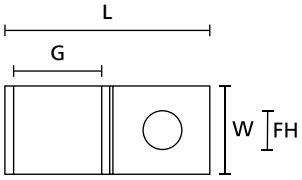


Stainless Steel P-Mount SSPC for use in arduous environments.

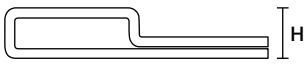
Material specification please see page 26.

The SSPC-Mounts can ideally be combined with the MBT cable ties on page 81 and with the MST and MLT cable ties on page 87, 88.

Can support quality assurance in the production of food stuffs, for example HACCP.



SSPC Series (plan view)



SSPC-Series (side view)

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
SSPC4	10.2	23.0	4.5	4.2	10.0	SS316	Metal (ML)	100 pcs.	151-00837
SSPC5	10.2	23.0	4.5	5.3	10.0	SS316	Metal (ML)	100 pcs.	151-00838
SSPC6	10.2	23.0	4.5	6.3	10.0	SS316	Metal (ML)	100 pcs.	151-00839

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-173

Screw fixing mounts

LKC-, NY- and LOK-series with overlapping curved design

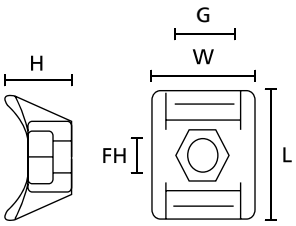
Designed specifically for holding heavier cable bundles, these mounting bases can be used in many industries from agriculture to truck manufacturing. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 13 mm width.

Features and benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration

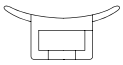
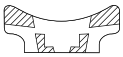
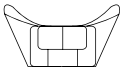


LOK02 fixing base application.



NY3256 (side view) *NY3256 (plan view)*

The LOK fixing bases can ideally be combined with the PE-, RPE-, and LPH-cable ties, see pages 64 and 65.

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
LKC		17.0	25.0	13.5	5.5	8.0	PA66	Black (BK)	100 pcs.	151-27010
		17.0	25.0	13.5	5.5	8.0	PA66	Natural (NA)	100 pcs.	151-27019
LKCSF1		19.0	40.0	16.8	6.0	13.0	PA66	Natural (NA)	100 pcs.	151-27219
		19.0	40.0	16.8	6.0	13.0	PA66	Black (BK)	100 pcs.	151-27202
NY3256		12.0	13.5	7.8	3.1	8.0	PA66	Natural (NA)	1,000 pcs.	151-25219
LOK02		14.0	21.0	18.0	5.1	9.0	PA6HIR	Black (BK)	100 pcs.	151-80210

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-174

Date of issue: September 2022

Screw fixing mounts

These cable tie mounts are very small in their overall size. They are designed for simple yet robust installation particulary in areas with high vibrations and/or limited space. They are a common fixing method for telecoms equipment, switchgear and control cabinets.

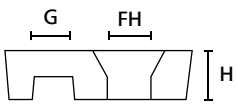
Features and benefits

- Small overall size for areas with limited mounting space
- Simple to install with a screw, bolt or rivet
- Excellent security, particularly in areas of high vibration
- Single hole fixing with two-way entry for cable tie

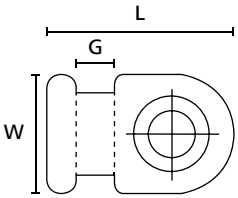


TY- (l) and MB-Series (r) with curved design, screwable.

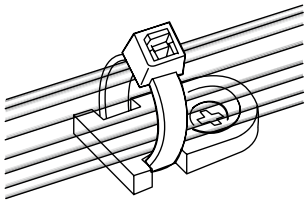
MB-Series curved design, screwable



MB1, MB2 Mounts (side view)



MB1, MB2 Mounts (plan view)



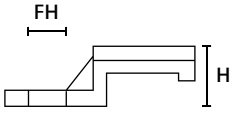
MB1, MB2 Mounts in application

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
MB1	8.0	12.5	3.5	2.9	2.6	PA66	Natural (NA)	100 pcs.	151-28119
MB2	12.5	20.5	3.3	5.0	5.0	PA66	Black (BK)	100 pcs.	151-28210
	12.5	20.5	3.3	5.0	5.0	PA66	White (WH)	100 pcs.	151-28219

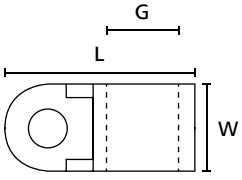
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Material specification please see page 26.

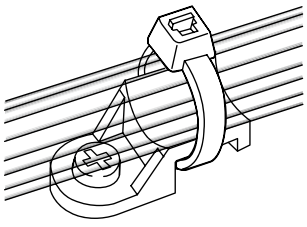
TY-Series curved design, screwable



TY3, TY8 Mounts (side view)



TY3, TY8 Mounts (plan view)



TY3, TY8 Mounts in application

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
TY8F1	10.0	22.5	7.2	4.5	8.0	PA66	Natural (NA)	1,000 pcs.	151-02157

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-175

Screw fixing mounts

LKM / CL / FH with curved design for sideways fixing

In areas with limited space these mounting bases allow the cable to be offset from the fixing hole, and can be installed in the equipment prior to the cable installation. A major cost saving can be made using these products as they will allow the use of many different sizes of standard cable ties without the need to stock a wide range of specific fixing ties.

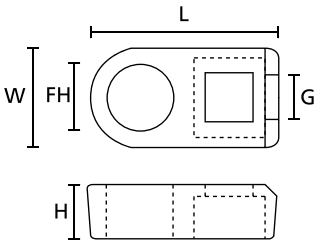
Features and benefits

- Small overall size for areas with limited mounting space
- Screwable mounts for fixing cable sideways
- Ideal for securing large, heavier bundles
- Suitable for cable ties up to 8 mm width

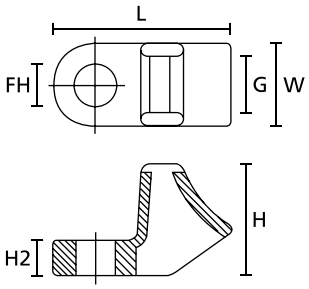


LKM, CL8 and FH cable tie mounts for applications with limited space.

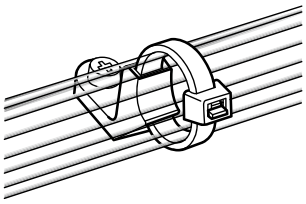
Material specification please see page 26.



FH cable tie mounts (plan and side view)



LKM, CL8 cable tie mounts (plan and side view)



CL8 cable tie mount in application

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
FH18	7.1	13.3	4.0	3.7	2.5	-	PA66	Natural (NA)	500 pcs.	151-61119
FH30	9.5	17.9	4.7	5.5	3.5	-	PA66	Natural (NA)	500 pcs.	151-61319
LKM	12.0	27.0	16.0	6.0	7.6	5.0	PA66	Black (BK)	100 pcs.	151-26301
	12.0	27.0	16.0	6.0	7.6	5.0	PA66	Natural (NA)	100 pcs.	151-26304
CL8	12.5	27.3	16.0	6.5	8.0	5.0	PA66	Natural (NA)	100 pcs.	151-02258
	12.5	27.3	16.0	6.5	8.0	5.0	PA66W	Black (BK)	100 pcs.	151-02259

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-176

Clamps with elastical loop

Cradle clamp

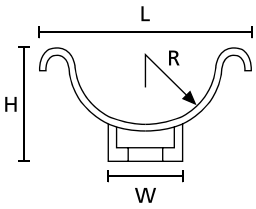
Simple and versatile method of bundling cables. These clamps consist of two parts. The clamping base for mounting onto a panel and the elastical loop.

Features and benefits

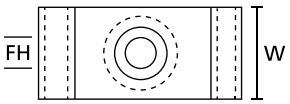
- 2-piece fixing part consists of clamp and retaining ring
- Suitable for pre-assembly and prototyping
- Useful for applications requiring addition or removal of cables
- Simply stretch loop over clip for simple and quick cable containment



Cradle clamp - 2-piece fixing part consisting of clamp and retaining ring. The simple and versatile method of bundling cables.



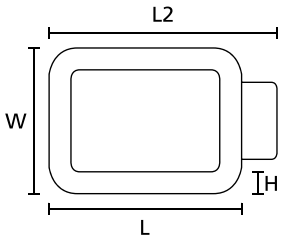
Cradle clamp (front view)



Cradle clamp (plan view)

TYPE	Width (W)	Length (L)	Height (H)	Radius (R)	Hole Ø (FH)	Material	Colour	Article-No.
C1	12.7	22.0	14.0	6.3	4.8	PA6HIR	Black (BK)	201-10010
C2	12.7	35.0	18.0	11.0	4.8	PA6HIR	Black (BK)	201-10020
C3	12.7	48.0	25.0	17.5	4.8	PA6HIR	Black (BK)	201-10030

All dimensions in mm. Subject to technical changes.



Retaining Ring R1 - 3

TYPE	Width (W)	Length (L)	Length (L2)	Height (H)	Material	Colour	Article-No.
R1	23.8	16.0	22.0	3.2	PVC	Black (BK)	201-20010
R2	23.8	22.0	29.0	3.2	PVC	Black (BK)	201-20020
R3	23.8	33.0	39.0	3.2	PVC	Black (BK)	201-20030

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-177

Strain relief clips

Klam-Klip (KK)

Strain relief clips for gripping cables up to 8.5 mm bundle diameter. Strain relief clip is simply attached to mounting surface with an M4 fixing screw.

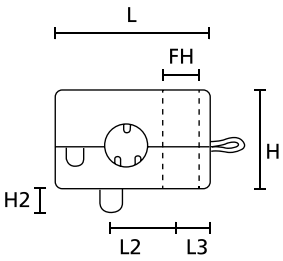
Features and benefits

- Simple 1-screw fixing to guide and secure leads
- Two halves of the clip are linked to ensure no loss of parts during re-wiring
- Anti-rotation pin prevents leads from twisting

Material specification please see page 26.



Strain relief Klam-Klip in application.



Klam-Klip (side view)



Klam-Klip Cable Restraints (plan view)

TYPE	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Bundle Ø min.	Bundle Ø max.	Material	Colour	Article-No.
KK1	8.8	22.0	14.0	3.5	5.0	4.5	5.7	PA6HIR	Black (BK)	234-10100
KK2	8.8	22.0	14.0	3.5	5.0	5.5	6.7	PA6HIR	Black (BK)	234-10200
KK3	8.8	22.0	14.0	3.5	5.0	6.5	7.7	PA6HIR	Black (BK)	234-10300
KK4	8.8	22.0	14.0	3.5	5.0	7.5	8.5	PA6HIR	Black (BK)	234-10400

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-178

Harness clip for heavy duty applications, for screws or threaded bolts

These heavy duty mounts (HDM) have been primarily designed for use in the automotive and truck industry. Nowadays they can be found in a variety of applications requiring heavy duty mounting in areas like the railway, defence and/or agriculture industry.

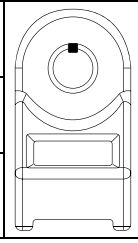
Features and benefits

- Design offers secure alignment to the bundle
- Possible replacement of cushion clamps and/or metal clamps
- Eliminates the needs for multiple sized fix diameter clamps
- For heavy duty cable ties up to 12.7 mm width
- High tightening torque
- Easy maintenance of bundle by simply changing the cable tie



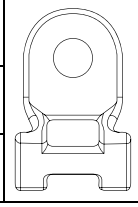
Heavy Duty Mounts HDM-Series, patent number US5820083.

Standard torque mounts

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
HDM19		19.3	36.3	16.7	4.7	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00134
HDM25		19.3	36.3	16.7	6.2	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00437
HDM312		19.3	36.3	16.7	7.8	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-00439

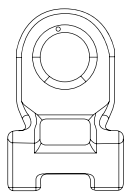
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Medium torque mounts

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
HDM321		24.0	46.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07100
HDM401		24.0	46.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07300
HDM501		24.0	46.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-07500

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

High torque mounts

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
HDM320		25.0	47.0	20.7	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02094
HDM400		25.0	47.0	20.7	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-01224
HDM500		25.0	47.0	20.7	12.7	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02096
HDM375BDM4W-R		34.1	89.0	25.2	10.29	12.7	PA66HIRHSUV	Black (BK)	100 pcs.	151-02104

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-179

Two way saddle mount for heavy duty applications, for parallel separation

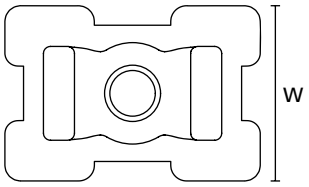
Heavy duty saddle mounts can be installed between two bundles to separate them and prevent chafing and wear. Fastened to a frame rail or mounting bracket, the special profile on the saddle mount provides a tight circumferential loop on large and small bundles. The saddle mount is an ideal assistant in many applications within the railway, truck and agricultural vehicle construction as well as in the ship building industry.



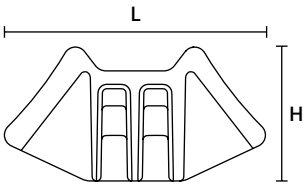
This saddle mount is installed between two bundles to separate them and prevent chafing and wear.

Features and benefits

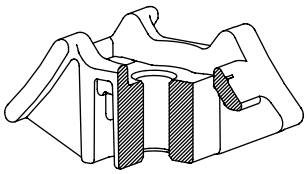
- For parallel routing of different bundles to avoid wear and chafing
- Offers secure alignment to the bundle
- Can be used in combination with heavy duty cable ties
- Easy maintenance of bundle by simply changing the cable tie
- Made from impact modified, heat stabilized material
- S2HM25 can be used with hex head screws 6.35



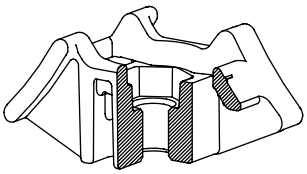
S2CM25



S2CM25



S2CM25



S2HM25

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
S2CM25	30.0	45.0	23.0	6.0, 6.35 (hexagonal)	12.7	PA66HIRHS	Grey (GY)	500 pcs.	151-29400
S2HM25	30.0	45.0	23.0	6.0, 6.35 (hexagonal)	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-29403

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-180

Harness clip for heavy duty applications, for screws or threaded bolts for edges

This axial oval mount stands off bundles from frame rails and cross members to prevent them from rubbing and chafing. They can be perfectly used in combination with heavy duty cable ties up to 12.7 mm width – ideal to securely fix cables and wires in the railway and shipbuilding industry as well as in truck and agricultural vehicle construction.

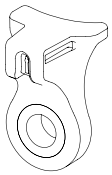
Features and benefits

- Guides bundles securely above sharp edges
- For threaded bolts or screws
- Can be used in combination with heavy duty cable ties
- For cable ties up to 12.7 mm width



Axial oval mounts stand off bundles from frame rails and cross members to prevent them from rubbing and chafing.

Material specification please see page 26.

TYPE	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
SAM83		26.0	34.0	35.0	8.0	12.7	PA66HIRHS	Grey (GY)	500 pcs.	151-29600
SAOM82		26.0	34.0	35.0	8.0	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-29701
SAM320B-R		25.0	29.9	44.9	8.31	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02099
SAM400B-R		25.0	29.9	44.9	10.29	12.7	PA66HIRHSUV	Black (BK)	500 pcs.	151-02102

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
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Heavy duty mounts for 3-way routing

These 3-way routing saddle mounts are designed to secure up to three bundles for multiple routing and reduce chaving or wear to those bundles. Applicable for various applications within the OEM, mass transit, defence or heavy truck and automotive markets.

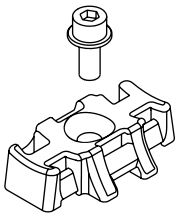
Features and benefits

- For parallel routing of bundles
- Secure alignment to the bundle due to H-design
- Easy maintenance of bundle by simply changing cable tie
- Cable tie head can be moved after bundling

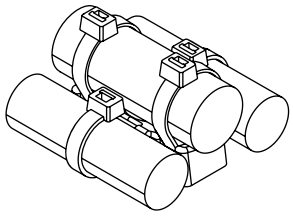


S3SB15CBM8 and S3CBM8.

S3CBM8



Suitable for external cylindrical hexagonal bolts M8



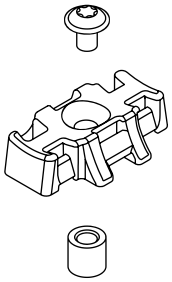
Example of a possible 3-way transfer

Material specification please see page 26.

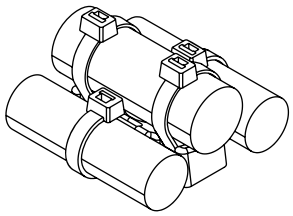
TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
S3CBM8	46.0	70.0	18.6	9.0	PA6GF30	Black (BK)	500 pcs.	151-01040

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

S3SB15CBM8



Suitable for welding studs (M8 internal bore & outer diameter 15 mm)



Example of a possible 3-way transfer

TYPE	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Material	Colour	Pack Cont.	Article-No.
S3SB15CBM8	46.0	70.0	18.6	9.0	PA6GF30	Black (BK)	500 pcs.	151-01010

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

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HellermannTyton

Flexibility is the key to stability.

If it doesn't fit, we'll make it fit. Our FlexTack cable tie mount demonstrates just how progressive this maxim can be. It adheres to virtually any surface, even with concave or convex forms. And whilst we were busy developing it, we also made it ultra lightweight and temperature-resistant up to +105 °C. An excellent fit all round.

www.HellermannTyton.co.uk/flexibility

MADE FOR REAL®



Date of issue: September 2022

Ratchet P-Clamp

The Ratchet P-Clamp family offers versatility when managing wires, cables and hoses. The robust design and durable materials make it ideal for heavy duty applications, both in- and outdoors. The one-piece adjustable clamp can be closed by hand to the desired diameter. The release feature provides easy and nondestructive removal of cables simply by using a flat-head screwdriver. This nondestructive release allows the clamp to be reused without removing or replacing any bolts or screws. The Ratchet P-Clamp is offered in four sizes and multiple mounting configurations.

Features and benefits

- One-piece ratchet closure design allows for easy installation during pre- or final assembly
- Multiple configurations handle a wide range of diameters and applications, reducing part inventory
- Clamp interior is designed to guide and center bundle to reduce pinching
- Easy release feature allows for quick adjustments and maintenance
- Impact modified, heat and UV stabilized PA66 provides long-term durability, in- and outdoors
- Steel mounting plate tolerates high torque mounting and is treated to resist chemicals and salt spray



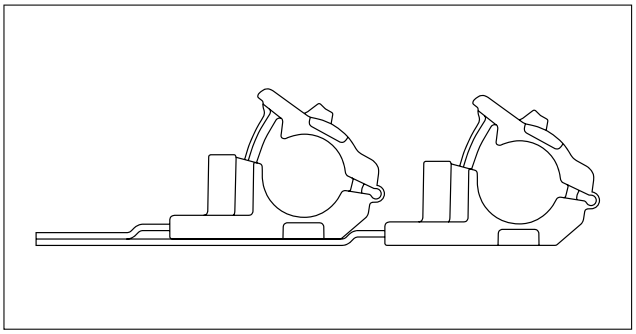
Ratchet P-Clamp - A more versatile way to mount and clamp cables.

www.HellermannTyton.co.uk/PClamp-cat22

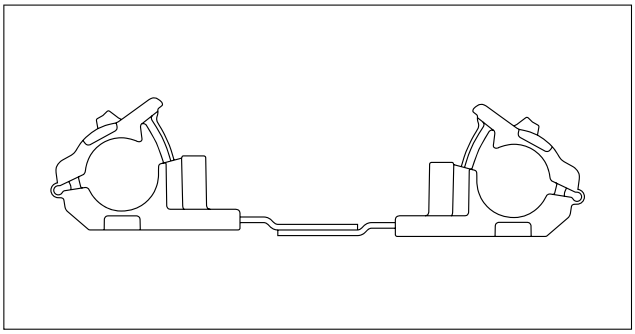
Material specification please see page 26.

Multiple configurations

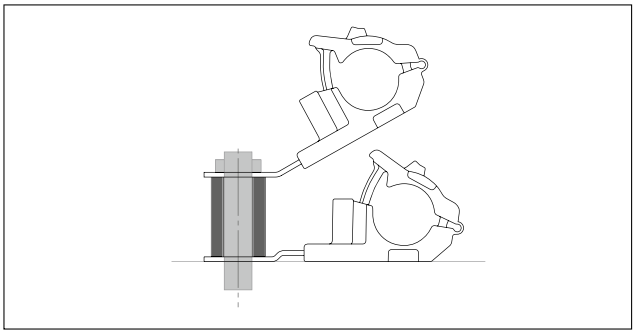
The wiring schemes in heavy duty applications become more complex day after day. Using a single mounting point, you can combine Ratchet P-Clamps to match the number, position and diameters of the wires or bundles inherent to today's wire management challenges. You will see below just a few of the nearly endless number of configurations you can arrange by mixing Ratchet P-Clamps of varying sizes and different mounting plates.



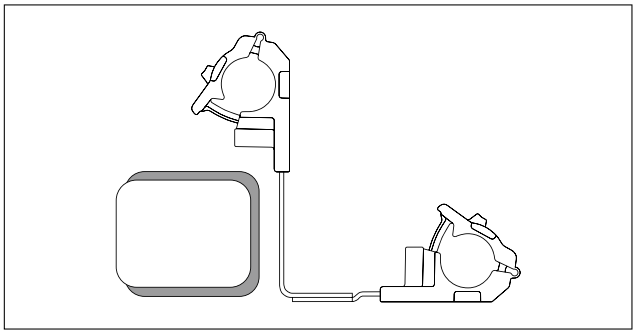
You can piggy-back Ratchet P-Clamps by using different length mounting plates to secure parallel cable configurations.



Ratchet P-Clamp mounting plates are shaped to allow face-to-face positioning. By using different length mounting plates, you can vary the distance between bundles and take advantage of the optimal routing path.



Add a spacer between Ratchet P-Clamps to speed installation and maintenance of stacked wire bundles.

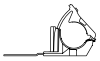


90° angle mounting plates enable you to work around obstacles and protect wire from contacting moving parts.

Date of issue: September 2022

Ratchet P-Clamp

For bundle diameters from 6.2 mm to 13.7 mm, A-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCA180LM6		34.9	134.1	6.2	13.7	6.5	101.5	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01639
RCA180MM6		34.9	105.1	6.2	13.7	6.5	72.5	Medium	PA66HIRHSUV, ST, ZN	Black (BK)	151-01638
RCA180SM6		34.9	83.1	6.2	13.7	6.5	50.5	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01637
RCA180SM8		34.9	83.1	6.2	13.7	8.31	50.5	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01416
RCA90LM6		34.9	96.8	6.2	13.7	6.5	24.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01644
RCA90LM8		34.9	96.8	6.2	13.7	8.31	24.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01437
RCA90SM6		34.9	68.8	6.2	13.7	6.5	24.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01643

All dimensions in mm. Subject to technical changes.

For bundle diameters from 12.7 mm to 19.5 mm, B-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCB180LM6		34.9	134.1	12.7	19.5	6.5	103.8	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01647
RCB180SM6		34.9	83.1	12.7	19.5	6.5	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01645
RCB180SM8		34.9	83.1	12.7	19.5	8.31	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01440
RCB180SM10		34.9	83.1	12.7	19.5	10.29	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01390
RCB180SM12		34.9	83.1	12.7	19.5	12.95	52.8	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01441
RCB90LM6		34.9	96.8	12.7	19.5	6.5	26.7	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01652
RCB90LM8		34.9	96.8	12.7	19.5	8.31	26.7	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01460
RCB90SM6		34.9	68.8	12.7	19.5	6.5	26.7	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01651
RCB90SM8		34.9	68.8	12.7	19.5	8.31	26.7	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01457

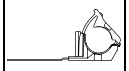
All dimensions in mm. Subject to technical changes.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-185

Ratchet P-Clamp

For bundle diameters from 19.4 mm to 36.0 mm, C-Sereis

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCC180LM6		34.9	154.0	19.4	36.0	6.5	113.3	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01655
RCC180SM6		34.9	103.0	19.4	36.0	6.5	62.3	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01653
RCC180SM8		34.9	103.0	19.4	36.0	8.31	62.3	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01474
RCC90LM6		34.9	129.2	19.4	36.0	6.5	39.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01660
RCC90LM8		34.9	129.2	19.4	36.0	8.31	39.9	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01495
RCC90SM6		34.9	101.2	19.4	36.0	6.5	39.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01659
RCC90SM8		34.9	101.2	19.4	36.0	8.31	39.9	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01492

All dimensions in mm. Subject to technical changes.

Material specification please see page 26.

For bundle diameters from 36.0 mm to 51.0 mm, D-Series

TYPE	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Material	Colour	Article-No.
RCD180SM8		34.9	115.5	36.0	51.0	8.31	70.0	Short	PA66HIRHSUV, ST, ZN	Black (BK)	151-01499
RCD90LM8		34.9	116.7	36.0	51.0	8.31	42.4	Long	PA66HIRHSUV, ST, ZN	Black (BK)	151-01521

All dimensions in mm. Subject to technical changes.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-186

Date of issue: September 2022

Ratchet P-Clamp accessories

Protection inserts

Soft material inserts snap precisely into the body of the clamp to provide an enhanced level of protection for applications with movement, high vibration or soft cable bundles. An integrated rib on the top of the insert prevents a lateral displacement of the corrugated tube, for e.g. acceleration. This provides secure fastenings of a corrugated tube with vertical and horizontal alignment.

Features and benefits

- Soft inserts (for A - D Series) for an additional level of protection
- Torque support for defined contact pressure
- Use of manual processing Tool EVO possible
- CT-Insert offers low fire hazard and is conform to low smoke generation requirements (UL94 V0)
- CT-Insert offers low evolution of toxic gases and corrosive acids in event of an fire



Ratchet P-Clamps soft inserts offering an additional level of protection.

TYPE	Width (W)	Bundle Ø min.	Bundle Ø max.	Description	Material	Colour	Article-No.
RCINSERTA	-	3.2	10.7	For A-Series	TPE	Black (BK)	151-01530
RCINSERTB	-	8.7	15.5	For B-Series	TPE	Black (BK)	151-01531
RCINSERTC	-	15.4	32.0	For C-Series	TPE	Black (BK)	151-01532
RCINSERTD	-	32.0	47.0	For D-Series	TPE	Black (BK)	151-01533
RCD-CT-INSERT	34.9	34.0	47.0	For convoluted tubes, D-Series	PA666V0	Black (BK)	151-02964

All dimensions in mm. Subject to technical changes.

EN 45545-2 c UL us

For product specific approvals and specifications please refer to the Appendix.

Ratchet P-Clamp accessories

Tension tab

The Tension Tab enables installers to apply a specific clamp tension when used with manual processing Tool of the EVO Series hand tools.

Features and benefits

- For pre-determined clamp pressure, a tension tab is available
- Tension tab for use with our EVO-Series hand tools
- Built-in channel on Ratchet P-Clamp makes using Tension Tabs quick and easy



Tension tab can be used to ensure specific tension.

TYPE	Material	Colour	Article-No.
RCTT	PA66HIRHSUV	Black (BK)	151-01529

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-187

Aluminium P-Clamps

Alu-P-Clamp with / without chloroprene insert

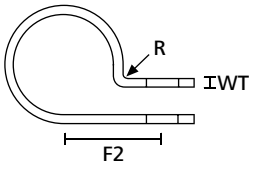
Manufactured from a high quality aluminium, these metal P-Clamps provide flexibility whilst providing a permanent fixing in the most arduous of environments. The addition of a chloroprene insert provides the cable or pipe bundle with a high degree of protection against vibration, reducing noise and also providing electrical isolation. They are commonly used in caravan construction, the defence and railway industry as well as in the renewable energy sector.

Features and benefits

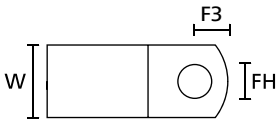
- Simple and secure pipe or cable fixation
- Can be combined with chloroprene rubber for vibration resistance
- Ideal for use in high temperature applications
- Suitable for applications needing strength of metal components



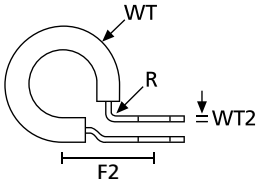
P-Clamps manufactured in polyamide, aluminium or aluminium with a chloroprene insert.



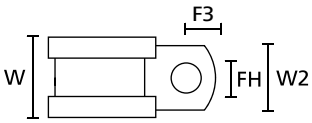
ALU P-Clamp (side view)



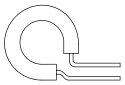
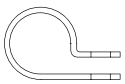
ALU P-Clamp (plan view)



ALU_C P-Clamp with chloroprene insert (side view)



ALU_C P-Clamp with chloroprene insert (plan view)

TYPE	Drawing	Wall (WT2)	Hole Ø (FH)	Fixing Hole Centres (F2)	Fixing Hole Centres (F3)	Bundle Ø max.	Material	Colour	Article-No.
ALU4C		0.8	5.2	11.6	5.5	3.2	AL, CR	Black (BK)	211-15040
ALU6C		0.8	5.2	13.4	5.5	6.4	AL, CR	Black (BK)	211-15060
ALU8C		0.8	5.2	15.0	5.5	9.5	AL, CR	Black (BK)	211-15080
ALU12C		1.3	5.2	19.9	5.5	15.9	AL, CR	Black (BK)	211-15120
ALU16C		1.3	5.2	23.1	5.5	22.2	AL, CR	Black (BK)	211-15160
ALU19C		1.3	5.2	25.5	5.5	27.0	AL, CR	Black (BK)	211-15190
ALU23C		1.6	5.2	29.4	5.5	33.3	AL, CR	Black (BK)	211-15230
ALU4		-	5.2	11.6	5.5	6.4	AL	Natural (NA)	211-10040
ALU6		-	5.2	13.4	5.5	9.5	AL	Natural (NA)	211-10060

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

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Plastic P-Clamps

HP-Series

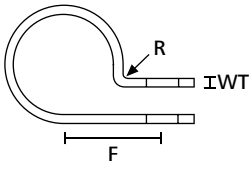
For permanent or semi-permanent cable fixings this range of plastic P-Clamps can be used in many industries. Their light weight makes them particularly suitable for use in areas such as aircraft and aerospace where minimising weight, but retaining a strong fixing, is vitally important.

Features and benefits

- Manufactured from polyamide
- Good temperature resistance and high strength
- Wide range of sizes for every application
- Can be used without cable ties



P-Clamps H1P - H18P in different dimensions.



P-Clamp H1P - H18P (side view)



P-Clamp H1P - H18P (plan view)

Material specification please see page 26.

TYPE	Hole Ø (FH)	Bundle Ø max.	Fixing Hole Centres (F)	Material	Colour	Article-No.
H1P	4.2	3.2	8.5	PA66HS	Black (BK)	211-60000
H2P	4.2	5.0	9.5	PA66HS	Black (BK)	211-60001
H3P	4.2	6.5	10.0	PA66HS	Black (BK)	211-60002
H4P	4.2	8.0	10.0	PA66	Natural (NA)	211-60049
	4.2	8.0	10.0	PA66HS	Black (BK)	211-60003
H5P	4.2	9.5	11.0	PA66	Natural (NA)	211-60059
	4.2	9.5	11.0	PA66HS	Black (BK)	211-60004
H6P	4.2	11.0	13.0	PA66	Natural (NA)	211-60069
	4.2	11.0	13.0	PA66HS	Black (BK)	211-60005
H7P	4.2	12.5	14.0	PA66HS	Black (BK)	211-60006
H8P	4.2	14.0	15.0	PA66HS	Black (BK)	211-60007
H9P	4.2	16.0	16.0	PA66HS	Black (BK)	211-60008
H10P	4.2	17.5	17.0	PA66HS	Black (BK)	211-60009
H11P	4.2	19.0	18.0	PA66	Natural (NA)	211-60119
H12P	4.2	20.5	19.0	PA66	Natural (NA)	211-60129
H13P	5.2	22.0	20.5	PA66	Natural (NA)	211-60139
H14P	5.2	24.0	21.5	PA66	Natural (NA)	211-60149
H15P	5.2	25.5	23.0	PA66	Natural (NA)	211-60159
H16P	5.2	28.5	24.0	PA66	Natural (NA)	211-60169
H18P	5.2	35.0	27.5	PA66	Natural (NA)	211-60189

All dimensions in mm. Subject to technical changes.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-189

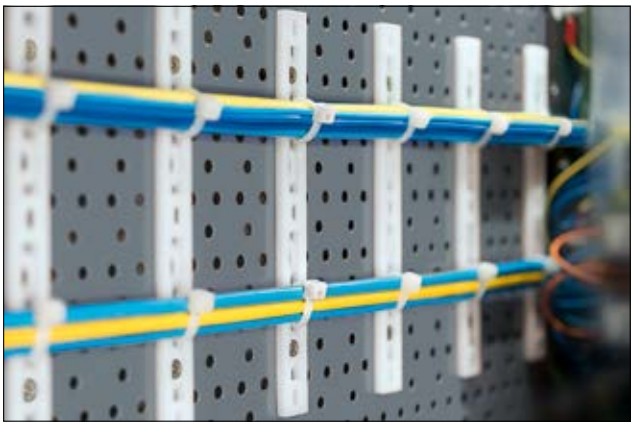
Mounting plates for screw fixing

MP-Series for parallel bundling

Many applications require each cable run to be firmly held in place but to be held separately from adjacent cable runs (example - control cabinets, machinery and military systems). The MP series of mounts can achieve this.

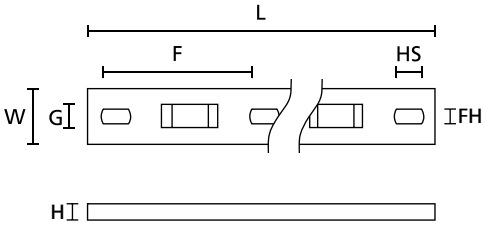
Features and benefits

- Allow multiple cables to run in parallel
- Simple to fix with two screws
- Cables are fixed by using a cable tie through any combination of the available slots

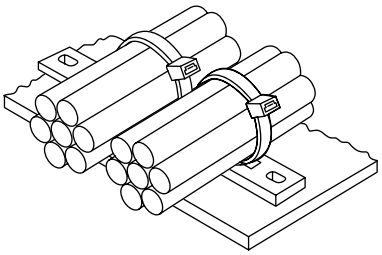


Screwable mounting plate MSMP.

Material specification please see page 26.



Mounting plates MP and MSMP (plan and side view)



Mounting plates in application

TYPE	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	No. of bundles	Material	Colour	Pack Cont.	Article-No.
MP2M3	12.7	76.2	3.2	3.7	5.2	2	PA66	Natural (NA)	100 pcs.	151-24219
MP3M3	12.7	108.0	3.2	3.7	5.2	3	PA66	Natural (NA)	100 pcs.	151-24319
MP4M3	12.7	139.8	3.2	3.7	5.2	4	PA66	Natural (NA)	100 pcs.	151-24419
MSMP5/10	15.8	204.5	5.3	5.1	7.6	5	PA66	Natural (NA)	100 pcs.	151-25519
MSMP6/6	15.8	244.0	5.3	3.8	7.6	6	PA66	Natural (NA)	100 pcs.	151-25619
MSMP4	15.9	167.0	5.2	5.1	8.2	4	PA66	Natural (NA)	500 pcs.	150-83499

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

EN 45545-2 c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-190

Date of issue: September 2022

HellermannTyton

Just change the focus and you'll create something new.

Everyone has their own point of view. That's why you find different kinds of personalities at HellermannTyton. We create a vibrant working environment for the details that we then step up a level. Take our EdgeClips: cable routing on the cutting edge – no need for drilling or adhesives. Lateral thinking at its best.

www.HellermannTyton.co.uk/EdgeClip

MADE FOR REAL®



Date of issue: S er 2022

1-piece fixing ties for edges

EdgeClip-Series

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. Once the cable tie is fastened around the cables the EdgeClip is presented ready for attaching to the panel. Widely used within the automotive and panel building industries these cable ties and EdgeClips save time and money.

Features and benefits

- Easy assembly, just clip on per hand
- For edges of 1 - 3 mm, 3 - 6 mm, 4 - 6 mm or 6 - 8 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- Ideal for applications where holes or adhesives are not suitable



T50ROSEC10 fitted onto a plastic panel to hold a Ø 6 mm harness.

www.HellermannTyton.co.uk/EdgeClip-cat22



1-Piece Fixing Tie T50SOSEC12 can be pushed easily on edges.

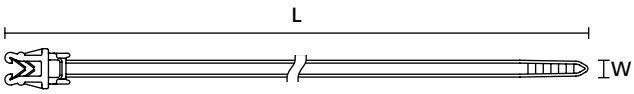
Material specification please see page 26.

The silver-grey clamp, the heart of our EdgeClips, consists of doubletempered spring steel in accordance with DIN EN 10132-4 C75S. The spring steel gives the clamp both the necessary rigidity to provide high pull-off forces and also sufficient flexibility for various possible applications. The double coating is applied initially with a zinc plate system followed by inorganic surface sealing. Naturally, no chromium (VI) is used in this process. The clamp therefore complies with the current EU Directive 200/53/EC on end of life vehicles and the prohibition on heavy metals. The refined spring-steel clamp also fulfils the requirements for resistance to salt spray stipulated in DIN EN ISO 9227 NSS (min. 840 h without corrosion of base metal) and DIN EN ISO 6270-Z-CH (min. 720 h without corrosion of base material). This solution has therefore been approved by many OEMs for exposed installation locations, e.g. in engine compartments and the running-gear area.

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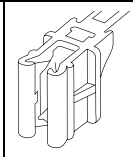
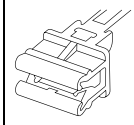
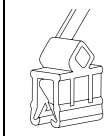
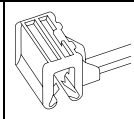
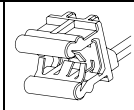
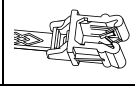
1-piece fixing ties for edges

EdgeClip-Series



T50SOSEC12E

*** AS Anti-Slip Ties inhibit sideways movement on the bundle.**

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50SOSEC12E		1.0 - 3.0	4.6	160.0	35.0	150	PA46	Grey (GY)	1-2;4-6;25	126-00253
		1.0 - 3.0	4.6	160.0	35.0	180	PA66HS	Black (BK)	1-2;4-6;25	148-00200
T50SOSEC13E		1.0 - 3.0	4.6	160.0	35.0	180	PA66HS	Black (BK)	1-2;4-6;25	126-00000
T40XEC5SP-E		1.0 - 3.0	4.0	85.0	15.0	178	PA66HS	Black (BK)	1-2;4-6;25	133-00059
T50SOSEC34E		1.0 - 3.0	4.6	155.0	35.0	180	PA66HS	Black (BK)	1-2;4-6;25	126-00426
T50SOSEC20-E		3.0 - 6.0	4.6	150.0	35.0	180	PA66HS	Black (BK)	1-2;4-6;25	126-00235
T50SOSAS-EC1.5-4TVE*		1.5 - 4.0	4.6	162.5	35.0	180	PA66HIRHS	Black (BK)	1-2;4-6;25	126-00354

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-193

2-piece fixing ties for edges

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry. These EdgeClips are specially designed for applications where space is limited such as in mirrors and headlights.

Features and benefits

- For flat edges
- For thin edges 0.5 - 2.5 mm
- Small housing for limited space
- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling

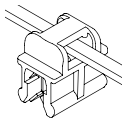
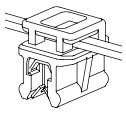


T30ROSEC0,5-2,5SPV for application on thin edges.



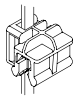
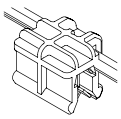
The Mini-EdgeClip family is our solution for limited spaces.

EdgeClip-Series, 0.5 - 2.5 mm, top fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30ROSEC0.5-2.5TP-SD		3.4	145.0	30.0	135	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01543
T30ROSEC0.5-2.5TPVA		3.4	145.0	30.0	135	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01542

All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 0.5 - 2.5 mm, side fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30ROSEC0.5-2.5SP-SVA		3.4	145.0	30.0	133	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01797
T30ROSEC0.5-2.5SP-SVB		3.4	145.0	30.0	133	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01546

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-194

Date of issue: September 2022

2-piece fixing ties for edges

EdgeClip-Series, 1.0 - 3.0 mm, top fixing

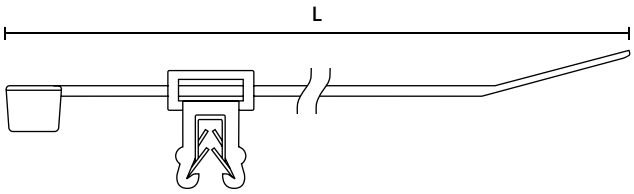
These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel buidling and electrical industry.

Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- EC9, EC10, EC21 and EC22 are for minimum bundle diameters of 1 mm
- For edges of 1 - 3 mm

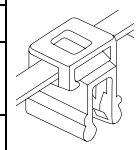
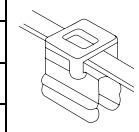
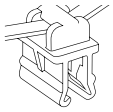
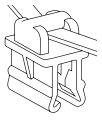


T50ROSEC10 fitted onto a plastic panel to hold a Ø 6 mm harness.



Fixing Tie with EC4

Material specification please see page 26.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30REC4A		3.6	148.0	33.0	135	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76090
T50SOSEC4A		4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76093
T50ROSEC4A		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76099
		4.6	200.0	45.0	225	PA66W	Black (BK)	1-2;4-6;25	156-00570
T50REC4A		4.6	202.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76091
Q50REC4A		4.7	210.0	45.0	220	PA66W	Black (BK)	1-2;4-6;25	156-01085
T30REC4B		3.6	148.0	35.0	135	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76080
T50SOSEC4B		4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00109
T50ROSEC4B		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-76079
Q50REC4B		4.7	210.0	45.0	220	PA66W	Black (BK)	1-2;4-6;25	156-01086
T18REC10SD		2.5	100.0	22.0	80	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	155-38304
T50SOSEC10		4.6	150.0	31.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00015
T50ROSEC10		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-05904
T18REC9SD		2.5	100.0	22.0	80	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	155-37104
T50SOSEC9SD		4.6	150.0	31.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00019
T50ROSEC9		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-05903
T50REC9		4.6	202.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01280

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-195

2-piece fixing ties for edges

EdgeClip-Series, 1.0 - 3.0 mm, side fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

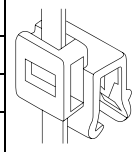
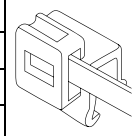
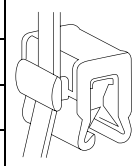
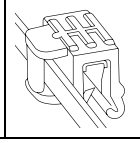
Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- EC9, EC10, EC21 and EC22 are for minimum bundle diameters of 1 mm
- For edges of 1 – 3 mm



T50ROSEC23 - the cable bundle runs parallel with the edge.

Material specification please see page 26.

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T30REC5A		3.6	148.0	33.0	135	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00003
T50SOSEC5A		4.6	150.0	31.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-40593
T50ROSEC5A		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-40591
Q50REC5A		4.7	210.0	45.0	220	PA66W	Black (BK)	1-2;4-6;25	156-01087
T50SOSEC5B		4.6	150.0	31.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-40583
T50REC5B		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-40582
T50ROSEC5B		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	150-40581
Q50REC5B		4.7	210.0	45.0	220	PA66W	Black (BK)	1-2;4-6;25	156-01088
T18REC21		2.5	100.0	18.0	80	PA66W, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01231
T50SOSEC21		4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00017
T50ROSEC21		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00010
T80REC21		4.7	205.0	55.0	355	PA66HS, PA66HIRHS	Natural (NA), Black (BK)	1-2;4-6;25	156-01728
T50ROSEC22		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00011

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-196

2-piece fixing ties for edges

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel buidling and electrical industry.

Features and benefits

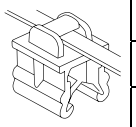
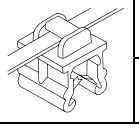
- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- For minimum bundle diameters of 1 mm
- For edges of 3 – 6 mm



Fixing Tie with EdgeClip for thick edges.

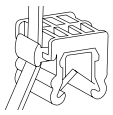
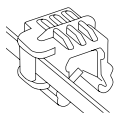
Other combinations between cable tie and foot part available on request.

EdgeClip-Series, 3.0 - 6.0 mm, top fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T18ROSEC19		2.5	100.0	20.0	80	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-04600
T50SOSEC19		4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-04601
T50ROSEC19		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-04602
T50SOSEC20		4.6	150.0	35.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00016
T50ROSEC20		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00020

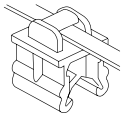
All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 3.0 - 6.0 mm, side fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50ROSEC23		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00006
T80REC23		4.7	205.0	55.0	355	PA66HS, PA66HIRHS	Natural (NA), Black (BK)	1-2;4-6;25	156-01729
T50ROSEC24		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00007

All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 6.0 - 8.0 mm, top fixing

TYPE	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50ROSEC6-8		4.6	200.0	45.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-02700

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-197

2-piece fixing ties for edges

EdgeClip-Series, twistable

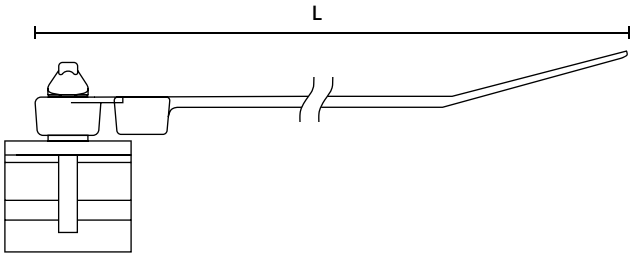
These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel buidling and electrical industry.

Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Easy to assemble by hand
- Cable tie head can be moved after bundling
- For edges of 1 – 2.5 mm or 1 – 3 mm
- Can be rotated to the desired position

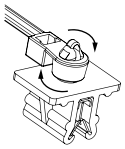
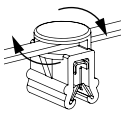
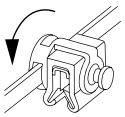


EdgeClip CBTO50R, rotatable 90°.



CBT30MR

Material specification please see page 26.

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
CBT30MR		2.5	3.5	160.0	32.0	135	PA66HS, POM	Black (BK)	1-2;4-6;25	156-00049
CBTO50R		3.0	4.6	202.0	47.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-01601
CBTOS50RSTUD5		3.0	4.6	202.0	47.0	225	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00380

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-198

Heavy duty harness clips

Beam clamps / Wedge clips

Primarily designed for use in the automotive/truck industry, these parts can be used in a wide variety of industries and applications where bundles need mounting.

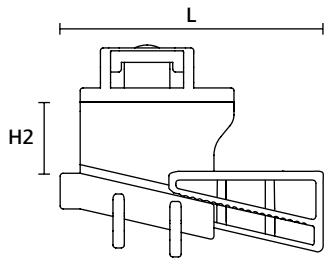
These heavy duty harness clips help to fix and secure cables, lines and hydraulic lines in truck, agriculture and railway vehicle construction, as well as in the ship building industry and industrial buildings.



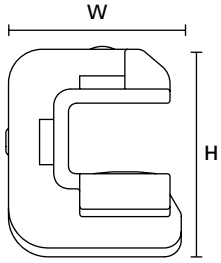
The Beam Clamp can be fixed onto a beam with a wedge. Up to two bundles can be routed on the top or rear side of the clamp.

Features and benefits

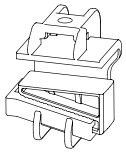
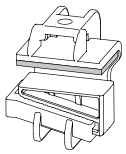
- Easy to install
- No damage to surfaces
- Easy maintenance of bundle by simply changing cable tie
- Cable tie head can be moved after bundling
- Applicable to a wide range of panel thicknesses



Beam Clamp, Front view



Beam Clamp, Side view

TYPE	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Height (H2)	Material	Colour	Article-No.
Beam Clamp D		5.5 - 7.0	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00886
Beam Clamp B		7.0 - 8.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00822
Beam Clamp C		8.5 - 10.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-00823
Beam Clamp D with foam		5.5 - 7.0	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01188
Beam Clamp B with foam		7.0 - 8.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01186
Beam Clamp C with foam		8.5 - 10.5	28.6	46.2	36.7	12.5	PA6GF30	Black (BK)	151-01187

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses, for edges

EdgeClip-Series

EdgeClips are used in the automotive industries and electrical industries and when it is impossible to drill holes or no other fixing points are available.

Features and benefits

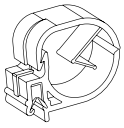
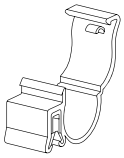
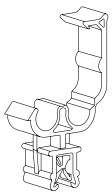
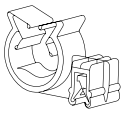
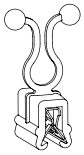
- Releasable fixing elements with EdgeClip
- Low-vibration routing of bigger bundle diameters
- Clips to be pushed onto an edge
- To be closed single handed, a snap can be felt
- Bundles can be released at any time
- EC27: fixing element enables usage of smaller bundle diameter
- EC41: for parallel guidance of two bundles



EdgeClip cable and tube clips are suitable for the low-vibration routing of cables and tubes with larger bundle diameters.

Material specification please see page 26.

www.HellermannTyton.co.uk/TwistLock-cat22

TYPE	Drawing	Panel Thickness	Attach to Ø	Material	Colour	Article-No.
EC27		1.0 - 3.0	15.0 - 22.0	PA66HIRHS	Black (BK)	151-00161
EC39		1.0 - 3.0	15.3 - 15.9	PA6HIR	Black (BK)	151-00174
EC41		3.0 - 6.0	2 x 8.0	PA6HIR	Black (BK)	151-00234
HCEC3.0SP-C		1.0 - 3.0	12.0 - 15.0	PA66HIRHS	Black (BK)	151-01863
EC1-3TL7OTP		1.0 - 3.0	6.5 - 8.5	PA66HIRHS	Black (BK)	151-02588

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-200

Automatic bundling

EdgeClip-Series for automatic cable tying systems

Clips to fix cables and harnesses in the automotive and white goods industry.

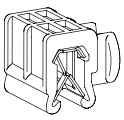
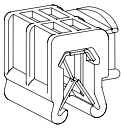
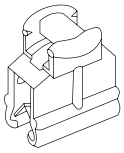
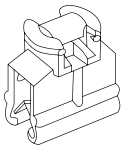
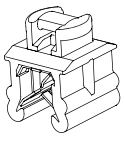
Features and benefits

- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool System 3080



EdgeClip for Automatic Cable Tying Systems.

Can be used with Automatic Cable Tying Systems on page 538.

TYPE	Drawing	Panel Thickness	Material	Colour	Article-No.
ATSEC38		1.5 - 4.0	PA66HIRHS	Black (BK)	102-68380
ATSEC37		1.5 - 4.0	PA66HIRHS	Black (BK)	102-68370
ATSEC35		1.5 - 4.0	PA66HIRHS	Black (BK)	102-68350
ATSEC36		1.5 - 4.0	PA66HIRHS	Black (BK)	102-68360
ATSEC19		3.0 - 6.0	PA66HIRHS	Black (BK)	102-68390

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

2-piece fixing ties with pipe clip

These fasteners interconnect two different bundles of goods, of various size and type. The mobility of the fixing tie provides a secure grip and protects the cables or bundles, even in difficult conditions.

Features and benefits
- Easy to assemble
- For routing of two different bundles
- For post-installation of additional cables for pre-assembled cable looms
- Ideally used in the automotive industry, but also in all industries where bundles, cables have to be routed and connected

2-piece fixing ties with pipe clip, twistable 360°

Features and benefits
- Simply clip on a wire or hose
- Fixing clip offers full 360° rotation
- Routed cable can move in any direction in relation to the fixing point



2-piece fixing ties with pipe clip

Features and benefits
- For post-installation of additional cables for pre-assembled cable looms
- Variety of twist angles and even different loop directions provide flexibility for cable routing
- For OC1 and 2A additional cable tie dimensions are available
- CBTO-series for cable ties up to 5 mm



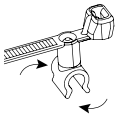
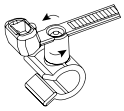
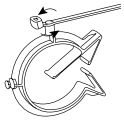
Material specification please see page 26.

Date of issue: September 2022

Other product variants are available in our Automotive catalogue.

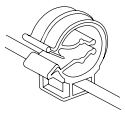


2-piece fixing ties with pipe clip, twistable 360°

TYPE	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	Material	Colour	Tools	Article-No.
T50SVC4S		3.8 - 4.2	4.7	155.0	35.0	PA66HS, PP	Black (BK), Natural (NA)	1-2;4-6;25	156-01374
T50SVC6.5		6.5 - 8.0	4.7	155.0	35.0	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00155
T50SVCOC10-14		10.0 - 14.0	4.7	155.0	35.0	PA46	Grey (GY)	1-2;4-6;25	156-01045
T50SVCOC19-24.5		19.0 - 24.5	4.7	155.0	35.0	PA66HS, PA66HIRHS	Black (BK)	1-2;4-6;25	156-00136

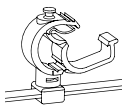
All dimensions in mm. Subject to technical changes.

2-piece fixing ties with pipe clip

TYPE	Drawing	Attach to Ø	Width (W)	Length (L)	Material	Bundle Ø max.	Colour	Tools	Article-No.
T50ROC1B		4.0 - 10.0	4.6	202.0	PA66HS, PA66HIRHS	45.0	Black (BK)	1-2;4-6;25	156-00306

All dimensions in mm. Subject to technical changes.

2-piece fixing ties with automatic harness clip

TYPE	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Tools	Article-No.
T50RIAHC1TICR		3.0 - 13.0	4.6	200.0	45.0	225	PA66HIRHS	Black (BK)	1-2;4-6;25	156-03377
T50RIAHC2TICR		11.0 - 20.0	4.6	200.0	50.0	225	PA66HIRHS	Black (BK)	1-2;4-6;25	156-05330

All dimensions in mm. Subject to technical changes.

Recommended Tools						
	1 MK10-SB	2 MK20	4 MK3PNSP2	5 EVO7i	6 MK7P	25 EVOcut
	550	550	551	553	555	563

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-203

Snapper hose clips for tubes and harnesses

SNP-Series

Our SNP range can be used as an alternative to metal hose clamps. Snapper can be used in markets as diverse as automotive, agriculture, white goods, venting systems, pumps and hydraulic systems to medical engineering.

Features and benefits

- Releasable and reusable plastic hose clamps
- Self-locking
- Releasable by giving a lateral movement to the 'head'
- Installation by hand possible
- Installation with processing tool for a secure tensioning
- For higher operating temperatures: Glass Filled PA66

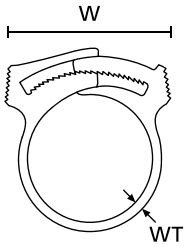


SNP - Snapper Hose Clips range.

Material specification please see page 26.

Snapper tools please see page 564.

SNP Snappers are also available on request in material PA66HS and PA46.



SNP - Snapper Hose Clip (front view)

SNP Clip (side view)

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W) min.	Width (W) max.	Width (W2)	Wall (WT)	Material	Colour	Article-No.
SNP1	6.0	6.5	8.33	11.73	3.8	1.00	POM	White (WH)	190-00022
	6.0	6.8	8.40	11.70	3.8	1.00	PA66GF13	Black (BK)	192-10010
SNP2(E)	8.7	10.0	17.00	21.00	6.0	1.50	POM	Natural (NA)	191-10029
SNP3(E)	10.0	11.4	19.00	25.00	6.0	1.80	POM	Natural (NA)	191-10039
SNP4(E)	10.8	12.3	19.00	23.00	6.0	1.80	POM	Natural (NA)	191-10049
SNP6(E)	12.0	13.7	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10069
SNP8(E)	13.7	15.3	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10089
SNP10(E)	15.0	16.8	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10109
SNP12(E)	16.8	18.4	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10129
SNP14(E)	18.1	19.9	19.00	24.00	6.0	1.80	POM	Natural (NA)	191-10149
SNP16	19.3	21.5	19.00	24.00	6.0	1.90	POM	Natural (NA)	191-10169
SNP20(E)	22.7	24.7	20.00	26.00	6.0	1.80	POM	Natural (NA)	191-10209

All dimensions in mm. Subject to technical changes.

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Add items to your watchlist!
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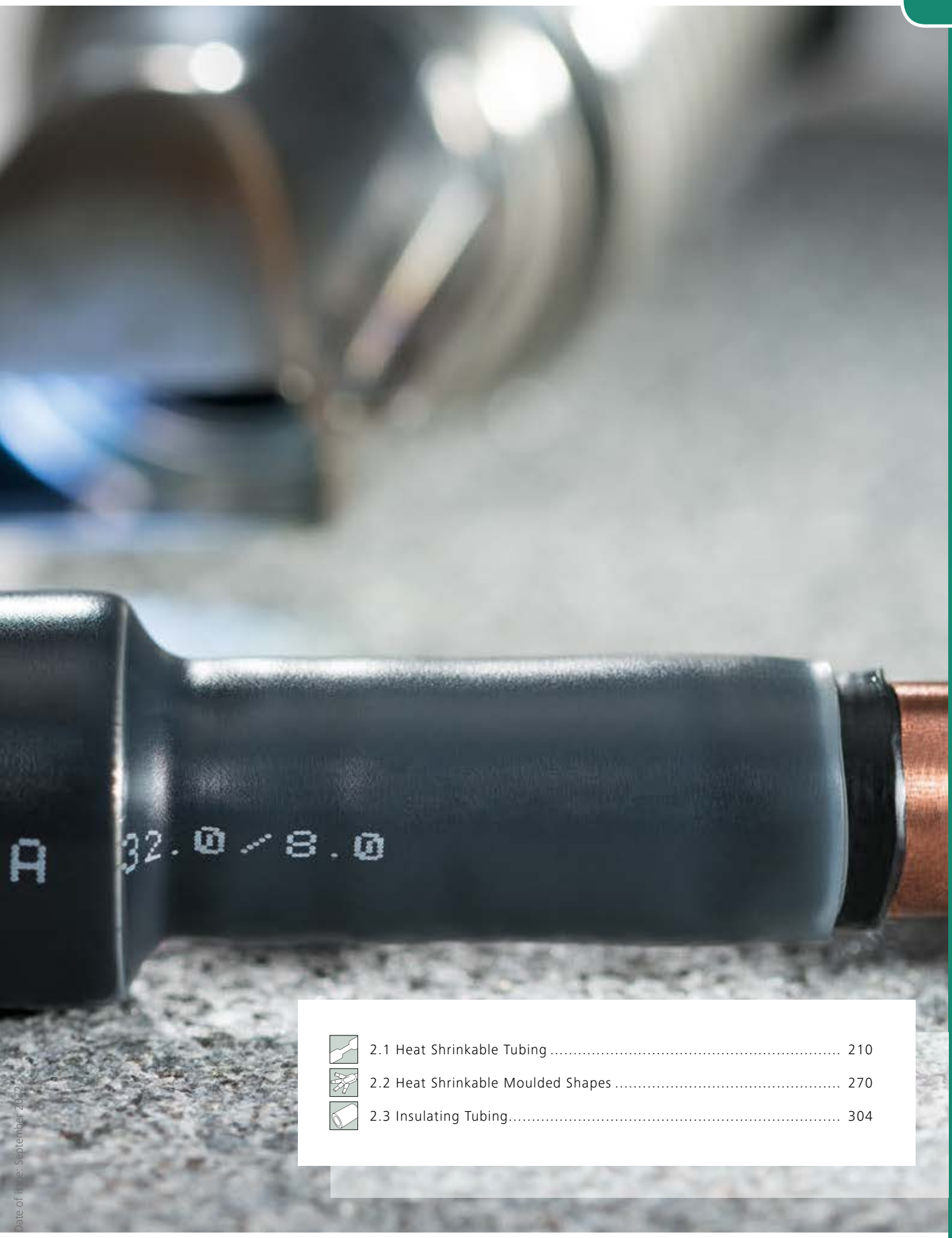


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Inspired by Paul Hellermann

Heat-shrinkable tubes have always made it easy to repair cables and pipes. Strictly speaking, however, Paul Hellermann used rubber bike valves to bring the insulation of damaged household cables to a mass market from 1935. The idea is the only thing that our modern heat-shrinkable tubes have in common with these simple chloroprene sleeves. Take the SA47-LA (see page 264), which was specially developed in line with customer specifications and offers outstanding protection against moisture and corrosion, thus enabling vehicles to retain their functionality.



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2.1 Heat Shrinkable Tubing

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2.2 Heat Shrinkable Moulded Shapes

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Overview of Applications for Heat Shrink Tubing

When selecting the correct heat shrink tubing size, it is important to bear in mind the 80:20 rule. The heat shrink tubing must shrink by at least 20 % and not more than 80 % of its complete shrinkage capacity to achieve the right result. In our overview of applications you will find the best heat shrink tube for every cable diameter. The 80:20 rule has of course been taken into account in the table.

Heat Shrinkable Tubing with a shrink ratio of 2:1
HFT-A, TL27, TF21, TF24, VITON®-E, TK20, TK29, TFE2, TR27, TCN20, SE28

Heat Shrinkable Tubing with a shrink ratio of 3:1
With the optimal shrink ratio of 3:1, you can cover a wide range of applications with just a few sizes. This leads to reduced stock expenditure and requires less space. 3:1 heat shrink tubes: TF34, TF31, EPS-300, TCN20 overexpanded, TA32, TA37

Shrink ratio 2:1 Size mm		Cable/Wire Diameter
1.2/0.6		0.7 mm
		1.1 mm
	2.4/1.2	1.4 mm
3.2/1.6		1.9 mm
		2.2 mm
	4.8/2.4	2.9 mm
6.4/3.2		3.8 mm
		4.3 mm
	9.5/4.7	5.7 mm
		5.8 mm
12.7/6.4		7.7 mm
		8.6 mm
	19.1/9.5	11.4 mm
25.4/12.7		15.2 mm
		17.2 mm
	38.1/19.1	22.9 mm
50.8/25.4		30.5 mm
		34.3 mm
	76.2/38.1	45.7 mm
101.6/50.8		61.0 mm
		68.6 mm
		91.4 mm

Shrink ratio 3:1 Size mm		Cable/Wire Diameter
1.5/0.5		0.7 mm
		1.3 mm
	3/1	1.4 mm
		2.6 mm
6/2		2.8 mm
		5.2 mm
	12/4	5.6 mm
18/6		8.4 mm
		10.4 mm
	24/8	11.2 mm
		15.6 mm
40/13		18.4 mm
		20.8 mm
		34.6 mm

Conversion from imperial to metric

Inch	1/32“	3/64“	1/16“	5/64“	3/32“	1/8“	3/16“	1/4“	3/8“
mm	0.8	1.2	1.6	2.0	2.4	3.2	4.8	6.4	9.5
Inch	1/2“	5/8“	3/4“	1“	1-1/4“	1-1/2“	2“	3“	4“
mm	12.7	15.9	19.1	25.4	31.8	38.1	50.8	76.2	101.6

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4:1 and 6:1 heat shrink tubing is able to shrink down to 1/4 or 1/6 of its original supplied diameter. The higher shrink ratio allows 4:1 and 6:1 tubing to cover a large substrate and enables the tubing to fit over large objects, like connectors and shrink down onto much smaller cable jackets.

Heat Shrinkable Tubing with a shrink ratio of 4:1
TREDUX MA47, TREDUX HA47, TA42, TA46, EPS-400, MA40, MA47, MU47, LVRK, RMS, LVK, LVK-C, HA40, HA47, SA47-LA, TFE4

Shrink ratio 4:1 Size mm			Cable/Wire Diameter
4/1			1.6 mm
	8/2		3.2 mm
			3.4 mm
12/3			4.8 mm
		16/4	6.4 mm
			6.8 mm
	24/6		9.6 mm
			10.2 mm
32/8			12.8 mm
			13.6 mm
			20.4 mm
		52/13	20.8 mm
			27.2 mm
			44.2 mm

Heat Shrinkable Tubing with a shrink ratio of 6:1
HA67

Shrink ratio 6:1 Size mm				Cable/Wire Diameter
19.0/3.2				6.4 mm
	33.0/5.5			11.0 mm
		44.4/7.4		14.8 mm
				15.8 mm
50.8/8.3				16.8 mm
			69.8/11.7	23.3 mm
				27.5 mm
	88.9/17.1			31.5 mm
				37.0 mm
		119.4/22.9		42.2 mm
				42.3 mm
				58.2 mm
				74.5 mm
235/40				79.0 mm
				100.1 mm
				196.0 mm

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The Right Heat Shrink Tube

The 80:20 rule means that a heat shrink tube should shrink by a maximum of 80% and a minimum of 20%.

For example:
A cable with a diameter of 5mm is to be wrapped in heat shrink tubing. In theory both sizes 6/2 and 12/4 would be suitable, since the required diameter of 5mm lies within the shrink range of both tube sizes.

Size 6/2

Maximum shrink (100 %)



Total shrinkage of 4 mm (6 mm – 2 mm)

Optimum shrinkage max. (80 %)



Shrinkage of 3.2 mm (4 mm x 0.8)

Optimum shrinkage min. (20 %)

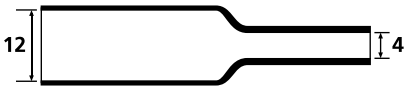


Shrinkage of 0.8 mm (4 mm x 0.2)

Size 6/2 has a range of application of between 2.8 mm and 5.2 mm and is therefore suitable for the cable diameter of 5 mm.

Size 12/4

Maximum shrink (100 %)



Shrinkage of 8 mm (12 mm – 4 mm)

Optimum shrinkage max. (80 %)



Shrinkage of 6.4 mm (8 mm x 0.8)

Optimum shrinkage min. (20 %)



Shrinkage of 1.6 mm (8 mm x 0.2)

The smallest application diameter of size 12/4 is 5.6 mm. This size is therefore unsuitable for a cable diameter of 5 mm.

Calculator tool for Heat Shrink Tubing

The calculator tool for heat shrink tubing is a selection guide for shrink tubing sizes based on the object to be covered. Fill in your specification and the calculator presents the right tubing size according to the 80:20 rule.

Find more information under **www.HellermannTyton.co.uk/heatshrink-calculator!**

The calculator tool also checks if the heat shrink tubing you have chosen is suitable for your application. For example you can find the heat shrink tubing with the Product Search on the www.HellermannTyton.co.uk website.

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Heat Shrinkable Tubing Overview

TYPE	Packaging Type	Variant	Material	Shrink Ratio	Operating Temperature	Dimension (mm)	Halogen-free	Colour	Specifi-cations	Page
ShrinKit 321 Basic		**Thin-Wall**	PO-X	3:1	-55 °C to +135 °C			Black		216
ShrinKit 321 Universal Basic			PO-X	3:1	-55 °C to +135 °C			Black, Blue, Green-Yellow, Red, White		217
ShrinKit 321 Universal			PO-X	3:1	-55 °C to +135 °C			Black, Blue, Green-Yellow, Red, Transparent		218
ShrinKit 321-A Basic		**Thin-Wall Hot melt adhesive**	PO-X	3:1	-55 °C to +110 °C			Black, Transparent		219
ShrinKit 321-A			PO-X	3:1	-55 °C to +110 °C			Black, Transparent		220
HIS-PACK		**Thin-Wall**	PO-X	2:1	-55 °C to +125 °C	1.2 - 25.4	HF	Black, Blue, Green-Yellow, Red, Transparent	2, 3	221
HIS-3			PO-X	3:1	-55 °C to +135 °C	1.6 - 25.4	HF	Black, Blue, Green-Yellow, Red, Transparent	2, 3	223
HIS-A		**Thin-Wall Hot melt adhesive**	PO-X	3:1	-55 °C to +125 °C	3.0 - 24.0	HF	Black, Transparent	2, 3	225
HIS-3 BAG		**Thin-Wall**	PO-X	3:1	-55 °C to +135 °C	1.6 - 12.7		Black, Blue, Brown, Green-Yellow, Grey, Red, Transparent	2, 3	226
TREDUX			PO-X	2:1, 3:1	-55 °C to +135 °C	1.5 - 101.6		Black, Green-Yellow	2, 3, 9	229
TREDUX MA47		**Medium-Wall Hot melt adhesive**	PO-X	up to 4:1	-55 °C to +110 °C	12.0 - 95.0	HF	Black		230
TREDUX HA47		**Thick-Wall Hot melt adhesive**	PO-X	up to 4:1	-55 °C to +110 °C	19.0 - 85.0	HF	Black		231
LVR		**Thin-Wall**	PVC	2:1	-20 °C to +80 °C	2.4 - 25.4		Black	9	232
TL27			PO-X	2:1	-70 °C to +135 °C	1.2 - 50.8	HF	Black		233
TCN20			PO-X	2:1	-55 °C to +125 °C	1.2 - 50.8		Black	2, 3	234
TCN20 overexpanded			PO-X	3:1	-55 °C to +125 °C	2.4 - 38.0		Black	2, 3	235

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Heat Shrinkable Tubing Overview

TYPE	Packaging Type	Variant	Material	Shrink Ratio	Operating Temperature	Dimension (mm)	Halogen-free	Colour	Specifi-cations	Page
HFT-A		**Thin-Wall**	PO-X	2:1	-55 °C to +135 °C	1.2 - 102.0		Black, Blue, Green-Yellow, Red, White, Yellow	3, 9, 10,11	236
TF21			PO-X	2:1	-55 °C to +135 °C	1.2 - 101.6		Black, Blue, Green-Yellow, Red, White, Yellow	2, 3, 5	239
TF24			PO-X	2:1	-55 °C to +135 °C	1.2 - 101.6	HF	Transparent	10,11	242
TF31			PO-X	3:1	-55 °C to +135 °C	1.5 - 40.0		Black, Blue, Green, Green-Yellow, Red, White, Yellow	2, 3	243
TF34			PO-X	3:1	-55 °C to +135 °C	1.5 - 40.0	HF	Transparent		246
TA32		**Thin-Wall Hot melt adhesive**	PO-X	3:1	-55 °C to +125 °C	3.0 - 40.0		Black	3, 9	247
TA42			PO-X	4:1	-55 °C to +125 °C	4.0 - 52.0		Black	9	248
TA46 Pre-cut tubing			PO-X	up to 4:1	-40 °C to +125 °C	5.75 - 18.30		Black		249
TA46 1.2m rods			PO-X	up to 4:1	-40 °C to +125 °C	5.75 - 52.00		Black		249
EPS-300			PO-X	3:1	-55 °C to +125 °C	3.0 - 40.0		Black		250
EPS-400			PO-X	4:1	-55 °C to +125 °C	4.0 - 32.0		Black		250
MA40		**Medium-Wall Hot melt adhesive**	PO-X	up to 4:1	-55 °C to +110 °C	8.0 - 55.0		Black	4	251
MA47			PO-X	up to 4:1	-55 °C to +110 °C	8.0 - 140.0	HF	Black		252
MU47		**Medium-Wall**	PO-X	up to 4:1	-55 °C to +110 °C	12.0 - 140.0	HF	Black		254
LVRK-L		**Shrink Cast**	PO-X	4:1	-55 °C to +125 °C	24.0 - 24.0		Black		255
RMS		**Shrink Cast Hot melt adhesive**	PO-X	up to 4.5:1	-40 °C to +120 °C	43.0 - 185.0	HF	Black		256

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Heat Shrinkable Tubing Overview

TYPE	Packaging Type	Variant	Material	Shrink Ratio	Operating Temperature	Dimension (mm)	Halogen-free	Colour	Specifi-cations	Page
LVK		**Shrink Cast Hot melt adhesive**	PO-X	up to 4:1	-55 °C to +110 °C		HF	Black		257
LVK-C with connectors			PO-X	up to 4:1	-55 °C to +110 °C		HF	Black		258
HA40		**Thick-Wall Hot melt adhesive**	PO-X	up to 4:1	-55 °C to +110 °C	9.0 - 92.0		Black	4	259
HA47			PO-X	up to 4:1	-55 °C to +110 °C	9.0 - 180.0	HF	Black		260
HA67			PO-X	6:1	-55 °C to +110 °C	19.0 - 119.4	HF	Black		261
TR27		**Thin-Wall**	PO-X	2:1	-40 °C to +105 °C, (+105 °C for 500 h)	3.2 - 50.8	HF	Black	12	262
TA37		**Thin-Wall Hot melt adhesive**	PO-X	3:1	-40 °C to +105 °C, (+105 °C for 500 h)	3.2 - 120.0	HF	Black	12	263
SA47-LA		**Standard-Wall Hot melt adhesive**	PO-X	4:1	-40 °C to +125 °C	5.75 - 52.0	HF	Black, Transparent		264
SE28		**Standard-Wall**	POA	2:1	-75 °C to +150 °C	3.2 - 102.0		Black	10,11	265
TK20		**Thin-Wall**	PVDF	2:1	-55 °C to +175 °C	1.2 - 50.8		Transparent	9, 10,11	266
Viton®-E		**Standard-Wall**	FPMX	2:1	-55 °C to +200 °C	3.2 - 50.8		Black	6, 10,11	267
TFE2		**Thin-Wall**	PTFE	2:1	-65 °C to +260 °C	0.86 - 11.94		Transparent		268
TFE4			PTFE	4:1	-65 °C to +260 °C	1.98 - 31.80		Transparent		269

SPECIFICATION

1	2	3	4	5	6
ASN	c UL us	CSA	DNV	JAR/FAR	LEA
7	**8**	**9**	**10**	**11**	**12**
MIL	NSA	UL	DVE	VG	EN 45545-2

Please refer to the Approvals Overview for further information, see page 579.

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Heat shrinkable tubing 3:1 in a kit

ShrinKit 321 Basic - 220 pcs. - black

The compact and handy kit belongs to the basic equipment for every assembler. Its ideal shrink ratio of 3:1 replaces many differently sized tubing.

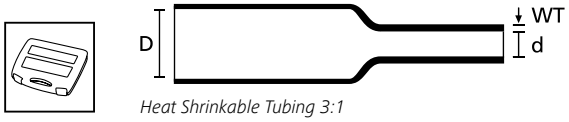
Features and benefits

- Compact and handy kit
- Black tubing
- Available in a wide size range of 1.5 mm to 18.0 mm
- 220 precut pieces in five sizes



ShrinKit 321 Basic - 220 pcs 3:1 heat shrink assortment.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+5%/-10% max.
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing
Insulation Class	B (VDE 0530)



Heat Shrinkable Tubing 3:1

RoHS

COMP.	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Colour	Content	Tools	Article-No.
1	1.5	0.5	35.0	0.45	Black (BK)	50 pcs.	30	380-03001
2	6.0	2.0	35.0	0.70	Black (BK)	30 pcs.		
3	3.0	1.0	35.0	0.55	Black (BK)	25 pcs.		
4	6.0	2.0	35.0	0.70	Black (BK)	15 pcs.		
5	6.0	2.0	35.0	0.70	Black (BK)	15 pcs.		
6	3.0	1.0	35.0	0.55	Black (BK)	25 pcs.		
7	1.5	0.5	35.0	0.45	Black (BK)	50 pcs.		
8	12.0	4.0	80.0	0.70	Black (BK)	5 pcs.		
8	18.0	6.0	80.0	0.80	Black (BK)	5 pcs.		

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

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Add items to your watchlist!
www.HT.click/49-216

Heat shrinkable tubing 3:1 in a kit

ShrinKit 321 Universal Basic - 177 pcs. - coloured

With ShrinKit 321 HellermannTyton has set a new standard in heat shrink tubing: ShrinKit tubings cover many applications with their ideal shrink ratio of 3:1.

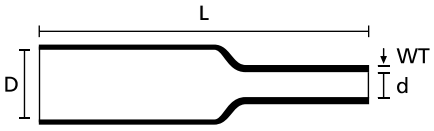
Features and benefits

- Compact and handy kit
- Black and coloured tubing
- Available in a wide size range of 3 mm to 18.0 mm
- 177 precut pieces in five sizes



ShrinKit 321 Universal Basic - 177 pcs 3:1 heat shrink assortment.





Heat Shrinkable Tubing 3:1

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+5%/-10% max.
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing
Insulation Class	B (VDE 0530)

RoHS

COMP.	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Colour	Content	Tools	Article-No.
1	12.0	4.0	35.0	0.70	Black (BK)	12 pcs.	30	380-03005
2	6.0	2.0	80.0	0.70	Blue (BU)	5 pcs.		
	6.0	2.0	80.0	0.70	Red (RD)	5 pcs.		
	6.0	2.0	80.0	0.70	White (WH)	5 pcs.		
	12.0	4.0	80.0	0.70	Black (BK)	2 pcs.		
	12.0	4.0	80.0	0.70	Blue (BU)	2 pcs.		
	12.0	4.0	80.0	0.70	Red (RD)	2 pcs.		
3	6.0	2.0	35.0	0.70	Blue (BU)	10 pcs.		
	6.0	2.0	35.0	0.70	Red (RD)	10 pcs.		
	6.0	2.0	35.0	0.70	White (WH)	10 pcs.		
4	9.0	3.0	35.0	0.70	Green-Yellow (GNYE)	15 pcs.		
5	9.0	3.0	35.0	0.70	Black (BK)	20 pcs.		
6	3.0	1.0	35.0	0.55	Black (BK)	10 pcs.		
	3.0	1.0	35.0	0.55	Blue (BU)	10 pcs.		
	3.0	1.0	35.0	0.55	Red (RD)	10 pcs.		
	3.0	1.0	35.0	0.55	White (WH)	10 pcs.		
7	6.0	2.0	35.0	0.70	Black (BK)	20 pcs.		
	6.0	2.0	35.0	0.70	Green-Yellow (GNYE)	10 pcs.		
8	18.0	6.0	160.0	0.80	Black (BK)	3 pcs.		
	18.0	6.0	160.0	0.80	Green-Yellow (GNYE)	3 pcs.		
	18.0	6.0	160.0	0.80	White (WH)	3 pcs.		

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-217

Heat shrinkable tubing 3:1 in a kit

ShrinKit 321 Universal - 975 pcs. - coloured

With ShrinKit 321 HellermannTyton has set a new standard in heat shrink tubing: ShrinKit tubings cover many applications wiith their ideal shrink ratio of 3:1.

Features and benefits

- Wide range of sizes, colours and lengths
- For insulation, bend protection and identification
- Case can be re-used for storing nails, screws, nuts, fish hooks, etc.
- Compartment sizes changeable by simply moving yellow space dividers
- 975 precut pieces

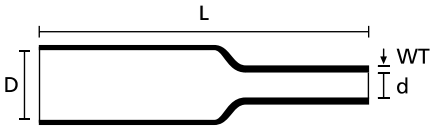


ShrinKit 321 Universal - 975 pcs 3:1 heat shrink assortment.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+5%/-10% max.
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing (except transparent)
Insulation Class	B (VDE 0530)

RoHS





Heat Shrinkable Tubing 3:1

COMP.	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Colour	Content	Tools	Article-No.
1	6.0	2.0	60.0	0.70	Black (BK)	50 pcs.	30	380-03002
2	12.0	4.0	100.0	0.70	Black (BK)	15 pcs.		
3	24.0	8.0	200.0	1.00	Black (BK)	10 pcs.		
4	6.0	2.0	60.0	0.70	Green-Yellow (GNYE)	50 pcs.		
5	3.0	1.0	50.0	0.55	Transparent (CL)	100 pcs.		
6	3.0	1.0	50.0	0.55	Black (BK)	100 pcs.		
7	12.0	4.0	100.0	0.70	Transparent (CL)	15 pcs.		
8	12.0	4.0	100.0	0.70	Red (RD)	15 pcs.		
9	3.0	1.0	50.0	0.55	Red (RD)	100 pcs.		
10	3.0	1.0	40.0	0.55	Blue (BU)	100 pcs.		
11	3.0	1.0	40.0	0.55	Green-Yellow (GNYE)	100 pcs.		
12	1.5	0.5	40.0	0.45	Black (BK)	75 pcs.		
	1.5	0.5	40.0	0.45	Green-Yellow (GNYE)	75 pcs.		
13	6.0	2.0	60.0	0.70	Blue (BU)	50 pcs.		
14	6.0	2.0	60.0	0.70	Red (RD)	50 pcs.		
15	6.0	2.0	60.0	0.70	Transparent (CL)	50 pcs.		
16	12.0	4.0	170.0	0.70	Green-Yellow (GNYE)	10 pcs.		
17	12.0	4.0	170.0	0.70	Blue (BU)	10 pcs.		

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-218

Heat shrinkable tubing 3:1 in a kit

ShrinKit 321-A Basic - with adhesive liner - 130 pcs. - BK/CL

The black tubing is mainly used for environmental sealing of splices and connectors. The transparent tubing is typically used for protection of cable markers.

Features and benefits

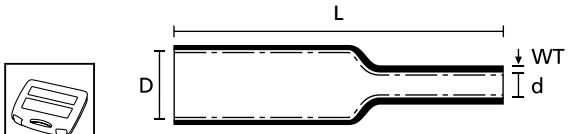
- Adhesive lined heat shrink tubing
- Inner wall melts when heated and is forced into gaps
- Adhesive forms seal against moisture as tubing cools
- Black tubes mainly for the protection of connectors and splices
- Clear tubing ideal for protection of printed label markers
- 130 precut pieces in three sizes.



ShrinKit 321-A Basic - 130 pcs 3:1 dual wall heat shrink assortment.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	+1%/-15% max.
Dielectric Strength	15 kV/mm
Flammability	self-extinguishing (except transparent)
Insulation Class	A (VDE 0530)

RoHS



Heat Shrinkable Tubing 3:1 with adhesive

COMP.	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Colour	Content	Tools	Article-No.
1	3.0	1.0	35.0	1.00	Black (BK)	25 pcs.	30	380-03004
2	12.0	4.0	35.0	1.70	Black (BK)	10 pcs.		
3	3.0	1.0	35.0	1.00	Transparent (CL)	25 pcs.		
4	6.0	2.0	35.0	1.10	Black (BK)	15 pcs.		
5	6.0	2.0	35.0	1.10	Transparent (CL)	15 pcs.		
6	6.0	2.0	35.0	1.10	Transparent (CL)	15 pcs.		
7	6.0	2.0	35.0	1.10	Black (BK)	15 pcs.		
8	12.0	4.0	80.0	1.70	Black (BK)	5 pcs.		
	12.0	4.0	80.0	1.70	Transparent (CL)	5 pcs.		

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-219

Heat shrinkable tubing 3:1 in a kit

ShrinKit 321-A - with adhesive liner - 210 pcs. - BK/CL

The black tubing is mainly used for environmental sealing of splices and connectors. The transparent tubing is typically used for protection of cable markers.

Features and benefits

- Adhesive lined heat shrink tubing
- Inner wall melts when heated and is forced into gaps
- Adhesive forms seal against moisture as tubing cools
- Black tubing mainly for the protection of connectors and splices
- Clear tubing ideal for protection of printed label markers
- Case can be re-used for storing nails, screws, nuts, fish hooks, etc.
- Compartment size changeable by simply moving yellow space dividers
- 210 precut pieces

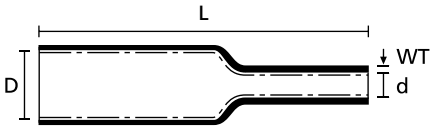


ShrinKit 321-A - 210 pcs 3:1 dual wall heat shrink assortment.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	+1%/-15% max.
Dielectric Strength	15 kV/mm
Flammability	self-extinguishing (except transparent)
Insulation Class	A (VDE 0530)

RoHS





Heat Shrinkable Tubing 3:1 with adhesive

COMP.	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Colour	Content	Tools	Article-No.
1	24.0	8.0	200.0	2.50	Black (BK)	5 pcs.	30	380-03003
2	12.0	4.0	65.0	1.70	Transparent (CL)	15 pcs.		
3	6.0	2.0	50.0	1.10	Black (BK)	20 pcs.		
	6.0	2.0	50.0	1.10	Transparent (CL)	20 pcs.		
4	12.0	4.0	65.0	1.70	Black (BK)	15 pcs.		
5	3.0	1.0	50.0	1.00	Black (BK)	50 pcs.		
	3.0	1.0	50.0	1.00	Transparent (CL)	50 pcs.		
6	6.0	2.0	35.0	1.10	Black (BK)	30 pcs.		
	6.0	2.0	35.0	1.10	Transparent (CL)	30 pcs.		
7	24.0	8.0	200.0	2.50	Transparent (CL)	5 pcs.		
8	12.0	4.0	100.0	1.70	Black (BK)	15 pcs.		
9	12.0	4.0	100.0	1.70	Black (BK)	15 pcs.		
10	12.0	4.0	100.0	1.70	Transparent (CL)	15 pcs.		
11	3.0	1.0	40.0	1.00	Black (BK)	50 pcs.		
	3.0	1.0	40.0	1.00	Transparent (CL)	50 pcs.		

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-220

Heat Shrinkable Tubing 2:1 on a Reel

HIS-PACK

HIS-PACK is used in general purpose of electrical insulation with a high level of protection against corrosion and mechanical abrasion.

Features and benefits

- Cross-linked Polyolefin, thin-wall and flexible
- Handy dispenser box including table showing application size range
- Available in black, red, blue, transparent and yellow/green
- 10 sizes from 1.2 mm to 25.4 mm
- Transparent color is halogen free



HIS-Pack.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing (except transparent), UL 224 VW-1 (except transparent)

RoHS

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
HIS-PACK-1.2/0.6	1.2	3/64 "	0.6	0.40	10 m	Black (BK)	30	300-30120
	1.2	3/64 "	0.6	0.40	10 m	Blue (BU)	30	300-30126
	1.2	3/64 "	0.6	0.40	10 m	Red (RD)	30	300-30122
	1.2	3/64 "	0.6	0.40	10 m	Transparent (CL)	30	300-30123
HIS-PACK-1.6/0.8	1.6	1/16 "	0.8	0.40	10 m	Black (BK)	30	300-30160
	1.6	1/16 "	0.8	0.40	10 m	Blue (BU)	30	300-30166
	1.6	1/16 "	0.8	0.40	10 m	Red (RD)	30	300-30162
	1.6	1/16 "	0.8	0.40	10 m	Transparent (CL)	30	300-30163
HIS-PACK-2.4/1.2	2.4	3/32 "	1.2	0.50	10 m	Black (BK)	30	300-30240
	2.4	3/32 "	1.2	0.50	10 m	Blue (BU)	30	300-30246
	2.4	3/32 "	1.2	0.50	10 m	Red (RD)	30	300-30242
	2.4	3/32 "	1.2	0.50	10 m	Transparent (CL)	30	300-30243
HIS-PACK-3.2/1.6	3.2	1/8 "	1.6	0.50	10 m	Black (BK)	30	300-30320
	3.2	1/8 "	1.6	0.50	10 m	Blue (BU)	30	300-30326
	3.2	1/8 "	1.6	0.50	10 m	Green-Yellow (GNYE)	30	300-30327
	3.2	1/8 "	1.6	0.50	10 m	Red (RD)	30	300-30322
	3.2	1/8 "	1.6	0.50	10 m	Transparent (CL)	30	300-30323

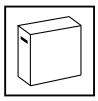
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-221

Heat Shrinkable Tubing 2:1 on a Reel

HIS-PACK





Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
HIS-PACK-4.8/2.4	4.8	3/16 "	2.4	0.50	10 m	Black (BK)	30	300-30480
	4.8	3/16 "	2.4	0.50	10 m	Blue (BU)	30	300-30486
	4.8	3/16 "	2.4	0.50	10 m	Green-Yellow (GNYE)	30	300-30487
	4.8	3/16 "	2.4	0.50	10 m	Red (RD)	30	300-30482
	4.8	3/16 "	2.4	0.50	10 m	Transparent (CL)	30	300-30483
HIS-PACK-6.4/3.2	6.4	1/4 "	3.2	0.60	5 m	Black (BK)	30	300-30640
	6.4	1/4 "	3.2	0.60	5 m	Blue (BU)	30	300-30646
	6.4	1/4 "	3.2	0.60	5 m	Green-Yellow (GNYE)	30	300-30647
	6.4	1/4 "	3.2	0.60	5 m	Red (RD)	30	300-30642
	6.4	1/4 "	3.2	0.60	5 m	Transparent (CL)	30	300-30643
HIS-PACK-9.5/4.7	9.5	3/8 "	4.7	0.60	5 m	Black (BK)	30	300-30950
	9.5	3/8 "	4.7	0.60	5 m	Blue (BU)	30	300-30956
	9.5	3/8 "	4.7	0.60	5 m	Green-Yellow (GNYE)	30	300-30957
	9.5	3/8 "	4.7	0.60	5 m	Red (RD)	30	300-30952
	9.5	3/8 "	4.7	0.60	5 m	Transparent (CL)	30	300-30953
HIS-PACK-12.7/6.4	12.7	1/2 "	6.4	0.60	5 m	Black (BK)	30	300-31270
	12.7	1/2 "	6.4	0.60	5 m	Blue (BU)	30	300-31276
	12.7	1/2 "	6.4	0.60	5 m	Green-Yellow (GNYE)	30	300-31277
	12.7	1/2 "	6.4	0.60	5 m	Red (RD)	30	300-31272
	12.7	1/2 "	6.4	0.60	5 m	Transparent (CL)	30	300-31273
HIS-PACK-19.1/9.5	19.1	3/4 "	9.5	0.80	5 m	Black (BK)	30	300-31900
	19.1	3/4 "	9.5	0.80	5 m	Blue (BU)	30	300-31906
	19.1	3/4 "	9.5	0.80	5 m	Green-Yellow (GNYE)	30	300-31907
	19.1	3/4 "	9.5	0.80	5 m	Red (RD)	30	300-31902
	19.1	3/4 "	9.5	0.80	5 m	Transparent (CL)	30	300-31903
HIS-PACK-25.4/12.7	25.4	1 "	12.7	0.90	5 m	Black (BK)	30	300-32540
	25.4	1 "	12.7	0.90	5 m	Blue (BU)	30	300-32546
	25.4	1 "	12.7	0.90	5 m	Green-Yellow (GNYE)	30	300-32547
	25.4	1 "	12.7	0.90	5 m	Red (RD)	30	300-32542
	25.4	1 "	12.7	0.90	5 m	Transparent (CL)	30	300-32543

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools
30 H6100
566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-222

Date of issue: September 2022

Heat Shrinkable Tubing 3:1 on a Reel

HIS-3

HIS-3 is used in general purpose of electrical insulation with a high level of protection against mechanical abrasion.

Features and benefits

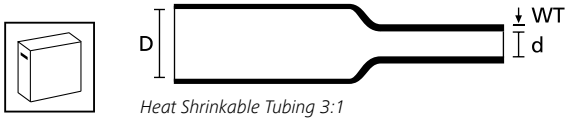
- Unlined tubing in handly dispenser packs
- High shrink ratio 3:1
- Fits highly variable cable dimensions
- Only 7 sizes for application diameter range of 1 mm up to 20 mm, reduce inventory by half
- Transparent color is halogen free



HIS-3 can fit highly variable substrate dimensions.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	32 kV/mm
Flammability	self-extinguishing (except transparent), UL 224 VW-1 (except transparent)
Insulation Class	B (VDE 0530)

RoHS



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Colour	Tools	Article-No.
HIS-3-1.5/0.5	1.6	0.5	0.45	10.0 m	10 m	Black (BK)	30	308-30150
	1.6	0.5	0.45	10.0 m	10 m	Blue (BU)	30	308-30156
	1.6	0.5	0.45	10.0 m	10 m	Red (RD)	30	308-30152
	1.6	0.5	0.45	10.0 m	10 m	Transparent (CL)	30	308-30153
HIS-3-3/1	3.2	1.0	0.55	10.0 m	10 m	Black (BK)	30	308-30300
	3.2	1.0	0.55	10.0 m	10 m	Blue (BU)	30	308-30306
	3.2	1.0	0.55	10.0 m	10 m	Green-Yellow (GNYE)	30	308-30307
	3.2	1.0	0.55	10.0 m	10 m	Red (RD)	30	308-30302
	3.2	1.0	0.55	10.0 m	10 m	Transparent (CL)	30	308-30303
HIS-3-6/2	6.4	2.0	0.65	5.0 m	5 m	Black (BK)	30	308-30600
	6.4	2.0	0.65	5.0 m	5 m	Blue (BU)	30	308-30606
	6.4	2.0	0.65	5.0 m	5 m	Green-Yellow (GNYE)	30	308-30607
	6.4	2.0	0.65	5.0 m	5 m	Red (RD)	30	308-30602
	6.4	2.0	0.65	5.0 m	5 m	Transparent (CL)	30	308-30603

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-223

Heat Shrinkable Tubing 3:1 on a Reel

HIS-3



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Colour	Tools	Article-No.
HIS-3-9/3	9.5	3.0	0.75	5.0 m	5 m	Black (BK)	30	308-30900
	9.5	3.0	0.75	5.0 m	5 m	Blue (BU)	30	308-30906
	9.5	3.0	0.75	5.0 m	5 m	Green-Yellow (GNYE)	30	308-30907
	9.5	3.0	0.75	5.0 m	5 m	Red (RD)	30	308-30902
	9.5	3.0	0.75	5.0 m	5 m	Transparent (CL)	30	308-30903
HIS-3-12/4	12.7	4.0	0.80	5.0 m	5 m	Black (BK)	30	308-31200
	12.7	4.0	0.80	5.0 m	5 m	Blue (BU)	30	308-31206
	12.7	4.0	0.80	5.0 m	5 m	Green-Yellow (GNYE)	30	308-31207
	12.7	4.0	0.80	5.0 m	5 m	Red (RD)	30	308-31202
	12.7	4.0	0.80	5.0 m	5 m	Transparent (CL)	30	308-31203
HIS-3-18/6	19.1	6.0	0.90	4.0 m	4 m	Black (BK)	30	308-31800
	19.1	6.0	0.90	4.0 m	4 m	Blue (BU)	30	308-31806
	19.1	6.0	0.90	4.0 m	4 m	Green-Yellow (GNYE)	30	308-31807
	19.1	6.0	0.90	4.0 m	4 m	Red (RD)	30	308-31802
	19.1	6.0	0.90	4.0 m	4 m	Transparent (CL)	30	308-31803
HIS-3-24/8	25.4	8.0	1.00	3.0 m	3 m	Black (BK)	30	308-32400
	25.4	8.0	1.00	3.0 m	3 m	Blue (BU)	30	308-32406
	25.4	8.0	1.00	3.0 m	3 m	Green-Yellow (GNYE)	30	308-32407
	25.4	8.0	1.00	3.0 m	3 m	Red (RD)	30	308-32402
	25.4	8.0	1.00	3.0 m	3 m	Transparent (CL)	30	308-32403

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-224

Date of issue: September 2022

Heat shrinkable tubing 3:1 on a reel

HIS-A - with adhesive liner

HIS-A forms a seal against moisture and protects against corrosion and mechanical abrasion.

Features and benefits

- Adhesive lined heat shrink tubing
- Inner wall melts when heated and is forced into gaps
- Adhesive forms seal against moisture as tubing cools
- Protects components
- Available in black and transparent
- 6 sizes for wide range of applications



HIS-A - with adhesive liner.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	-10% max.
Softening Point Adhesive	+85 °C
Dielectric Strength	24 kV/mm
Flammability	self-extinguishing (except transparent), UL 224 VW-1 (except transparent)
Insulation Class	A (VDE 0530)



Heat Shrinkable Tubing 3:1 with adhesive

RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
HIS-A-3/1	3.0	1.0	1.00	10 m	Black (BK)	30	308-10300
	3.0	1.0	1.00	10 m	Transparent (CL)	30	308-10303
HIS-A-6/2	6.0	2.0	1.00	5 m	Black (BK)	30	308-10600
	6.0	2.0	1.00	5 m	Transparent (CL)	30	308-10603
HIS-A-9/3	9.0	3.0	1.00	5 m	Black (BK)	30	308-10900
	9.0	3.0	1.00	5 m	Transparent (CL)	30	308-10903
HIS-A-12/4	12.0	4.0	1.65	5 m	Black (BK)	30	308-11200
	12.0	4.0	1.65	5 m	Transparent (CL)	30	308-11203
HIS-A-18/6	19.0	6.0	2.10	4 m	Black (BK)	30	308-11800
	19.0	6.0	2.10	4 m	Transparent (CL)	30	308-11803
HIS-A-24/8	24.0	8.0	2.35	3 m	Black (BK)	30	308-12400
	24.0	8.0	2.35	3 m	Transparent (CL)	30	308-12403

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-225

Heat Shrinkable Tubing 3:1 in blister bags

HIS-3 BAG

HIS-3 BAG tubings are useable for insulation and protection of cables and harnesses.

Features and benefits

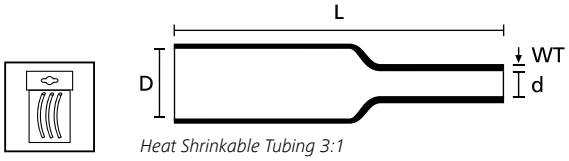
- Thin wall and flexible tubing made of cross-linked Polyolefin
- High shrink ratio 3:1
- Handy, small packaging with 10 pre-cut pieces of 200 mm
- Fits highly variable cable diameters



HIS-3 BAG available in seven colours and four sizes.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	32 kV/mm
Flammability	self-extinguishing (except transparent), UL 224 VW-1 (except transparent)

RoHS



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Pack Cont.	Colour	Tools	Article-No.
HIS-3-BAG-1.5/0.5	1.6	0.5	0.45	200.0	10 pcs.	Black (BK)	30	308-30151
	1.6	0.5	0.45	200.0	10 pcs.	Blue (BU)	30	308-30161
	1.6	0.5	0.45	200.0	10 pcs.	Brown (BN)	30	308-30163
	1.6	0.5	0.45	200.0	10 pcs.	Green-Yellow (GNYE)	30	308-30165
	1.6	0.5	0.45	200.0	10 pcs.	Grey (GY)	30	308-30162
	1.6	0.5	0.45	200.0	10 pcs.	Red (RD)	30	308-30160
	1.6	0.5	0.45	200.0	10 pcs.	Transparent (CL)	30	308-30164
HIS-3-BAG-3/1	3.2	1.0	0.55	200.0	10 pcs.	Black (BK)	30	308-30310
	3.2	1.0	0.55	200.0	10 pcs.	Blue (BU)	30	308-30312
	3.2	1.0	0.55	200.0	10 pcs.	Brown (BN)	30	308-30314
	3.2	1.0	0.55	200.0	10 pcs.	Green-Yellow (GNYE)	30	308-30316
	3.2	1.0	0.55	200.0	10 pcs.	Grey (GY)	30	308-30313
	3.2	1.0	0.55	200.0	10 pcs.	Red (RD)	30	308-30311
	3.2	1.0	0.55	200.0	10 pcs.	Transparent (CL)	30	308-30315

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

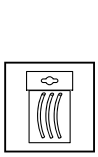
For product specific approvals and specifications please refer to the Appendix.

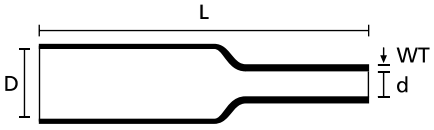
Add items to your watchlist!
www.HT.click/49-226

Date of issue: September 2022

Heat Shrinkable Tubing 3:1 in blister bags

HIS-3 BAG





Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Pack Cont.	Colour	Tools	Article-No.
HIS-3-BAG-6/2	6.4	2.0	0.65	200.0	10 pcs.	Black (BK)	30	308-30610
	6.4	2.0	0.65	200.0	10 pcs.	Blue (BU)	30	308-30612
	6.4	2.0	0.65	200.0	10 pcs.	Brown (BN)	30	308-30614
	6.4	2.0	0.65	200.0	10 pcs.	Grey (GY)	30	308-30613
	6.4	2.0	0.65	200.0	10 pcs.	Red (RD)	30	308-30611
	6.4	2.0	0.65	200.0	10 pcs.	Transparent (CL)	30	308-30615
	6.4	2.0	0.65	200.0	10 pcs.	Green-Yellow (GNYE)	30	308-30617
HIS-3-BAG-12/4	12.7	4.0	0.80	200.0	10 pcs.	Black (BK)	30	308-31210
	12.7	4.0	0.80	200.0	10 pcs.	Blue (BU)	30	308-31212
	12.7	4.0	0.80	200.0	10 pcs.	Brown (BN)	30	308-31214
	12.7	4.0	0.80	200.0	10 pcs.	Grey (GY)	30	308-31213
	12.7	4.0	0.80	200.0	10 pcs.	Red (RD)	30	308-31211
	12.7	4.0	0.80	200.0	10 pcs.	Transparent (CL)	30	308-31215
	12.7	4.0	0.80	200.0	10 pcs.	Green-Yellow (GNYE)	30	308-31217

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-227

Point of sale display for TREDUX

TREDUX-Display

With TREDUX HellermannTyton has set a new standard in heat shrink tubing. TREDUX offers a complete range of thin, medium and thick wall tubing cut into 1 meter length. All tubing are labled with an EAN barcode securely packed in display boxes. They can be removed individually for occasional use in smaller quantities. With the practical, valuable metal point of sale display is an optimal product presentation guaranteed. The following table is a proposed content for a TREDUX-Display.

Features and benefits

- Complete range of thin, medium- and thick wall heatshrink tubing in one display
- All tubings can be sold in single 1 meter length or entire carton
- Pick of single tube possible allowing job specific purchasing
- Optimised stock based on usage based display content
- Holder for end user brochures available attached to display



The TREDUX-Display.

TYPE	Content	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Tools	Article-No.
TREDUX-Display								
TREDUX-Display	-	-	-	-	1 pc.	Blue (BU)	30	319-30000
TREDUX - thin wall								
TREDUX-1.5/0.5	1	1.5	0.5	0.45	20 pcs.	Black (BK)	30	319-00150
TREDUX-3/1	1	3.0	1.0	0.55	20 pcs.	Green-Yellow (GNYE)	30	319-00307
TREDUX-6/2	1	6.0	2.0	0.65	15 pcs.	Green-Yellow (GNYE)	30	319-00607
TREDUX-12/4	1	12.0	4.0	0.80	10 pcs.	Green-Yellow (GNYE)	30	319-01207
TREDUX-24/8	1	24.0	8.0	1.20	5 pcs.	Black (BK)	30	319-02400
TREDUX-3/1	2	3.0	1.0	0.55	20 pcs.	Black (BK)	30	319-00300
TREDUX-6/2	2	6.0	2.0	0.65	15 pcs.	Black (BK)	30	319-00600
TREDUX-12/4	4	12.0	4.0	0.80	10 pcs.	Black (BK)	30	319-01200
TREDUX MA47 medium wall - with adhesive liner								
TREDUX-MA47-19/6	1	19.0	6.0	2.40	10 pcs.	Black (BK)	30;32	323-50190
TREDUX-MA47-40/12	1	40.0	12.0	2.50	4 pcs.	Black (BK)	30;32	323-50400
TREDUX-MA47-30/8	2	30.0	8.0	2.60	6 pcs.	Black (BK)	30;32	323-50300
TREDUX HA47 thick wall - with adhesive liner								
TREDUX-HA47-19/6	1	19.0	6.0	2.70	10 pcs.	Black (BK)	32	321-50190
TREDUX-HA47-33/8	1	33.0	8.0	3.20	5 pcs.	Black (BK)	32	321-50330
TREDUX-HA47-45/12	1	45.0	12.0	4.10	4 pcs.	Black (BK)	32	321-50450

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-228

Date of issue: September 2022

Heat shrinkable tubing up to 3:1 - 1 m lengths

TREDUX - thin wall

TREDUX thin wall heat shrink tubing is used for general electrical insulation and mechanical protection of cables and wires.

Features and benefits

- Thin wall, flexible, cross-linked polyolefin tubing
- 1m shrink tubing lengths delivered in handy display carton
- 9 sizes from 1.5 mm to 101.6 mm
- All tubings can be sold in single 1 meter length or entire box



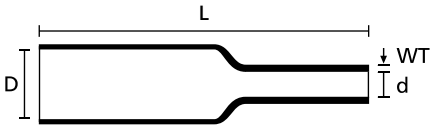
TREDUX shrinks a maximum of 3:1.

More colours on request. Please contact us.

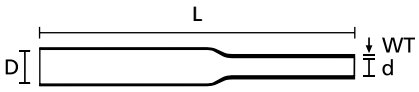
MATERIAL	Polyolefin, cross-linked (PO-X)	
Shrink Ratio	2:1	3:1
Operating Temperature	-55 °C to +135 °C	
Min. Shrink Temperature	+70 °C	
Longitudinal Change After Shrinkage	+/-5%	
Dielectric Strength	20 kV/mm	
Flammability	self-extinguishing, UL 224 VW-1	

RoHS





Heat Shrinkable Tubing 3:1



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Pack Cont.	Colour	Shrink Ratio	Tools	Article-No.
TREDUX-1.5/0.5	1.5	0.5	0.45	1.0 m	20 pcs.	Black (BK)	3:1	30	319-00150
	1.5	0.5	0.45	1.0 m	20 pcs.	Green-Yellow (GNYE)	3:1	30	319-00157
TREDUX-3/1	3.0	1.0	0.55	1.0 m	20 pcs.	Black (BK)	3:1	30	319-00300
	3.0	1.0	0.55	1.0 m	20 pcs.	Green-Yellow (GNYE)	3:1	30	319-00307
TREDUX-6/2	6.0	2.0	0.65	1.0 m	15 pcs.	Black (BK)	3:1	30	319-00600
	6.0	2.0	0.65	1.0 m	15 pcs.	Green-Yellow (GNYE)	3:1	30	319-00607
TREDUX-12/4	12.0	4.0	0.80	1.0 m	10 pcs.	Black (BK)	3:1	30	319-01200
	12.0	4.0	0.80	1.0 m	10 pcs.	Green-Yellow (GNYE)	3:1	30	319-01207
TREDUX-24/8	24.0	8.0	1.20	1.0 m	5 pcs.	Black (BK)	3:1	30	319-02400
	24.0	8.0	1.20	1.0 m	5 pcs.	Green-Yellow (GNYE)	3:1	30	319-02407
TREDUX-38.1/19.1	38.1	19.1	1.02	1.0 m	6 pcs.	Black (BK)	2:1	30	319-03800
	38.1	19.1	1.02	1.0 m	6 pcs.	Green-Yellow (GNYE)	2:1	30	319-03807
TREDUX-50.8/25.4	50.8	25.4	1.14	1.0 m	6 pcs.	Black (BK)	2:1	30	319-05100
TREDUX-76.2/38.1	76.2	38.1	1.27	1.0 m	3 pcs.	Black (BK)	2:1	30	319-07600
TREDUX-101.6/50.8	101.6	50.8	1.40	1.0 m	2 pcs.	Black (BK)	2:1	30	319-10200

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-229

Heat Shrinkable Tubing up to 4:1 - 1 m lengths

TREDUX MA47 medium wall - with adhesive liner

Suitable for insulation and protection of low voltage cable joints and terminations.

Features and benefits

- Medium wall heat shrink tubing
- Thermoplastic adhesive liner for protection from moisture and weathering
- 1 m shrink tubing lenghts delivered in handy display carton
- All tubes can be sold in single 1 meter lengths or entire box

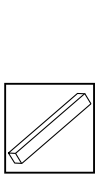


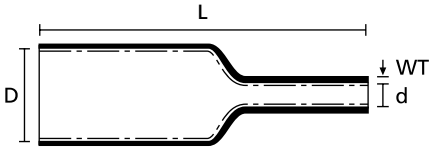
TREDUX MA47 in handy display carton.

www.HellermannTyton.co.uk/Tredux-cat22

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Softening Point Adhesive	+85 °C
Min. Shrink Temperature	+120 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	not flame-retardant
Insulation Class	A (VDE 0530)

HF ✓ RoHS ✓





Heat Shrinkable Tubing 4:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Pack Cont.	Colour	Tools	Article-No.
TREDUX-MA47-12/3	12.0	3.0	2.00	1.0 m	6 pcs.	Black (BK)	30;32	323-50120
TREDUX-MA47-19/6	19.0	6.0	2.40	1.0 m	10 pcs.	Black (BK)	30;32	323-50190
TREDUX-MA47-30/8	30.0	8.0	2.60	1.0 m	6 pcs.	Black (BK)	30;32	323-50300
TREDUX-MA47-40/12	40.0	12.0	2.50	1.0 m	4 pcs.	Black (BK)	30;32	323-50400
TREDUX-MA47-50/16	50.0	16.0	2.70	1.0 m	2 pcs.	Black (BK)	30;32	323-50500
TREDUX-MA47-63/19	63.0	19.0	2.80	1.0 m	2 pcs.	Black (BK)	30;32	323-50630
TREDUX-MA47-75/22	75.0	22.0	3.00	1.0 m	2 pcs.	Black (BK)	30;32	323-50750
TREDUX-MA47-95/30	95.0	30.0	3.00	1.0 m	1 pc.	Black (BK)	30;32	323-50950

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-230

Heat Shrinkable Tubing up to 3,5:1 - 1 m lengths

TREDUX HA47 thick wall - with adhesive liner

The toughness and weatherability make TREDUX thick wall tubing suitable for exposed applications and underground cable joints.

Features and benefits

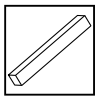
- Thick wall polyolefin adhesive-lined tubing
- 1 m shrink tubing lengths delivered in handy display carton
- All tubes can be sold in single 1 meter lengths or entire box

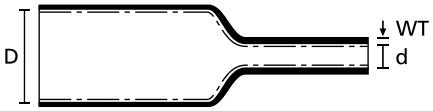


TREDUX HA47 - application below ground.

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm
Flammability	not flame-retardant

HF ✓ RoHS ✓





Heat Shrinkable Tubing 4:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Pack Cont.	Colour	Tools	Article-No.
TREDUX-HA47-19/6	19.0	6.0	2.70	1.0 m	10 pcs.	Black (BK)	32	321-50190
TREDUX-HA47-33/8	33.0	8.0	3.20	1.0 m	5 pcs.	Black (BK)	32	321-50330
TREDUX-HA47-45/12	45.0	12.0	4.10	1.0 m	4 pcs.	Black (BK)	32	321-50450
TREDUX-HA47-51/16	51.0	16.0	4.10	1.0 m	2 pcs.	Black (BK)	32	321-50510
TREDUX-HA47-68/22	68.0	22.0	4.10	1.0 m	1 pc.	Black (BK)	32	321-50680
TREDUX-HA47-85/25	85.0	25.4	4.30	1.0 m	1 pc.	Black (BK)	32	321-50850

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	32 CHG900
	565

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-231

Heat shrinkable tubing 2:1 - PVC

LVR

LVR can be used for cable joints, low voltage bus bars and batteries.

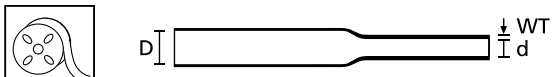
Features and benefits

- PVC heat shrinkable tubing
- Self-extinguishing
- Good chemical resistance and mechanical protection



LVR used for mechanical protection.

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC)
Shrink Ratio	2:1
Operating Temperature	-30 °C to +105 °C
Min. Shrink Temperature	+80 °C
Longitudinal Change After Shrinkage	+/-10% max
Dielectric Strength	22 kV/mm
Shelf Life	12 Months max.
Storage Temperature	+25 °C max.
Flammability	self-extinguishing, UL 224 VW-1



Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
LVR-2.4/1.2	2.4	1.2	0.40	250 m	Black (BK)	30	344-00240
LVR-3.2/1.6	3.2	1.6	0.40	250 m	Black (BK)	30	344-00320
LVR-4.8/2.4	4.8	2.4	0.50	250 m	Black (BK)	30	344-00480
LVR-6.4/3.2	6.4	3.2	0.60	250 m	Black (BK)	30	344-00640
LVR-9.5/4.8	9.5	4.8	0.60	125 m	Black (BK)	30	344-00950
LVR-12.7/6.4	12.7	6.4	0.70	75 m	Black (BK)	30	344-01270
LVR-19.1/9.5	19.0	9.5	0.80	100 m	Black (BK)	30	344-01900
LVR-25.4/12.7	25.4	12.7	1.00	100 m	Black (BK)	30	344-02540

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-232

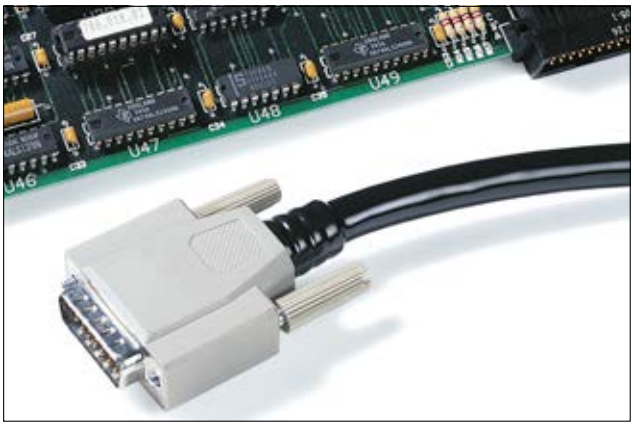
Low-Heat Shrinkable Tubing 2:1

TL27 - halogen free

The product has a low shrink temperature which offers very fast recovery. Application fields include covering of heat sensitive parts, mechanical protection and cosmetic covering.

Features and benefits

- Very low shrink temperature
- Fast shrinking
- Halogen free



TL27 – a very flexible tubing for automotive or applications where halogens cannot be accepted.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-70 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+5%/-15%
Dielectric Strength	23 kV/mm
Flammability	self-extinguishing

HF ✓ RoHS ✓





Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TL27-1.2/0.6	1.2	3/64 "	0.6	0.31	500 m	Black (BK)	30	302-20120
TL27-1.6/0.8	1.6	1/16 "	0.8	0.33	500 m	Black (BK)	30	302-20160
TL27-2.4/1.2	2.4	3/32 "	1.2	0.36	500 m	Black (BK)	30	302-30240
TL27-3.2/1.6	3.2	1/8 "	1.6	0.39	300 m	Black (BK)	30	302-30320
TL27-4.8/2.4	4.8	3/16 "	2.4	0.42	150 m	Black (BK)	30	302-30480
TL27-6.4/3.2	6.4	1/4 "	3.2	0.45	100 m	Black (BK)	30	302-30640
TL27-9.5/4.8	9.5	3/8 "	4.8	0.48	100 m	Black (BK)	30	302-30950
TL27-12.7/6.4	12.7	1/2 "	6.4	0.52	100 m	Black (BK)	30	302-21270
TL27-19.1/9.5	19.1	3/4 "	9.5	0.58	100 m	Black (BK)	30	302-31900
TL27-25.4/12.7	25.4	1 "	12.7	0.67	100 m	Black (BK)	30	302-32540
TL27-38.1/19.1	38.1	1-1/2 "	19.1	0.76	100 m	Black (BK)	30	302-23810
TL27-50.8/25.4	50.8	2 "	25.4	0.85	100 m	Black (BK)	30	302-25080

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-233

Low-Heat Shrinkable Tubing 2:1

TCN20 - self extinguishing

TCN20 is suitable for a wide range of applications such as electrical insulation, mechanical protection and cable bundling.

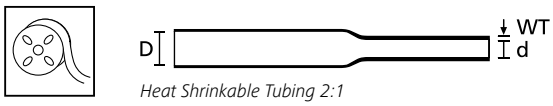
Features and benefits

- Thin wall general purpose polyolefin tubing
- Self extinguishing, UL224 VW-1, CSA
- Fast shrinking
- Low shrink temperature



Heat Shrink Tubing TCN20.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing, UL 224 VW-1



Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TCN20-1.2/0.6	1.2	3/64 "	0.6	0.30	300 m	Black (BK)	30	300-73010
TCN20-1.6/0.8	1.6	1/16 "	0.8	0.35	300 m	Black (BK)	30	300-73020
TCN20-2.4/1.2	2.4	3/32 "	1.2	0.45	300 m	Black (BK)	30	300-73030
TCN20-3.2/1.6	3.2	1/8 "	1.6	0.45	300 m	Black (BK)	30	300-73040
TCN20-4.8/2.4	4.8	3/16 "	2.4	0.50	300 m	Black (BK)	30	300-73050
TCN20-6.4/3.2	6.4	1/4 "	3.2	0.55	300 m	Black (BK)	30	300-73060
TCN20-9.5/4.8	9.5	3/8 "	4.8	0.55	100 m	Black (BK)	30	300-73070
TCN20-12.7/6.4	12.7	1/2 "	6.4	0.65	100 m	Black (BK)	30	300-73080
TCN20-19.1/9.5	19.1	3/4 "	9.5	0.80	60 m	Black (BK)	30	300-73090
TCN20-25.4/12.7	25.4	1 "	12.7	0.90	60 m	Black (BK)	30	300-73100
TCN20-38.1/19.1	38.1	1-1/2 "	19.1	1.02	30 m	Black (BK)	30	300-73110
TCN20-50.8/25.4	50.8	2 "	25.4	1.15	30 m	Black (BK)	30	300-73120

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-234

Heat shrinkable tubing 3:1 - Self extinguishing

TCN20 overexpanded

Mechanical and electrical protection applications for parts with high diameter variances. This fast shrinking tubing makes it suitable for high volume production.

Features and benefits

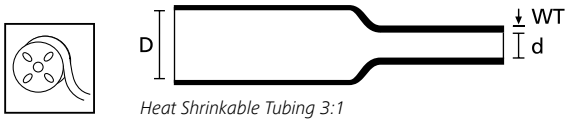
- Thin wall overexpanded polyolefin tubing
- Self extinguishing and low shrink temperature
- Highly flame-retardant, UL224 VW-1



Heat shrink tubing TCN20 overexpanded.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing

RoHS



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TCN20-2.4/0.8	2.4	0.8	0.40	300 m	Black (BK)	30	300-73130
TCN20-3.2/1.2	3.2	1.2	0.50	300 m	Black (BK)	30	300-73140
TCN20-4.8/1.6	4.8	1.6	0.50	300 m	Black (BK)	30	300-73150
TCN20-6.6/2.4	6.6	2.4	0.55	300 m	Black (BK)	30	300-73160
TCN20-9.5/3.2	9.5	3.2	0.65	100 m	Black (BK)	30	300-73170
TCN20-12.7/4.8	12.7	4.8	0.75	100 m	Black (BK)	30	300-73180
TCN20-19.0/6.4	19.0	6.4	0.75	60 m	Black (BK)	30	300-73190
TCN20-25.4/9.5	25.4	9.5	0.80	60 m	Black (BK)	30	300-73200
TCN20-38.0/12.7	38.0	12.7	0.95	30 m	Black (BK)	30	300-73210

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-235

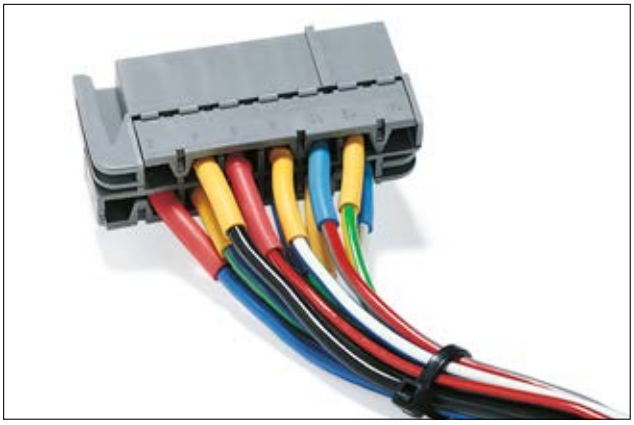
Heat Shrinkable Tubing 2:1 flexible and coloured

HFT-A - self extinguishing

This high performance thin wall tubing is used extensively for electrical and mechanical protection. It is also well proven for sleeve marking to identify wiring circuits.

Features and benefits

- Flexible heat shrink tubing
- Fast shrinking, easy handling, good mechanical strength
- Wide range of colours
- Internal diameters up to 101.6 mm (4 inches)
- UL-224 ,CSA listed and VG approved



HFT-A conforms to major standards used in all Defence industries.

Standard sizes available in colours black, red, blue, yellow, white and green-yellow.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+135 °C
Longitudinal Change After Shrinkage	-5% max.
Dielectric Strength	>21 kV/mm
Flammability	self-extinguishing, UL 224 VW-1





Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
HFT-A-1.2/0.6	1.2	3/64 "	0.6	0.40	400 m	Black (BK)	VG 95343 T05 A 001 A	30	305-01200
	1.2	3/64 "	0.6	0.40	400 m	Blue (BU)	VG 95343 T05 A 001 G	30	305-01206
	1.2	3/64 "	0.6	0.40	400 m	Red (RD)	VG 95343 T05 A 001 C	30	305-01202
	1.2	3/64 "	0.6	0.40	400 m	White (WH)	VG 95343 T05 A 001 L	30	305-01209
	1.2	3/64 "	0.6	0.40	400 m	Yellow (YE)	VG 95343 T05 A 001 E	30	305-01204
HFT-A-1.6/0.8	1.6	1/16 "	0.8	0.40	400 m	Black (BK)	VG 95343 T05 A 002 A	30	305-01600
	1.6	1/16 "	0.8	0.40	400 m	Blue (BU)	VG 95343 T05 A 002 G	30	305-01606
	1.6	1/16 "	0.8	0.40	400 m	Red (RD)	VG 95343 T05 A 002 C	30	305-01602
	1.6	1/16 "	0.8	0.40	400 m	White (WH)	VG 95343 T05 A 002 L	30	305-01609
	1.6	1/16 "	0.8	0.40	400 m	Yellow (YE)	VG 95343 T05 A 002 E	30	305-01604
HFT-A-2.4/1.2	2.4	3/32 "	1.2	0.50	100 m	Blue (BU)	VG 95343 T05 A 003 G	30	305-02406
	2.4	3/32 "	1.2	0.50	100 m	Red (RD)	VG 95343 T05 A 003 C	30	305-02402
	2.4	3/32 "	1.2	0.50	100 m	White (WH)	VG 95343 T05 A 003 L	30	305-02409
	2.4	3/32 "	1.2	0.50	100 m	Yellow (YE)	VG 95343 T05 A 003 E	30	305-02404
	2.4	3/32 "	1.2	0.50	400 m	Black (BK)	VG 95343 T05 A 003 A	30	305-02400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Heat Shrinkable Tubing 2:1 flexible and coloured

HFT-A - self extinguishing





Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
HFT-A-3.2/1.6	3.2	1/8 "	1.6	0.50	100 m	Blue (BU)	VG 95343 T05 A 004 G	30	305-03206
	3.2	1/8 "	1.6	0.50	100 m	Green-Yellow (GNYE)	VG 95343 T05 A 004 N	30	305-03245
	3.2	1/8 "	1.6	0.50	100 m	Red (RD)	VG 95343 T05 A 004 C	30	305-03202
	3.2	1/8 "	1.6	0.50	100 m	White (WH)	VG 95343 T05 A 004 L	30	305-03209
	3.2	1/8 "	1.6	0.50	100 m	Yellow (YE)	VG 95343 T05 A 004 E	30	305-03204
	3.2	1/8 "	1.6	0.50	400 m	Black (BK)	VG 95343 T05 A 004 A	30	305-03200
HFT-A-4.8/2.4	4.8	3/16 "	2.4	0.50	75 m	Blue (BU)	VG 95343 T05 A 005 G	30	305-04806
	4.8	3/16 "	2.4	0.50	75 m	Green-Yellow (GNYE)	VG 95343 T05 A 005 N	30	305-04845
	4.8	3/16 "	2.4	0.50	75 m	Red (RD)	VG 95343 T05 A 005 C	30	305-04802
	4.8	3/16 "	2.4	0.50	75 m	White (WH)	VG 95343 T05 A 005 L	30	305-04809
	4.8	3/16 "	2.4	0.50	75 m	Yellow (YE)	VG 95343 T05 A 005 E	30	305-04804
	4.8	3/16 "	2.4	0.50	300 m	Black (BK)	VG 95343 T05 A 005 A	30	305-04800
HFT-A-6.4/3.2	6.4	1/4 "	3.2	0.60	75 m	Blue (BU)	VG 95343 T05 A 006 G	30	305-06406
	6.4	1/4 "	3.2	0.60	75 m	Green-Yellow (GNYE)	VG 95343 T05 A 006 N	30	305-06445
	6.4	1/4 "	3.2	0.60	75 m	Red (RD)	VG 95343 T05 A 006 C	30	305-06402
	6.4	1/4 "	3.2	0.60	75 m	White (WH)	VG 95343 T05 A 006 L	30	305-06409
	6.4	1/4 "	3.2	0.60	75 m	Yellow (YE)	VG 95343 T05 A 006 E	30	305-06404
	6.4	1/4 "	3.2	0.60	300 m	Black (BK)	VG 95343 T05 A 006 A	30	305-06400
HFT-A-9.5/4.8	9.5	3/8 "	4.8	0.60	50 m	Blue (BU)	VG 95343 T05 A 007 G	30	305-09506
	9.5	3/8 "	4.8	0.60	50 m	Green-Yellow (GNYE)	VG 95343 T05 A 007 N	30	305-09545
	9.5	3/8 "	4.8	0.60	50 m	Red (RD)	VG 95343 T05 A 007 C	30	305-09502
	9.5	3/8 "	4.8	0.60	50 m	White (WH)	VG 95343 T05 A 007 L	30	305-09509
	9.5	3/8 "	4.8	0.60	50 m	Yellow (YE)	VG 95343 T05 A 007 E	30	305-09504
	9.5	3/8 "	4.8	0.60	150 m	Black (BK)	VG 95343 T05 A 007 A	30	305-09500
HFT-A-12.7/6.4	12.7	1/2 "	6.4	0.60	50 m	Blue (BU)	VG 95343 T05 A 008 G	30	305-12706
	12.7	1/2 "	6.4	0.60	50 m	Green-Yellow (GNYE)	VG 95343 T05 A 008 N	30	305-12745
	12.7	1/2 "	6.4	0.60	50 m	Red (RD)	VG 95343 T05 A 008 C	30	305-12702
	12.7	1/2 "	6.4	0.60	50 m	White (WH)	VG 95343 T05 A 008 L	30	305-12709
	12.7	1/2 "	6.4	0.60	50 m	Yellow (YE)	VG 95343 T05 A 008 E	30	305-12704
	12.7	1/2 "	6.4	0.60	100 m	Black (BK)	VG 95343 T05 A 008 A	30	305-12700
HFT-A-19.0/9.5	19.0	3/4 "	9.5	0.80	25 m	Blue (BU)	VG 95343 T05 A 009 G	30	305-19006
	19.0	3/4 "	9.5	0.80	25 m	Green-Yellow (GNYE)	VG 95343 T05 A 009 N	30	305-19045
	19.0	3/4 "	9.5	0.80	25 m	Red (RD)	VG 95343 T05 A 009 C	30	305-19002
	19.0	3/4 "	9.5	0.80	25 m	White (WH)	VG 95343 T05 A 009 L	30	305-19009
	19.0	3/4 "	9.5	0.80	25 m	Yellow (YE)	VG 95343 T05 A 009 E	30	305-19004
	19.0	3/4 "	9.5	0.80	50 m	Black (BK)	VG 95343 T05 A 009 A	30	305-19000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Heat Shrinkable Tubing 2:1 flexible and coloured

HFT-A - self extinguishing



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
HFT-A-25.4/12.7	25.4	1 "	12.7	0.90	25 m	Blue (BU)	VG 95343 T05 A 010 G	30	305-25406
	25.4	1 "	12.7	0.90	25 m	Green-Yellow (GNYE)	VG 95343 T05 A 010 N	30	305-25445
	25.4	1 "	12.7	0.90	25 m	Red (RD)	VG 95343 T05 A 010 C	30	305-25402
	25.4	1 "	12.7	0.90	25 m	White (WH)	VG 95343 T05 A 010 L	30	305-25409
	25.4	1 "	12.7	0.90	25 m	Yellow (YE)	VG 95343 T05 A 010 E	30	305-25404
	25.4	1 "	12.7	0.90	50 m	Black (BK)	VG 95343 T05 A 010 A	30	305-25400
HFT-A-38.0/19.0	38.0	1-1/2 "	19.0	1.00	50 m	Black (BK)	VG 95343 T05 A 011 A	30	305-38100
	38.0	1-1/2 "	19.0	1.00	50 m	Blue (BU)	VG 95343 T05 A 011 G	30	305-38106
	38.0	1-1/2 "	19.0	1.00	50 m	Green-Yellow (GNYE)	VG 95343 T05 A 011 N	30	305-38145
	38.0	1-1/2 "	19.0	1.00	50 m	Red (RD)	VG 95343 T05 A 011 C	30	305-38102
	38.0	1-1/2 "	19.0	1.00	50 m	White (WH)	VG 95343 T05 A 011 L	30	305-38109
	38.0	1-1/2 "	19.0	1.00	50 m	Yellow (YE)	VG 95343 T05 A 011 E	30	305-38104
HFT-A-50.8/25.4	51.0	2 "	25.4	1.10	35 m	Black (BK)	VG 95343 T05 A 012 A	30	305-50800
	51.0	2 "	25.4	1.10	35 m	Blue (BU)	VG 95343 T05 A 012 G	30	305-50806
	51.0	2 "	25.4	1.10	35 m	Red (RD)	VG 95343 T05 A 012 C	30	305-50802
	51.0	2 "	25.4	1.10	35 m	White (WH)	VG 95343 T05 A 012 L	30	305-50809
	51.0	2 "	25.4	1.10	35 m	Yellow (YE)	VG 95343 T05 A 012 E	30	305-50804
HFT-A-76.0/38.0	76.0	3 "	38.0	1.30	25 m	Black (BK)	VG 95343 T05 A 013 A	30	305-76200
	76.0	3 "	38.0	1.30	25 m	Blue (BU)	VG 95343 T05 A 013 G	30	305-76206
	76.0	3 "	38.0	1.30	25 m	Red (RD)	VG 95343 T05 A 013 C	30	305-76202
	76.0	3 "	38.0	1.30	25 m	White (WH)	VG 95343 T05 A 013 L	30	305-76209
	76.0	3 "	38.0	1.30	25 m	Yellow (YE)	VG 95343 T05 A 013 E	30	305-76204
HFT-A-101.6/50.8	102.0	4 "	51.0	1.40	25 m	Black (BK)	VG 95343 T05 A 014 A	30	305-91600
	102.0	4 "	51.0	1.40	25 m	Blue (BU)	VG 95343 T05 A 014 G	30	305-91606
	102.0	4 "	51.0	1.40	25 m	Red (RD)	VG 95343 T05 A 014 C	30	305-91602
	102.0	4 "	51.0	1.40	25 m	White (WH)	VG 95343 T05 A 014 L	30	305-91609
	102.0	4 "	51.0	1.40	25 m	Yellow (YE)	VG 95343 T05 A 014 E	30	305-91604

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-238

Date of issue: September 2022

Heat shrinkable tubing 2:1 - flexible and coloured

TF21

Due to it's versatility TF21 is suitable for a wide range of applications like electrical insulations, mechanical protection and marking.

Features and benefits

- Thin wall, flexible polyolefin tubing
- Fast shrinking and low shrink temperature
- Meets and exceeds a range of industrial standards
- Big variety of different colours and sizes
- Flame retarded and UL224 VW1 listed



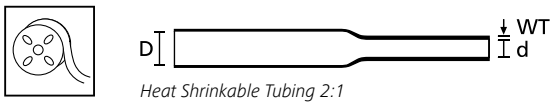
TF21 - available in a wide range of colours and sizes.

More colours on request.

Cut lengths available on request. Please contact us!

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	≥30 kV/mm
Flammability	self-extinguishing, UL 224 VW-1

RoHS



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF21-1.2/0.6	1.2	3/64 "	0.6	0.41	100 m	Blue (BU)	30	309-20126
	1.2	3/64 "	0.6	0.41	100 m	Red (RD)	30	309-20122
	1.2	3/64 "	0.6	0.41	100 m	White (WH)	30	309-20129
	1.2	3/64 "	0.6	0.41	100 m	Yellow (YE)	30	309-20124
	1.2	3/64 "	0.6	0.41	300 m	Black (BK)	30	309-10120
TF21-1.6/0.8	1.6	1/16 "	0.8	0.43	100 m	Blue (BU)	30	309-20166
	1.6	1/16 "	0.8	0.43	100 m	Red (RD)	30	309-20162
	1.6	1/16 "	0.8	0.43	100 m	White (WH)	30	309-20169
	1.6	1/16 "	0.8	0.43	100 m	Yellow (YE)	30	309-20164
	1.6	1/16 "	0.8	0.43	300 m	Black (BK)	30	309-10160
TF21-2.4/1.2	2.4	3/32 "	1.2	0.51	100 m	Blue (BU)	30	309-20246
	2.4	3/32 "	1.2	0.51	100 m	Green-Yellow (GNYE)	30	309-40247
	2.4	3/32 "	1.2	0.51	100 m	Red (RD)	30	309-20242
	2.4	3/32 "	1.2	0.51	100 m	White (WH)	30	309-20249
	2.4	3/32 "	1.2	0.51	100 m	Yellow (YE)	30	309-20244
	2.4	3/32 "	1.2	0.51	300 m	Black (BK)	30	309-10240

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

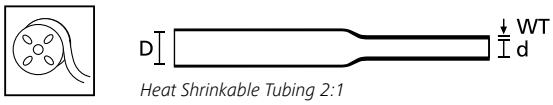
JAR/FAR

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-239

Heat shrinkable tubing 2:1 - flexible and coloured

TF21



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF21-3.2/1.6	3.2	1/8 "	1.6	0.51	100 m	Blue (BU)	30	309-20326
	3.2	1/8 "	1.6	0.51	100 m	Green-Yellow (GNYE)	30	309-40327
	3.2	1/8 "	1.6	0.51	100 m	Red (RD)	30	309-20322
	3.2	1/8 "	1.6	0.51	100 m	White (WH)	30	309-20329
	3.2	1/8 "	1.6	0.51	100 m	Yellow (YE)	30	309-20324
	3.2	1/8 "	1.6	0.51	300 m	Black (BK)	30	309-10320
TF21-4.8/2.4	4.8	3/16 "	2.4	0.51	60 m	Blue (BU)	30	309-50486
	4.8	3/16 "	2.4	0.51	60 m	Green-Yellow (GNYE)	30	309-50487
	4.8	3/16 "	2.4	0.51	60 m	Red (RD)	30	309-50482
	4.8	3/16 "	2.4	0.51	60 m	White (WH)	30	309-50489
	4.8	3/16 "	2.4	0.51	60 m	Yellow (YE)	30	309-50484
	4.8	3/16 "	2.4	0.51	300 m	Black (BK)	30	309-10480
TF21-6.4/3.2	6.4	1/4 "	3.2	0.64	60 m	Blue (BU)	30	309-50646
	6.4	1/4 "	3.2	0.64	60 m	Green-Yellow (GNYE)	30	309-50647
	6.4	1/4 "	3.2	0.64	60 m	Red (RD)	30	309-50642
	6.4	1/4 "	3.2	0.64	60 m	White (WH)	30	309-50649
	6.4	1/4 "	3.2	0.64	60 m	Yellow (YE)	30	309-50644
	6.4	1/4 "	3.2	0.64	300 m	Black (BK)	30	309-10640
TF21-9.5/4.8	9.5	3/8 "	4.8	0.64	50 m	Blue (BU)	30	309-20956
	9.5	3/8 "	4.8	0.64	50 m	Green-Yellow (GNYE)	30	309-50957
	9.5	3/8 "	4.8	0.64	50 m	Red (RD)	30	309-20952
	9.5	3/8 "	4.8	0.64	50 m	White (WH)	30	309-20959
	9.5	3/8 "	4.8	0.64	50 m	Yellow (YE)	30	309-20954
	9.5	3/8 "	4.8	0.64	150 m	Black (BK)	30	309-10950
TF21-12.7/6.4	12.7	1/2 "	6.4	0.64	50 m	Blue (BU)	30	309-21276
	12.7	1/2 "	6.4	0.64	50 m	Green-Yellow (GNYE)	30	309-41277
	12.7	1/2 "	6.4	0.64	50 m	Red (RD)	30	309-21272
	12.7	1/2 "	6.4	0.64	50 m	White (WH)	30	309-21279
	12.7	1/2 "	6.4	0.64	50 m	Yellow (YE)	30	309-21274
	12.7	1/2 "	6.4	0.64	100 m	Black (BK)	30	309-11270
TF21-19.1/9.5	19.1	3/4 "	9.5	0.76	50 m	Black (BK)	30	309-11900
	19.1	3/4 "	9.5	0.76	50 m	Blue (BU)	30	309-11906
	19.1	3/4 "	9.5	0.76	50 m	Green-Yellow (GNYE)	30	309-11907
	19.1	3/4 "	9.5	0.76	50 m	Red (RD)	30	309-11902
	19.1	3/4 "	9.5	0.76	50 m	White (WH)	30	309-11909
	19.1	3/4 "	9.5	0.76	50 m	Yellow (YE)	30	309-11904

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

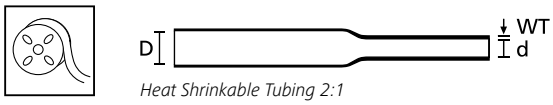
For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-240

Date of issue: September 2022

Heat shrinkable tubing 2:1 - flexible and coloured

TF21



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF21-25.4/12.7	25.4	1 "	12.7	0.89	50 m	Black (BK)	30	309-12540
	25.4	1 "	12.7	0.89	50 m	Blue (BU)	30	309-12546
	25.4	1 "	12.7	0.89	50 m	Green-Yellow (GNYE)	30	309-12547
	25.4	1 "	12.7	0.89	50 m	Red (RD)	30	309-12542
	25.4	1 "	12.7	0.89	50 m	White (WH)	30	309-12549
	25.4	1 "	12.7	0.89	50 m	Yellow (YE)	30	309-12544
TF21-38.0/19.0	38.1	1-1/2 "	19.1	1.02	60 m	Black (BK)	30	309-13810
	38.1	1-1/2 "	19.1	1.02	60 m	Blue (BU)	30	309-13816
	38.1	1-1/2 "	19.1	1.02	60 m	Green-Yellow (GNYE)	30	309-13817
	38.1	1-1/2 "	19.1	1.02	60 m	Red (RD)	30	309-13812
	38.1	1-1/2 "	19.1	1.02	60 m	White (WH)	30	309-13819
	38.1	1-1/2 "	19.1	1.02	60 m	Yellow (YE)	30	309-13814
TF21-50.8/25.4	50.8	2 "	25.4	1.14	60 m	Black (BK)	30	309-15080
	50.8	2 "	25.4	1.14	60 m	Blue (BU)	30	309-15086
	50.8	2 "	25.4	1.14	60 m	Green-Yellow (GNYE)	30	309-15087
	50.8	2 "	25.4	1.14	60 m	Red (RD)	30	309-15082
	50.8	2 "	25.4	1.14	60 m	White (WH)	30	309-15089
	50.8	2 "	25.4	1.14	60 m	Yellow (YE)	30	309-15084
TF21-76.0/38.0	76.2	3 "	38.1	1.27	30 m	Black (BK)	30	309-17600
	76.2	3 "	38.1	1.27	30 m	Blue (BU)	30	309-17606
	76.2	3 "	38.1	1.27	30 m	Red (RD)	30	309-17602
	76.2	3 "	38.1	1.27	30 m	White (WH)	30	309-17609
	76.2	3 "	38.1	1.27	30 m	Yellow (YE)	30	309-17604
TF21-101.6/50.8	101.6	4 "	50.8	1.40	15 m	Black (BK)	30	309-11020
	101.6	4 "	50.8	1.40	15 m	Blue (BU)	30	309-11026
	101.6	4 "	50.8	1.40	15 m	Red (RD)	30	309-11022
	101.6	4 "	50.8	1.40	15 m	White (WH)	30	309-11029
	101.6	4 "	50.8	1.40	15 m	Yellow (YE)	30	309-11024

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-241

Heat Shrinkable Tubing 2:1 flexible and transparent

TF24

Protects wire and cable markers subject to abuse, while permitting inspectability of each item covered. Protects electronic components while permitting their identification and inspection.

Features and benefits

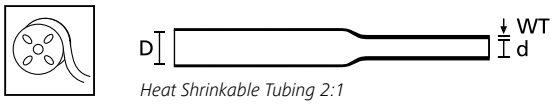
- Transparent, flexible polyolefin tubing
- Protects identification marking perfect
- Halogen free
- Good mechanical and chemical resistance
- VG and additional industrial approvals



TF24 transparent tubing with 2:1 shrink ratio.

Cut lengths available on request. Please contact us!

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	+/-5% max.
Dielectric Strength	30 kV/mm
Flammability	not flame-retardant



Heat Shrinkable Tubing 2:1

HF ✓ RoHS ✓

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
TF24-1.2/0.6	1.2	3/64 "	0.6	0.41	100 m	Transparent (CL)	VG 95343 T05 B 001 M	30	309-40123
TF24-1.6/0.8	1.6	1/16 "	0.8	0.43	100 m	Transparent (CL)	VG 95343 T05 B 002 M	30	309-40163
TF24-2.4/1.2	2.4	3/32 "	1.2	0.51	100 m	Transparent (CL)	VG 95343 T05 B 003 M	30	309-40243
TF24-3.2/1.6	3.2	1/8 "	1.6	0.51	100 m	Transparent (CL)	VG 95343 T05 B 004 M	30	309-40323
TF24-4.8/2.4	4.8	3/16 "	2.4	0.51	60 m	Transparent (CL)	VG 95343 T05 B 005 M	30	309-50483
TF24-6.4/3.2	6.4	1/4 "	3.2	0.64	60 m	Transparent (CL)	VG 95343 T05 B 006 M	30	309-50643
TF24-9.5/4.8	9.5	3/8 "	4.8	0.64	50 m	Transparent (CL)	VG 95343 T05 B 007 M	30	309-40953
TF24-12.7/6.4	12.7	1/2 "	6.4	0.64	50 m	Transparent (CL)	VG 95343 T05 B 008 M	30	309-41273
TF24-19.1/9.5	19.1	3/4 "	9.5	0.76	50 m	Transparent (CL)	VG 95343 T05 B 009 M	30	309-31903
TF24-25.4/12.7	25.4	1 "	12.7	0.89	50 m	Transparent (CL)	VG 95343 T05 B 010 M	30	309-32543
TF24-38.1/19.1	38.1	1-1/2 "	19.1	1.02	60 m	Transparent (CL)	VG 95343 T05 B 011 M	30	309-33813
TF24-50.8/25.4	50.8	2 "	25.4	1.14	60 m	Transparent (CL)	VG 95343 T05 B 012 M	30	309-35083
TF24-76.2/38.1	76.2	3 "	38.1	1.27	30 m	Transparent (CL)	VG 95343 T05 B 013 M	30	309-37603
TF24-101.6/50.8	101.6	4 "	50.8	1.40	15 m	Transparent (CL)	VG 95343 T05 B 014 M	30	309-31023

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
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Heat shrinkable tubing 3:1 - flexible and coloured

TF31

If higher fire protection is a requirement TF31 heat shrinkable tubing is a good choice. It is used for protection, insulation and identification wires, cables and light duty harnesses.

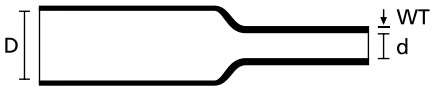
Features and benefits

- Thin wall, very flexible polyolefin tubing
- A small range of sizes cover a wide range of diameters allowing reduced inventory
- Fast shrinking and low shrink temperature
- Flame-retardant, UL224 VW1 listed

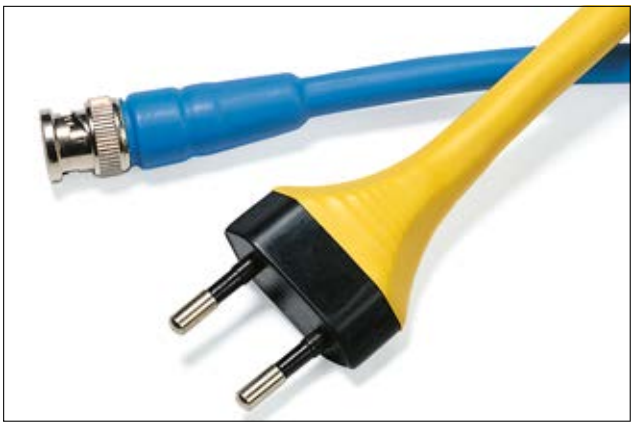
www.HellermannTyton.co.uk/TF31-cat22

Cut lengths available on request. Please contact us!





Heat Shrinkable Tubing 3:1



TF31 with 3:1 shrink ratio allowing for a wider range of application.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Longitudinal Change After Shrinkage	+5%/-15%
Dielectric Strength	≥30 kV/mm
Flammability	self-extinguishing, UL 224 VW-1

RoHS

More colours on request.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF31-1.5/0.5	1.5	0.5	0.50	30 m	Black (BK)	30	333-30150
	1.5	0.5	0.50	30 m	Blue (BU)	30	333-30156
	1.5	0.5	0.50	30 m	Green (GN)	30	333-30155
	1.5	0.5	0.50	30 m	Green-Yellow (GNYE)	30	333-30157
	1.5	0.5	0.50	30 m	Red (RD)	30	333-30152
	1.5	0.5	0.50	30 m	White (WH)	30	333-30159
	1.5	0.5	0.50	30 m	Yellow (YE)	30	333-30154
	1.5	0.5	0.50	300 m	Black (BK)	30	333-20150
TF31-3/1	3.0	1.0	0.60	30 m	Black (BK)	30	333-30300
	3.0	1.0	0.60	30 m	Blue (BU)	30	333-30306
	3.0	1.0	0.60	30 m	Green (GN)	30	333-30305
	3.0	1.0	0.60	30 m	Green-Yellow (GNYE)	30	333-30307
	3.0	1.0	0.60	30 m	Red (RD)	30	333-30302
	3.0	1.0	0.60	30 m	White (WH)	30	333-30309
	3.0	1.0	0.60	30 m	Yellow (YE)	30	333-30304
	3.0	1.0	0.60	150 m	Black (BK)	30	333-40300

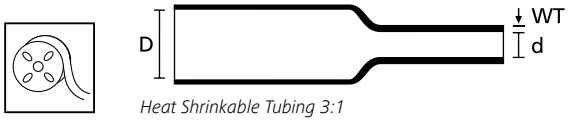
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-243

Heat shrinkable tubing 3:1 - flexible and coloured

TF31



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF31-6/2	6.0	2.0	0.70	30 m	Black (BK)	30	333-30600
	6.0	2.0	0.70	30 m	Blue (BU)	30	333-30606
	6.0	2.0	0.70	30 m	Green (GN)	30	333-30605
	6.0	2.0	0.70	30 m	Green-Yellow (GNYE)	30	333-30607
	6.0	2.0	0.70	30 m	Red (RD)	30	333-30602
	6.0	2.0	0.70	30 m	White (WH)	30	333-30609
	6.0	2.0	0.70	30 m	Yellow (YE)	30	333-30604
	6.0	2.0	0.70	150 m	Black (BK)	30	333-40600
TF31-9/3	9.0	3.0	0.80	30 m	Black (BK)	30	333-30900
	9.0	3.0	0.80	30 m	Blue (BU)	30	333-30906
	9.0	3.0	0.80	30 m	Green (GN)	30	333-30905
	9.0	3.0	0.80	30 m	Green-Yellow (GNYE)	30	333-30907
	9.0	3.0	0.80	30 m	Red (RD)	30	333-30902
	9.0	3.0	0.80	30 m	White (WH)	30	333-30909
	9.0	3.0	0.80	30 m	Yellow (YE)	30	333-30904
	9.0	3.0	0.80	150 m	Black (BK)	30	333-20900
TF31-12/4	12.0	4.0	0.85	30 m	Black (BK)	30	333-31200
	12.0	4.0	0.85	30 m	Blue (BU)	30	333-31206
	12.0	4.0	0.85	30 m	Green (GN)	30	333-31205
	12.0	4.0	0.85	30 m	Green-Yellow (GNYE)	30	333-31207
	12.0	4.0	0.85	30 m	Red (RD)	30	333-31202
	12.0	4.0	0.85	30 m	White (WH)	30	333-31209
	12.0	4.0	0.85	30 m	Yellow (YE)	30	333-31204
	12.0	4.0	0.85	100 m	Black (BK)	30	333-21200
TF31-18/6	18.0	6.0	1.00	30 m	Black (BK)	30	333-31800
	18.0	6.0	1.00	30 m	Blue (BU)	30	333-31806
	18.0	6.0	1.00	30 m	Green (GN)	30	333-31805
	18.0	6.0	1.00	30 m	Green-Yellow (GNYE)	30	333-31807
	18.0	6.0	1.00	30 m	Red (RD)	30	333-31802
	18.0	6.0	1.00	30 m	White (WH)	30	333-31809
	18.0	6.0	1.00	30 m	Yellow (YE)	30	333-31804
	18.0	6.0	1.00	60 m	Black (BK)	30	333-41800

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-244

Heat shrinkable tubing 3:1 - flexible and coloured

TF31





Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF31-24/8	24.0	8.0	1.20	30 m	Black (BK)	30	333-32400
	24.0	8.0	1.20	30 m	Blue (BU)	30	333-32406
	24.0	8.0	1.20	30 m	Green (GN)	30	333-32405
	24.0	8.0	1.20	30 m	Green-Yellow (GNYE)	30	333-32407
	24.0	8.0	1.20	30 m	Red (RD)	30	333-32402
	24.0	8.0	1.20	30 m	White (WH)	30	333-32409
	24.0	8.0	1.20	30 m	Yellow (YE)	30	333-32404
	24.0	8.0	1.20	60 m	Black (BK)	30	333-42400
TF31-40/13	40.0	13.0	1.25	30 m	Black (BK)	30	333-34000
	40.0	13.0	1.25	30 m	Blue (BU)	30	333-34006
	40.0	13.0	1.25	30 m	Green (GN)	30	333-34005
	40.0	13.0	1.25	30 m	Green-Yellow (GNYE)	30	333-34007
	40.0	13.0	1.25	30 m	Red (RD)	30	333-34002
	40.0	13.0	1.25	30 m	White (WH)	30	333-34009
	40.0	13.0	1.25	30 m	Yellow (YE)	30	333-34004
	40.0	13.0	1.25	60 m	Black (BK)	30	333-24000

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools
30 H6100
566

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-245

Heat shrinkable tubing 3:1 - flexible and transparent

TF34

Protects wire and cable markers subject to abuse, while permitting inspectability of each item covered. Protects electronic components while permitting their identification and inspection.

Features and benefits

- Transparent, flexible polyolefin tubing
- Protects identification marking perfectly
- Fewer sizes required to cover a wide range of diameters allowing reduced inventory
- Halogen free

www.HellermannTyton.co.uk/TF34-cat22



TF34 transparent tubing with 3:1 shrink ratio allowing for a wider range of application.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	-5% max.
Dielectric Strength	46 kV/mm
Flammability	not flame-retardant

HF ✓ RoHS ✓

Cut lengths available on request. Please contact us!



Heat Shrinkable Tubing 3:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TF34-1.5/0.5	1.5	0.5	0.50	30 m	Transparent (CL)	30	333-30153
TF34-3/1	3.0	1.0	0.50	30 m	Transparent (CL)	30	333-30303
TF34-6/2	6.0	2.0	0.70	30 m	Transparent (CL)	30	333-30603
TF34-9/3	9.0	3.0	0.80	30 m	Transparent (CL)	30	333-30903
TF34-12/4	12.0	4.0	0.85	30 m	Transparent (CL)	30	333-31203
TF34-18/6	18.0	6.0	1.00	30 m	Transparent (CL)	30	333-31803
TF34-24/8	24.0	8.0	1.20	30 m	Transparent (CL)	30	333-32403
TF34-40/13	40.0	13.0	1.25	30 m	Transparent (CL)	30	333-34003

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-246

Heat shrinkable tubing adhesive lined - 1.2 m lengths

TA32/TA42 is designed for environmental sealing and electrical insulation of wire splices, terminations and components.

Features and benefits

- Thin wall adhesive-lined heat shrink tubing
- Highly flame retardant
- Outer wall conforms to UL224
- High shrink ratio



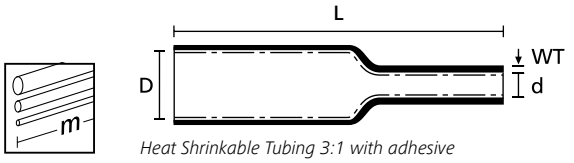
TA32 and TA42 are UL224 listed adhesive lined tubing. Available in 3:1 and 4:1 shrink ratio.

Cut lengths available on request. Please contact us!

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+110 °C
Softening Point Adhesive	+110 °C
Longitudinal Change After Shrinkage	-15% max.
Dielectric Strength	25 kV/mm
Flammability	flame-retardant, UL 224

RoHS

TA32 - thin wall, 3:1 shrink ratio



Heat Shrinkable Tubing 3:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Shrink Ratio	Tools	Article-No.
TA32-3/1	3.0	1.0	0.95	1.2 m	Black (BK)	3:1	30	318-30300
TA32-4.5/1.5	4.8	1.5	1.10	1.2 m	Black (BK)	3:1	30	318-30450
TA32-6/2	6.4	2.0	1.20	1.2 m	Black (BK)	3:1	30	318-30600
TA32-9/3	9.5	3.0	1.30	1.2 m	Black (BK)	3:1	30	318-30900
TA32-12/4	12.7	4.0	1.40	1.2 m	Black (BK)	3:1	30	318-31200
TA32-19/6	19.0	6.0	1.80	1.2 m	Black (BK)	3:1	30	318-31900
TA32-24/8	24.0	8.0	2.50	1.2 m	Black (BK)	3:1	30	318-32400
TA32-40/13	40.0	13.0	2.50	1.2 m	Black (BK)	3:1	30	318-34000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

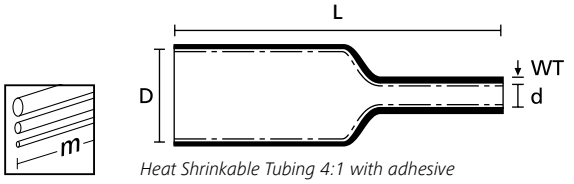
For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-247

Heat shrinkable tubing adhesive lined - 1.2 m lengths

TA42 - thin wall, 4:1 shrink ratio



Heat Shrinkable Tubing 4:1 with adhesive



TA32 and TA42 are UL224 listed adhesive lined tubing. Available in 3:1 and 4:1 shrink ratio.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Shrink Ratio	Tools	Article-No.
TA42-4/1	4.0	1.0	1.00	1.2 m	Black (BK)	4:1	30	318-40400
TA42-8/2	8.0	2.0	1.20	1.2 m	Black (BK)	4:1	30	318-40800
TA42-12/3	12.0	3.0	1.40	1.2 m	Black (BK)	4:1	30	318-41200
TA42-16/4	16.0	4.0	1.80	1.2 m	Black (BK)	4:1	30	318-41600
TA42-24/6	24.0	6.0	2.20	1.2 m	Black (BK)	4:1	30	318-42400
TA42-32/8	32.0	8.0	2.50	1.2 m	Black (BK)	4:1	30	318-43200
TA42-52/13	52.0	13.0	2.55	1.2 m	Black (BK)	4:1	30	318-45200

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-248

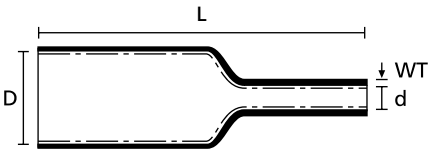
Date of issue: September 2022

Heat shrinkable tubing adhesive lined

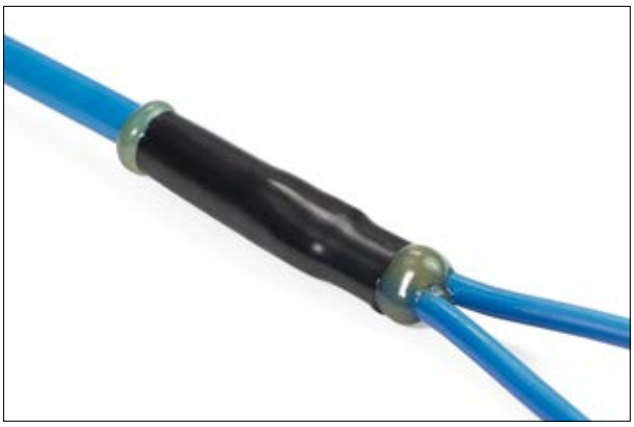
TA46 heat shrink tubing is designed for insulating, sealing and protecting inline wire splices, wire bundles, terminals and connectors. The adhesive lined heat shrink tubing provides moisture proof environmental sealing of electrical splices in wire harnesses especially complying to automotive industry requirements. Besides electrical insulation, the self-extinguishing polyolefin jacket provides mechanical protection against abrasion, cutting and bending. The highly viscous EVA based adhesive once heated flexibly flows between wires or conductors. The combination of excellent adhesive bonding properties and strong jacket shrink performance provides excellent bonding to cable jackets and environmental sealing of complex profiles.

Features and benefits

- High 4:1 shrink ratio to cover various diameters and profiles
- Semi-rigid jacket offers mechanical protection against abrasion, cutting and bending
- EVA based adhesive for efficient environmental sealing
- Insulating, protecting and sealing in one process step
- Suitable for processing in automated heat shrink application equipment
- Continuous operating temperature -40 °C to +125 °C
- Excellent strain relief due to combination of tough outer jacket and highly efficient adhesive



Heat Shrinkable Tubing 4:1 with adhesive

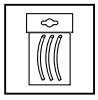


TA46 - Environmental sealing, insulating and protecting inline wire splices.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-40 °C to +125 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	>10 kV/mm
Flammability	self-extinguishing

RoHS

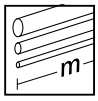
TA46 - Pre-cut tubing



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
TA46-5.75/1.25-50mm	5.75	1.25	1.30	50.0	Black (BK)	30	318-00001
TA46-7.5/1.65-50mm	7.50	1.65	1.50	50.0	Black (BK)	30	318-00011
TA46-11.0/2.4-65mm	11.00	2.40	1.90	65.0	Black (BK)	30	318-00021
TA46-18.3/4.35-75mm	18.30	4.35	2.40	75.0	Black (BK)	30	318-00031

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

TA46 - 1.2m length



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
TA46-5.75/1.25	5.75	1.25	1.30	1.2 m	Black (BK)	30	318-00000
TA46-7.5/1.65	7.50	1.65	1.50	1.2 m	Black (BK)	30	318-00010
TA46-11.0/2.4	11.00	2.40	1.90	1.2 m	Black (BK)	30	318-00020
TA46-18.3/4.35	18.30	4.35	2.40	1.2 m	Black (BK)	30	318-00030
TA46-24/6	24.00	6.00	-	1.2 m	Black (BK)	30	318-00040
TA46-32/8	32.00	8.00	-	1.2 m	Black (BK)	30	318-00050
TA46-52/13	52.00	13.00	-	1.2 m	Black (BK)	30	318-00060

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-249

Heat shrinkable tubing adhesive lined

Heat shrinkable tubing EPS seals and protects a wide variety of electrical applications like back end connector sealing, connector-to-cable transitions and splices.

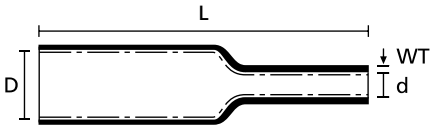
Features and benefits

- Flexible, thin wall polyolefin heat shrink tubing
- With coextruded hot melt adhesive inner wall
- Protects against moisture
- Provides an environmental sealing of complex parts

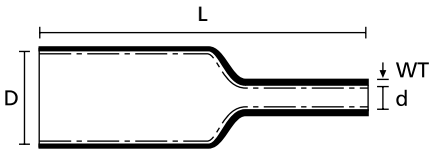
Cut lengths available on request. Please contact us!



PTA300 and PTA400 offer high shrink ratios and protection against humidity.



Heat Shrinkable Tubing 3:1 with adhesive



Heat Shrinkable Tubing 4:1 with adhesive

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+120 °C
Longitudinal Change After Shrinkage	-5% max.
Softening Point Adhesive	+90 °C
Dielectric Strength	45 kV/mm
Flammability	self-extinguishing

RoHS

EPS-300 - 3:1 shrink ratio

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Shrink Ratio	Tools	Article-No.
EPS-300-3/1	3.0	1.0	1.00	400 m	Black (BK)	3:1	30	340-03010
EPS-300-6/2	6.0	2.0	1.00	300 m	Black (BK)	3:1	30	340-06020
EPS-300-9/3	9.0	3.0	1.40	150 m	Black (BK)	3:1	30	340-09030
EPS-300-12/4	12.0	4.0	1.80	100 m	Black (BK)	3:1	30	340-12040
EPS-300-19/6	19.0	6.0	2.20	50 m	Black (BK)	3:1	30	340-19060
EPS-300-24/8	24.0	8.0	2.50	25 m	Black (BK)	3:1	30	340-24080
EPS-300-40/13	40.0	13.0	2.50	25 m	Black (BK)	3:1	30	340-40130

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

EPS-400 - 4:1 shrink ratio

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Shrink Ratio	Tools	Article-No.
EPS-400-4/1	4.0	1.0	1.00	300 m	Black (BK)	4:1	30	341-04010
EPS-400-8/2	8.0	2.0	1.00	150 m	Black (BK)	4:1	30	341-08020
EPS-400-12/3	12.0	3.0	1.40	100 m	Black (BK)	4:1	30	341-12030
EPS-400-16/4	16.0	4.0	1.80	100 m	Black (BK)	4:1	30	341-16040
EPS-400-24/6	24.0	6.0	2.20	50 m	Black (BK)	4:1	30	341-24060
EPS-400-32/8	32.0	8.0	2.50	25 m	Black (BK)	4:1	30	341-32080

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-250

Heat shrinkable tubing 4:1 - Flame retardant

MA40 - medium wall adhesive lined

Designed for low voltage cable joints and terminations in shipbuilding. Insulates and protects against moisture.

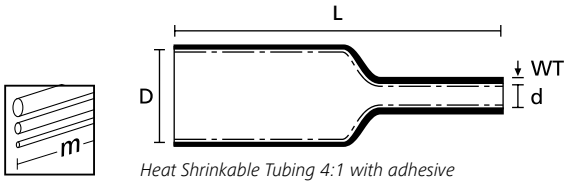
Features and benefits

- Medium wall adhesive lined shrink tubing for low voltage power cables
- Designed for shipbuilding, Germanische Lloyd approved
- Flame retarded
- UV and weather resistant
- Excellent mechanical performance



MA40 medium wall, adhesive lined and flame retarded tubing for shipbuilding applications.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	self-extinguishing



Heat Shrinkable Tubing 4:1 with adhesive

LFH ✓ RoHS ✓

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
MA40-8/2	8.0	2.0	1.70	1.0 m	Black (BK)	30;32	323-00100
MA40-12/3	12.0	3.0	2.00	1.0 m	Black (BK)	30;32	323-00101
MA40-16/5	16.0	5.0	2.00	1.0 m	Black (BK)	30;32	323-00103
MA40-22/6	22.0	6.0	2.40	1.0 m	Black (BK)	30;32	323-00104
MA40-33/8	33.0	8.0	2.50	1.0 m	Black (BK)	30;32	323-00105
MA40-40/12	40.0	12.0	2.60	1.0 m	Black (BK)	30;32	323-00106
MA40-55/16	55.0	16.0	2.70	1.0 m	Black (BK)	30;32	323-00107

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

ASTM DNV

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-251

Heat Shrinkable Tubing up to 4:1 - 1 m lengths

MA47 - medium wall adhesive lined

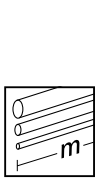
Insulation and Protection of low voltage cable jonts and terminations above and below ground.

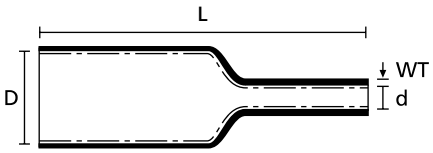
Features and benefits

- Medium wall tubing with robust insulation characteristics
- Shrink tubing for above and underground cable applications
- Protects cable joints and terminations in low voltage applications
- Internally coated with a thermoplastic adhesive
- Protects against humidity and other environmental impacts after shrinking

www.HellermannTyton.co.uk/MA47-cat22

Cut lengths available on request. Please contact us!





Heat Shrinkable Tubing 4:1 with adhesive



MA47 for above and below ground.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	not flame-retardant
Insulation Class	A (VDE 0530)

RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
MA47-8/2	8.0	2.0	1.80	1.0 m	Black (BK)	30;32	323-20080
MA47-12/3	12.0	3.0	1.80	1.0 m	Black (BK)	30;32	323-20120
MA47-19/6	22.0	6.0	2.40	1.0 m	Black (BK)	30;32	323-20190
MA47-30/8	33.0	8.0	2.60	1.0 m	Black (BK)	30;32	323-20300
MA47-40/12	40.0	12.0	2.60	1.0 m	Black (BK)	30;32	323-20400
MA47-50/16	55.0	16.0	2.70	1.0 m	Black (BK)	30;32	323-20500
MA47-63/19	65.0	19.0	2.90	1.0 m	Black (BK)	30;32	323-20630
MA47-75/22	75.0	22.0	3.00	1.0 m	Black (BK)	30;32	323-20750
MA47-95/30	95.0	25.0	3.60	1.0 m	Black (BK)	30;32	323-20950
MA47-115/34	115.0	34.0	3.50	1.0 m	Black (BK)	30;32	323-21150
MA47-140/42	140.0	42.0	3.30	1.0 m	Black (BK)	30;32	323-21400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-252

Date of issue: September 2022

Heat shrinkable tubing up to 4:1 - 1 m lengths in a Kit

MA47 - medium wall adhesive lined

MA47 heat shrinkable tubing in 4 sizes packed in a handy transportation tube. Insulation and protection of low voltage cable joints and terminations above and below ground.

Features and benefits

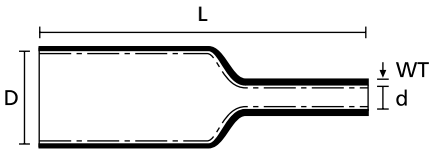
- Re-usable transportation tube in adjustable length
- 4 sizes of MA47 for different applications in 1 kit
- Medium wall tubing with robust insulation characteristics
- Shrink tubing for above and underground cable applications
- Protects against humidity and other environmental impacts after shrinking



Heatshrink tubing MA47 in a handy, re-usable kit.

Detailed Information about Heatguns please refer to page 565.

Detailed information about MA47 please refer to page 252.



Heat Shrinkable Tubing 4:1 with adhesive

TYPE	Content	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
MA47 Kit	-	-	-	-	-	Transparent (CL)	30;32	905-50026
MA47-12/3	2 pcs.	12.0	3.0	1.80	1.0 m	Black (BK)	30;32	
MA47-19/6	2 pcs.	22.0	6.0	2.40	1.0 m	Black (BK)	30;32	
MA47-30/8	2 pcs.	33.0	8.0	2.60	1.0 m	Black (BK)	30;32	
MA47-40/12	2 pcs.	40.0	12.0	2.60	1.0 m	Black (BK)	30;32	

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-253

Heat Shrinkable Tubing up to 4:1 - 1 m lengths

MU47 - medium wall unlined

Insulation and production of low voltage cable joints and terminations.

Features and benefits

- Medium wall heat shrink tubing
- Not adhesive lined
- Provides good mechanical strength
- Resistant to solvents, acids and alkaline solutions



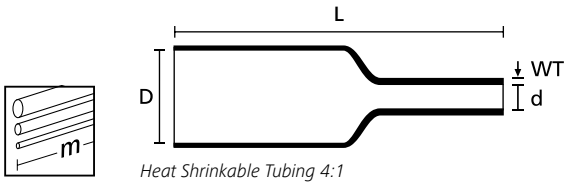
Medium wall tubing MA47 with shrink ratio 4:1 and adhesive liner.

Detailed Information about Heatguns please refer to page 565.

Cut lengths available on request. Please contact us!

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	not flame-retardant

HF ✓ RoHS ✓



Heat Shrinkable Tubing 4:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
MU47-12/3	12.0	3.0	1.80	1.0 m	Black (BK)	30;32	323-10120
MU47-19/6	22.0	6.0	2.40	1.0 m	Black (BK)	30;32	323-10190
MU47-30/8	33.0	8.0	2.60	1.0 m	Black (BK)	30;32	323-10300
MU47-40/12	40.0	12.0	2.60	1.0 m	Black (BK)	30;32	323-10400
MU47-50/16	55.0	16.0	2.90	1.0 m	Black (BK)	30;32	323-10500
MU47-63/19	65.0	19.0	2.90	1.0 m	Black (BK)	30;32	323-10630
MU47-75/22	75.0	22.0	3.00	1.0 m	Black (BK)	30;32	323-10750
MU47-95/30	95.0	25.0	3.60	1.0 m	Black (BK)	30;32	323-10950
MU47-115/34	115.0	34.0	3.50	1.0 m	Black (BK)	30;32	323-11150
MU47-140/42	140.0	42.0	3.30	1.0 m	Black (BK)	30;32	323-11400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-254

Cable repair kit

LVRK-L

The Cable Repair Kit LVRK-L is a solution for the fast and safe repair of damaged cable and wires in electrical installations. Damaged cable jackets and wires can be repaired safely and durably, saving time and labour

Features and benefits

- Fast, safe and labour-saving repair of cable and wires
- No need for concealed sockets or wire insertion, with subsequent cost savings
- Available as a kit for simple and easy handling
- 1x heat shrinkable tubing, length 200 mm, shrink ratio 4:1, excellent insulation and can be cut for installation
- 5x crimp connectors with heat shrinkable insulation and adhesive liner
- 4x Q-tie heat stabilised cable ties with innovative and time-saving open-head design



Low Voltage Cable Repair Kit - LVRK-L.

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Shrink Ratio	4:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+110 °C
Softening Point Adhesive	+110 °C
Longitudinal Change After Shrinkage	-15% max.
Dielectric Strength	15 kV/mm

www.HellermannTyton.co.uk/LVRK-cat22

RoHS

TYPE	Length (L)	Colour	Pack Cont.	Tools	Article-No.
LVRK-L-24/6-200	200.0	Black (BK)	1 pc.	30	380-04019

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-255

Heat shrinkable cable repair sleeves

RMS

RMS wrap-around sleeves are easy to install.

Features and benefits

- Fast, moisture proof and permanent repair of cable jackets
- Only 6 sizes for a wide range of cable diameters: from 10 mm up to 160 mm
- Available in 4 standard lengths, custom lengths available on request
- Each RMS kit is ready for use and comes with instruction sheet, abrasive strip and cleaning sachet
- Weather resistant and halogen free
- TCP (thermo-chromatic paint) spots indicate the sleeve has been sufficiently heated



RMS wrap-around sleeves for rapid and secure cable repair.

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Shrink Ratio	up to 4.5:1
Operating Temperature	-40 °C to +120 °C
Min. Shrink Temperature	+110 °C
Softening Point Adhesive	+105 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	30 kV/mm
Flammability	not flame-retardant

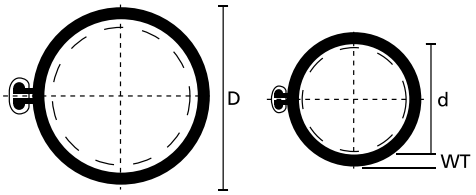
HF ✓ RoHS ✓



RMS: Repair sleeve, steel closure, abrasive strip, cleaning sachet, instruction sheet.



www.HellermannTyton.co.uk/RMS-cat22



Cable Repair Sleeve RMS with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Suitable for Cable Ø from/to	Length (L)	Colour	Tools	Article-No.
RMS 43-10	43.0	10.0	2.30	15 - 35	250.0	Black (BK)	32	450-20000
	43.0	10.0	2.30	15 - 35	500.0	Black (BK)	32	450-20001
	43.0	10.0	2.30	15 - 35	750.0	Black (BK)	32	450-20004
	43.0	10.0	2.30	15 - 35	1,000.0	Black (BK)	32	450-20002
RMS 52-15	52.0	15.0	2.30	20 - 45	250.0	Black (BK)	32	450-20010
	52.0	15.0	2.30	20 - 45	500.0	Black (BK)	32	450-20011
	52.0	15.0	2.30	20 - 45	750.0	Black (BK)	32	450-20014
	52.0	15.0	2.30	20 - 45	1,000.0	Black (BK)	32	450-20012
RMS 76-22	76.0	22.0	2.50	28 - 65	500.0	Black (BK)	32	450-20021
	76.0	22.0	2.50	28 - 65	750.0	Black (BK)	32	450-20024
	76.0	22.0	2.50	28 - 65	1,000.0	Black (BK)	32	450-20022
RMS 100-30	100.0	30.0	2.54	35 - 85	500.0	Black (BK)	32	450-20030
	100.0	30.0	2.54	35 - 85	1,000.0	Black (BK)	32	450-20031
RMS 139-38	139.0	38.0	2.77	45 - 120	1,000.0	Black (BK)	32	450-20041
RMS 185-55	185.0	55.0	2.74	65 - 160	1,000.0	Black (BK)	32	450-20050

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-256

Heat shrinkable straight-through joint

LVK

LVK is a heat shrinkable straight-through joint for universal connecting of unarmoured polymeric cables or conductors insulated with PVC, PE and XLPE. Suitable for compression and mechanical connectors on aluminium or copper cables. Voltage level 0.6/1.0 (1.2) kV.



LVK - Heat shrinkable straight-through joint.

Features and benefits

- Universally suitable to connect cables and conductors
- Immediately ready for use
- Using a high-quality thermoplastic inner adhesive
- Good corrosion protection properties with excellent abrasion resistance and weather resistance
- TCP (thermo chromatic paint) spots indicate the sleeve has been sufficiently heated
- Resistant to chemical agents and alkaline earths
- Excellent shrink behavior
- High UV resistance
- Halogen free

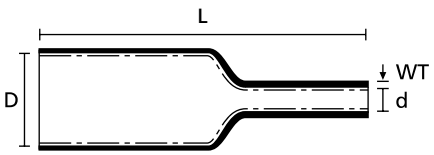


LVK: Outer sleeve, inner sleeves, cleaning cloth, emery cloth, installation instructions.

MATERIAL	Polyolefin, cross-linked (PO-X)
Colour	Black (BK)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+105 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm

HF ✓ RoHS ✓





Heat Shrinkable Tubing 4:1 with adhesive

Recommended Tools	
	32 CHG900
	565

For more information on toolings please refer to the Application Tooling chapter.

Without connector!

TYPE	No. of Inner sleeves	Conductor Size Range mm²	Inner Tubing Supplied Ø D min.	Inner Tubing Recov. Ø d max.	Inner Tubing Length (L)	Outer Tubing Supplied Ø D min.	Outer Tubing Recov. Ø d max.	Outer Tubing Length (L)	Tools	Article-No.
LVK-4x16-50	4	16-50	22.0	6.0	170.0	55.0	16.0	550.0	32	380-04008
LVK-4x25-150	4	25-150	33.0	8.0	250.0	105.0	25.0	800.0	32	380-04010
LVK-4x25-95	4	25-95	33.0	8.0	250.0	75.0	20.0	800.0	32	380-04009
LVK-4x95-300	4	95-300	40.0	12.0	280.0	130.0	35.0	900.0	32	380-04011
LVK-5x1.5-16	5	1.5-16	19.0	3.2	125.0	48.0	12.0	450.0	32	380-04006
LVK-5x1.5-6	5	1.5-6	12.0	3.0	70.0	48.0	12.0	250.0	32	380-04005
LVK-5x6-25	5	6-25	22.0	6.0	125.0	55.0	16.0	500.0	32	380-04007

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-257

Heat shrinkable straight-through joint with mechanical connectors

LVK-C - adhesive lined

LVK-C is a heat shrinkable straight-through joint for universal connecting of unarmoured polymeric cables or conductors insulated with PVC, PE and XLPE. With mechanical connectors for aluminium or copper cables. Voltage level 0.6/1.0 (1.2) kV.



LVK-C - Heat shrinkable straight-through joint with connectors.

Features and benefits

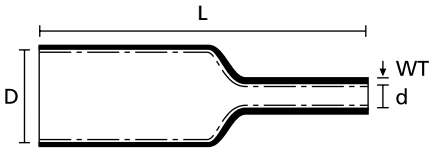
- Universally suitable to connect cables and conductors
- Immediately ready for use
- Using a high-quality thermoplastic inner adhesive
- Good corrosion protection properties with excellent abrasion resistance and weather resistance
- TCP (thermo chromatic paint) spots indicate the sleeve has been sufficiently heated
- Resistant to chemical agents and alkaline earths
- Excellent shrink behavior
- High UV resistance
- With mechanical connectors
- Halogen free



LVK-C: Outer sleeve, inner sleeves, mechanical connectors, cleaning cloth, emery cloth, installation instructions.

With connector!





Heat Shrinkable Tubing 4:1 with adhesive

MATERIAL	Polyolefin, cross-linked (PO-X)
Colour	Black (BK)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+105 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm

HF ✓ RoHS ✓

TYPE	No. of Inner sleeves	Conductor Size Range mm²	Inner Tubing Supplied Ø D min.	Inner Tubing Recov. Ø d max.	Inner Tubing Length (L)	Outer Tubing Supplied Ø D min.	Outer Tubing Recov. Ø d max.	Outer Tubing Length (L)	Tools	Article-No.
LVK-C-4x16-50	4	16-50	22.0	6.0	170.0	55.0	16.0	550.0	32	380-04016
LVK-C-4x25-150	4	25-150	33.0	8.0	250.0	105.0	25.0	800.0	32	380-04018
LVK-C-4x25-95	4	25-95	33.0	8.0	250.0	75.0	20.0	800.0	32	380-04017
LVK-C-5x1.5-16	5	1.5-16	19.0	3.2	125.0	48.0	12.0	450.0	32	380-04014
LVK-C-5x1.5-6	5	1.5-6	12.0	3.0	70.0	48.0	12.0	250.0	32	380-04013
LVK-C-5x6-25	5	6-25	22.0	6.0	125.0	55.0	16.0	500.0	32	380-04015

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-258

Heat shrinkable tubing 4:1 - Flame retardant

HA40 - thick wall adhesive lined

Designed for low voltage cable joints and terminations in shipbuilding. Insulates and protects against moisture.

Features and benefits

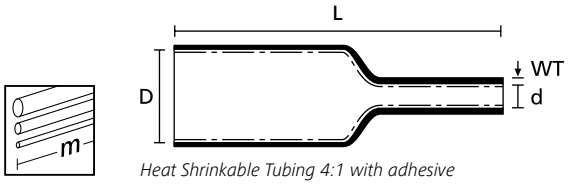
- Thick wall adhesive lined shrink tubing for low voltage power cables
- Designed for shipbuilding, Germanische Lloyd approved
- Flame retarded
- UV and weather resistant
- Excellent mechanical performance



HA40 thick wall, adhesive lined and flame retarded tubing for shipbuilding applications.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	self-extinguishing

LFH RoHS



Heat Shrinkable Tubing 4:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
HA40-9/3	9.0	3.0	2.00	1.0 m	Black (BK)	32	321-00100
HA40-13/4	13.0	4.0	2.20	1.0 m	Black (BK)	32	321-00101
HA40-22/6	22.0	6.0	2.70	1.0 m	Black (BK)	32	321-00102
HA40-33/8	33.0	8.0	3.20	1.0 m	Black (BK)	32	321-00103
HA40-40/12	40.0	12.0	4.10	1.0 m	Black (BK)	32	321-00104
HA40-55/16	55.0	16.0	4.10	1.0 m	Black (BK)	32	321-00105
HA40-75/22	75.0	22.0	4.10	1.0 m	Black (BK)	32	321-00106
HA40-92/25	92.0	25.0	4.20	1.0 m	Black (BK)	32	321-00107

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	32 CHG900
	565

For more information on toolings please refer to the Application Tooling chapter.

ASTM DNV

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-259

Heat Shrinkable Tubing up to 3,5:1 - 1 m lengths

HA47 - thick wall adhesive lined

The toughness and wheatherability makes it well suited for exposed applications and underground cable joints and cable terminations.

Features and benefits

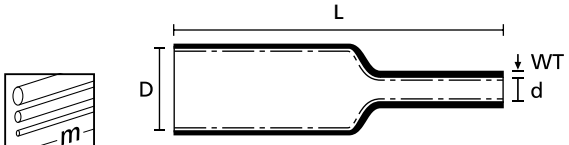
- Thick wall polyolefin adhesive-lined sleeving
- Thermoplastic adhesive protects against moisture and weathering
- Used for low voltage power applications



HA47 - Halogenfree 4:1 Heavy Dual Wall Heat Shrink Tubing.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Flammability	not flame-retardant
Insulation Class	A (VDE 0530)

RoHS



Heat Shrinkable Tubing 3.5:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
HA47-9/3	9.0	3.0	2.00	1.0 m	Black (BK)	32	321-20090
HA47-13/4	13.0	4.0	2.40	1.0 m	Black (BK)	32	321-20130
HA47-19/6	19.0	6.0	2.70	1.0 m	Black (BK)	32	321-20180
HA47-33/8	33.0	8.0	3.20	1.0 m	Black (BK)	32	321-20280
HA47-45/12	45.0	12.0	4.00	1.0 m	Black (BK)	32	321-20450
HA47-51/16	51.0	16.0	4.00	1.0 m	Black (BK)	32	321-20510
HA47-68/22	68.0	22.0	4.00	1.0 m	Black (BK)	32	321-20680
HA47-85/25	85.0	25.0	4.20	1.0 m	Black (BK)	32	321-20850
HA47-105/30	105.0	30.0	4.20	1.0 m	Black (BK)	32	321-20900
HA47-130/36	130.0	36.0	4.20	1.0 m	Black (BK)	32	321-21300
HA47-160/50	165.0	50.0	4.20	1.0 m	Black (BK)	32	321-21600
HA47-180/50	180.0	50.0	4.20	1.0 m	Black (BK)	32	321-21850

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	32 CHG900
	565

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-260

Heat Shrinkable Tubing 6:1, adhesive lined in 1.2 m cuts

HA67

Insulates, seals and protects large size differences between connectors and cables.

Features and benefits

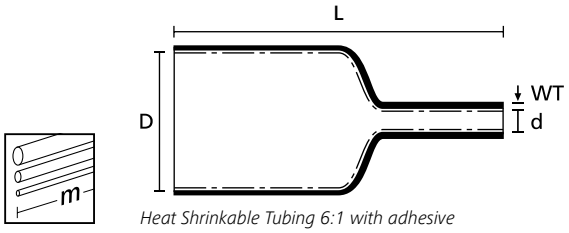
- High shrink ratio, heavy-duty heat shrinkable tubing
- Thermoplastic adhesive-lined tubing
- Conforms well to highly variable substrate dimensions
- Simplifies cable repair
- Passes over large connectors and shrinks onto much smaller cable jackets
- Environmental sealing and excellent insulation
- Resistant to impact and abrasion



Due to the high shrink ratio HA67 is suitable for complex shapes and dimensions.

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Shrink Ratio	6:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm
Flammability	not flame-retardant

HF ✓ RoHS ✓



Heat Shrinkable Tubing 6:1 with adhesive

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
HA67-19.0/3.2	19.0	3.2	3.20	1.2 m	Black (BK)	32	321-30000
HA67-33.0/5.5	33.0	5.5	3.40	1.2 m	Black (BK)	32	321-30100
HA67-44.4/7.4	44.4	7.4	3.60	1.2 m	Black (BK)	32	321-30200
HA67-50.8/8.3	50.8	8.3	4.80	1.2 m	Black (BK)	32	321-30300
HA67-69.8/11.7	69.8	11.7	4.80	1.2 m	Black (BK)	32	321-30400
HA67-88.9/17.1	88.9	17.1	4.80	1.2 m	Black (BK)	32	321-30500
HA67-119.4/22.9	119.4	22.9	4.80	1.2 m	Black (BK)	32	321-30600

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	32 CHG900
	565

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-261

Heat Shrinkable Tubing 2:1 - Flame retardant

TR27

TR27 is used in applications where toxic emissions evolved in a fire must be minimised, e.g. heavily populated buildings or safety sensitive areas like tunnels, hospitals, schools, theatres, mass transit vehicles and computer centres.

Features and benefits

- Thin wall, flexible polyolefin tubing
- Optional available with adhesive or as thick wall version (SR27)
- Halogen free and excellent flame-retardant properties
- Meets various industrial standards

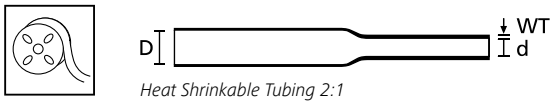


TR27 is ideal for safety sensitive areas.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Min. Shrink Temperature	+115 °C
Longitudinal Change After Shrinkage	+5%/-10% max.
Dielectric Strength	15 kV/mm
Flammability	Limited Fire Hazard, Halogen free, Low generation of toxic gases and corrosive acid, Low smoke generation

HF ✓ LFH ✓

RoHS ✓



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Tools	Article-No.
TR27-3.2/1.6	3.2	1/8 "	1.6	0.51	150 m	Black (BK)	30	315-50320
TR27-4.8/2.4	4.8	3/16 "	2.4	0.51	60 m	Black (BK)	30	315-50480
TR27-6.4/3.2	6.4	1/4 "	3.2	0.64	60 m	Black (BK)	30	315-50640
TR27-9.5/4.8	9.5	3/8 "	4.8	0.64	60 m	Black (BK)	30	315-50950
TR27-12.7/6.4	12.7	1/2 "	6.4	0.64	60 m	Black (BK)	30	315-51270
TR27-19.1/9.5	19.1	3/4 "	9.5	0.76	60 m	Black (BK)	30	315-51900
TR27-25.4/12.7	25.4	1 "	12.7	0.51	60 m	Black (BK)	30	315-52540
TR27-38.1/19.1	38.1	1-1/2 "	19.1	1.02	60 m	Black (BK)	30	315-53810
TR27-50.8/25.4	50.8	2 "	25.4	1.14	60 m	Black (BK)	30	315-55100

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-262

Date of issue: September 2022

Heat shrinkable tubing 3:1 - Flame retardant

TA37 – thin wall adhesive lined

TA37 shrink tubing has a low smoke index and excellent flame retardant properties to meet strict fire security standards in electrical insulation.

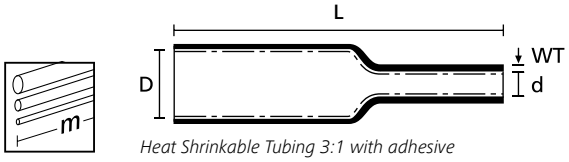
Features and benefits

- Thin wall adhesive lined heat shrink tubing
- Halogen free
- Flame retardant
- Combination of these three (halogen free, adhesive lined and flame retardant) product properties is unique



TA37 - Halogenfree and self-extinguishing 3:1 Thin Dual Wall Heat Shrink Tubing.

MATERIAL	Polyolefin, Chemically cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	+3%/-15%
Dielectric Strength	19.7 kV/mm
Flammability	self-extinguishing, Low smoke generation, Low generation of toxic gases and corrosive acid



Heat Shrinkable Tubing 3:1 with adhesive

HF ✓ LFH ✓
RoHS ✓

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
TA37 3-1	3.2	1.0	0.95	1.2 m	Black (BK)	30	315-13000
TA37 4.5-1.5	4.8	1.5	1.10	1.2 m	Black (BK)	30	315-13001
TA37 6-2	6.4	2.0	1.20	1.2 m	Black (BK)	30	315-13002
TA37 9-3	9.5	3.0	1.30	1.2 m	Black (BK)	30	315-13003
TA37 12-4	12.7	4.0	1.40	1.2 m	Black (BK)	30	315-13004
TA37 19-6	19.1	6.0	2.20	1.2 m	Black (BK)	30	315-13005
TA37 24-8	24.0	8.0	2.50	1.2 m	Black (BK)	30	315-13006
TA37 40-13	40.0	13.0	2.50	1.2 m	Black (BK)	30	315-13007
TA37 50-19	50.0	19.0	4.00	1.2 m	Black (BK)	30	315-13008
TA37 75-25	75.0	25.0	3.00	1.2 m	Black (BK)	30	315-13009
TA37 120-45	120.0	45.0	4.00	1.2 m	Black (BK)	30	315-13011

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-263

Heat shrinkable tubing 4:1 - 1.2 m lengths

SA47-LA - standard wall adhesive lined for perfect corrosion protection

SA47-LA is a semi-rigid halogen free polyolefin tubing with an inner liner of hot melt adhesive. It has excellent tensile strength and strain relief. The adhesive liner provides superb moisture protection. Ideal for electrical connections and splices in automobiles. Tubing is transparent and hot melt adhesive is black.

SA47-LA is specially designed with less adhesive for cable connections.

Features and benefits

- Flexible, standard wall polyolefin heat shrink tubing
- Industry leading corrosion protection
- Excellent tensile strength and strain relief
- Provides excellent moisture protection
- Tubing is clear and hot melt adhesive black
- Provides environmental sealing of complex parts
- Halogen free

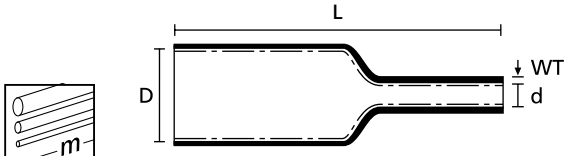


SA47-LA - High performance heat shrink tubing.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	4:1
Operating Temperature	-40 °C to +125 °C
Min. Shrink Temperature	+130 °C
Melting Point	+110 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	>20 kV/mm

Cut lengths available on request. Please contact us!

HF ✓ RoHS ✓



Heat Shrinkable Tubing 4:1 with adhesive

Available with transparent inner adhesive on request.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Tools	Article-No.
SA47-LA 5.75/1.25	5.75	1.25	1.15	1.2 m	Transparent (CL), Black (BK)	30	301-10020
SA47-LA 7.5/1.65	7.5	1.65	1.40	1.2 m	Transparent (CL), Black (BK)	30	301-10021
SA47-LA 11.0/2.4	11.0	2.4	1.80	1.2 m	Transparent (CL), Black (BK)	30	301-10022
SA47-LA 18.3/4.35	18.3	4.35	2.20	1.2 m	Transparent (CL), Black (BK)	30	301-10023
SA47-LA 24/6	24.0	6.0	2.54	1.2 m	Transparent (CL), Black (BK)	30	301-10024
SA47-LA 32/8	32.0	8.0	2.54	1.2 m	Transparent (CL), Black (BK)	30	301-10025
SA47-LA 52/13	52.0	13.0	3.00	1.2 m	Transparent (CL), Black (BK)	30	301-10026

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-264

Heat Shrinkable Tubing 2:1 - Elastomer

SE28

SE28 is used for long-term protection of cables and wire harnesses in military equipment, motor sports, and aviation.

Features and benefits

- Flexible, high performance elastomeric heat shrink tubing
- Used in aerospace, defence, railway and automotive applications
- Resistant to diesel fuel, aviation and hydraulic fluids
- Provides a reliable protection against abrasion and mechanical damage
- Very suitable for protecting cables and wire harnesses
- For high temperature applications up to 150 °C



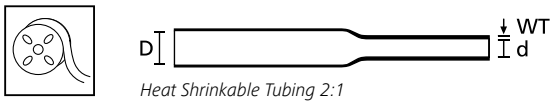
SE28 - Diesel resistant 2:1 high performance elastomer heat shrink tubing.

www.HellermannTyton.co.uk/SE28-cat22

MATERIAL	Elastomer, cross-linked (POA)
Shrink Ratio	2:1
Operating Temperature	-75 °C to +150 °C
Min. Shrink Temperature	+170 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm
Flammability	self-extinguishing

Product also available with thin wall (TE28). See more info on our internet page.

RoHS



Heat Shrinkable Tubing 2:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
SE28 3.2/1.6	3.2	1.6	0.75	150 m	Black (BK)	VG 95343 T05 D 001 A	30	342-20000
SE28 4.8/2.4	4.8	2.4	0.85	60 m	Black (BK)	VG 95343 T05 D 002 A	30	342-20010
SE28 6.4/3.2	6.4	3.2	0.90	60 m	Black (BK)	VG 95343 T05 D 003 A	30	342-20020
SE28 9.5/4.8	9.5	4.8	1.00	60 m	Black (BK)	VG 95343 T05 D 004 A	30	342-20030
SE28 12.7/6.4	12.7	6.4	1.20	60 m	Black (BK)	VG 95343 T05 D 005 A	30	342-20040
SE28 19.0/9.5	19.0	9.5	1.45	30 m	Black (BK)	VG 95343 T05 D 006 A	30	342-20050
SE28 25.4/12.7	25.4	12.7	1.80	30 m	Black (BK)	VG 95343 T05 D 007 A	30	342-20060
SE28 38.0/19.0	38.0	19.0	2.40	30 m	Black (BK)	VG 95343 T05 D 008 A	30	342-20070
SE28 51.0/25.4	51.0	25.4	2.80	30 m	Black (BK)	VG 95343 T05 D 009 A	30	342-20080
SE28 76.0/38.0	76.0	38.0	3.20	15 m	Black (BK)	VG 95343 T05 D 010 A	30	342-20090
SE28 101.2/51.0	102.0	51.0	3.60	10 m	Black (BK)	VG 95343 T05 D 011 A	30	342-20100

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-265

Heat shrinkable tubing 2:1 - PVDF

TK20

Typical applications of this translucent tubing are where high-temperature performance is required. Also very suitable for applications that ask for visual inspection of covered components, or if a low friction surface is needed. TK20 is also used as oil stop for energy cables.

This thin walled, translucent heat shrink tubing is often used for chemical applications.

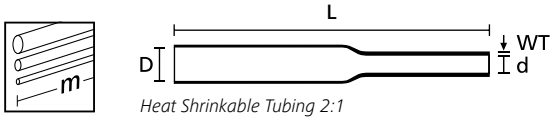
Features and benefits

- Semi-rigid heat shrinkable tubing made of PVDF
- Thin wall and tough
- For higher temperature applications
- Very good mechanical strength, abrasion resistance and chemical resistance
- Meets various industrial standards
- Self extinguishing, UL 224 VW1 listed



This thin walled, translucent heat shrink tubing is often used for chemical applications.

MATERIAL	Polyvinylidene Fluoride (PVDF)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +175 °C
Min. Shrink Temperature	+170 °C
Longitudinal Change After Shrinkage	+/-10% max
Dielectric Strength	30 kV/mm
Flammability	UL 224 VW-1, self-extinguishing



Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Size (imperial)	Recov. Ø d max.	Wall (WT)	Length (L)	Colour	Designation as per VG-Norm	Tools	Article-No.
TK20-1.2/0.6	1.2	3/64 "	0.6	0.25	1.2 m	Transparent (CL)	VG 95343 T05 F 001 M	30	331-00129
TK20-1.6/0.8	1.6	1/16 "	0.8	0.25	1.2 m	Transparent (CL)	VG 95343 T05 F 002 M	30	311-00169
TK20-2.4/1.2	2.4	3/32 "	1.2	0.25	1.2 m	Transparent (CL)	VG 95343 T05 F 003 M	30	311-00249
TK20-3.2/1.6	3.2	1/8 "	1.6	0.25	1.2 m	Transparent (CL)	VG 95343 T05 F 004 M	30	311-00329
TK20-4.8/2.4	4.8	3/16 "	2.4	0.25	1.2 m	Transparent (CL)	VG 95343 T05 F 005 M	30	311-00489
TK20-6.4/3.2	6.4	1/4 "	3.2	0.30	1.2 m	Transparent (CL)	VG 95343 T05 F 006 M	30	311-00649
TK20-9.5/4.8	9.5	3/8 "	4.75	0.30	1.2 m	Transparent (CL)	VG 95343 T05 F 007 M	30	311-00959
TK20-12.7/6.4	12.7	1/2 "	6.4	0.30	1.2 m	Transparent (CL)	VG 95343 T05 F 008 M	30	311-01279
TK20-19.1/9.5	19.1	3/4 "	9.5	0.43	1.2 m	Transparent (CL)	VG 95343 T05 F 009 M	30	311-01909
TK20-25.4/12.7	25.4	1 "	12.7	0.48	1.2 m	Transparent (CL)	VG 95343 T05 F 010 M	30	311-02549
TK20-38.1/19.1	38.1	1-1/2 "	19.1	0.51	1.2 m	Transparent (CL)	-	30	311-03819
TK20-50.8/25.4	50.8	2 "	25.4	0.51	1.2 m	Transparent (CL)	-	30	311-05089

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-266

Heat Shrinkable Tubing 2:1 - Fluoroelastomer

Viton®-E

Viton®-E is used for reliable protection against aggressive chemicals in high temperature environments like engine compartments and turbines. It is also used when protective tubings are required to remain flexible at low temperatures.

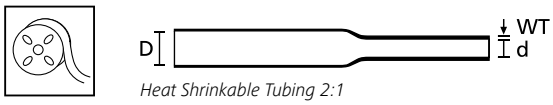
Features and benefits

- High temperature resistant fluoroelastomeric heat shrink tubing
- Very good electrical, chemical and mechanical features
- Resistant to many fuels, oils and lubricants
- Flexible even at very low temperatures



Viton®-E for flexibility and protection against aggressive chemicals.

MATERIAL	Fluoropolymer, cross-linked (FPMX)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +200 °C
Min. Shrink Temperature	+170 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	8 kV/mm
Flammability	self-extinguishing
Insulation Class	C (VDE 0530)



Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Colour	Designation as per VG-Norm	Tools	Article-No.
VITON®-E-3.2/1.6	3.2	1.6	0.70	50 m	Black (BK)	VG 95343 T05 E 001 A	30	330-00320
VITON®-E-4.8/2.4	4.8	2.4	0.80	50 m	Black (BK)	VG 95343 T05 E 002 A	30	330-00480
VITON®-E-6.4/3.2	6.4	3.2	0.90	50 m	Black (BK)	VG 95343 T05 E 003 A	30	330-00640
VITON®-E-9.5/4.8	9.5	4.8	1.00	25 m	Black (BK)	VG 95343 T05 E 004 A	30	330-00950
VITON®-E-12.7/6.4	12.7	6.4	1.20	25 m	Black (BK)	VG 95343 T05 E 005 A	30	330-01270
VITON®-E-19.0/9.5	19.0	9.5	1.40	25 m	Black (BK)	VG 95343 T05 E 006 A	30	330-01900
VITON®-E-25.4/12.7	25.4	12.7	1.80	25 m	Black (BK)	VG 95343 T05 E 007 A	30	330-02540
VITON®-E-38.0/19.0	38.0	19.0	2.40	15 m	Black (BK)	VG 95343 T05 E 008 A	30	330-03810
VITON®-E-50.8/25.4	50.8	25.4	2.80	15 m	Black (BK)	VG 95343 T05 E 009 A	30	330-05080

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

LEA DVE VG

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-267

Heat Shrinkable Tubing - PTFE

TFE2 2:1

TFE is ideal for high temperature applications, when resistance to aggressive fluids is required or a very thin walled tubing is needed, for example in pH-measuring instruments. TFE tubing is also used to reduce movement due to friction, covering cylinders for example.

Features and benefits

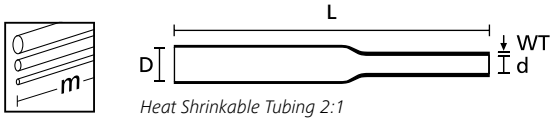
- PTFE heat shrink tubing
- Very high temperature resistance
- Extra thin wall translucent tubing
- High abrasion resistance and good resistance against aggressive chemicals
- Available in either 2:1 (TFE2) or 4:1 (TFE4) shrink ratios



TFE is available in either 2:1 or 4:1 shrink ratios.

Cut lengths available on request. Please contact us!

MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-65 °C to +260 °C
Min. Shrink Temperature	+330 °C
Longitudinal Change After Shrinkage	-20% max.
Dielectric Strength	40 kV/mm
Flammability	Non burning



Heat Shrinkable Tubing 2:1

RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wire Size (AWG)	Wall (WT)	Length (L)	Colour	Shrink Ratio	Tools	Article-No.
TFE2-30	0.86	0.38	30	0.23	1.2 m	Transparent (CL)	2:1	30	336-00079
TFE2-28	0.96	0.46	28	0.23	1.2 m	Transparent (CL)	2:1	30	336-00099
TFE2-26	1.17	0.56	26	0.23	1.2 m	Transparent (CL)	2:1	30	336-00109
TFE2-24	1.27	0.69	24	0.25	1.2 m	Transparent (CL)	2:1	30	336-00139
TFE2-22	1.39	0.82	22	0.25	1.2 m	Transparent (CL)	2:1	30	336-00149
TFE2-20	1.52	0.99	20	0.30	1.2 m	Transparent (CL)	2:1	30	336-00159
TFE2-18	1.93	1.25	18	0.30	1.2 m	Transparent (CL)	2:1	30	336-00199
TFE2-16	2.36	1.55	16	0.30	1.2 m	Transparent (CL)	2:1	30	336-00249
TFE2-14	3.05	1.83	14	0.30	1.2 m	Transparent (CL)	2:1	30	336-00319
TFE2-12	3.81	2.26	12	0.30	1.2 m	Transparent (CL)	2:1	30	336-00399
TFE2-10	4.85	2.85	10	0.30	1.2 m	Transparent (CL)	2:1	30	336-00489
TFE2-8	6.10	3.58	8	0.38	1.2 m	Transparent (CL)	2:1	30	336-00619
TFE2-6	7.67	4.52	6	0.38	1.2 m	Transparent (CL)	2:1	30	336-00779
TFE2-4	9.40	5.69	4	0.38	1.2 m	Transparent (CL)	2:1	30	336-00949
TFE2-2	10.92	7.06	2	0.38	1.2 m	Transparent (CL)	2:1	30	336-01109
TFE2-0	11.94	8.81	0	0.38	1.2 m	Transparent (CL)	2:1	30	336-01209

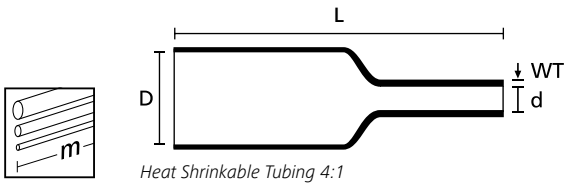
All dimensions in mm. Subject to technical changes.
AWG: American Wire Gauge Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-268

Heat Shrinkable Tubing - PTFE

TFE4 4:1



Heat Shrinkable Tubing 4:1

TYPE	Supplied Ø D min.	Recov. Ø d max.	Size (imperial)	Wall (WT)	Length (L)	Colour	Shrink Ratio	Tools	Article-No.
TFE4-5/64	1.98	0.64	5/64 "	0.22	1.2 m	Transparent (CL)	4:1	30	339-00209
TFE4-1/8	3.17	0.94	1/8 "	0.25	1.2 m	Transparent (CL)	4:1	30	339-00329
TFE4-3/16	4.75	1.27	3/16 "	0.30	1.2 m	Transparent (CL)	4:1	30	339-00340
TFE4-1/4	6.35	1.60	1/4 "	0.30	1.2 m	Transparent (CL)	4:1	30	339-00649
TFE4-3/8	9.52	2.44	3/8 "	0.30	1.2 m	Transparent (CL)	4:1	30	339-00959
TFE4-1/2	12.7	3.66	1/2 "	0.38	1.2 m	Transparent (CL)	4:1	30	339-01279
TFE4-5/8	15.87	4.52	5/8 "	0.38	1.2 m	Transparent (CL)	4:1	30	339-01599
TFE4-3/4	19.05	5.69	3/4 "	0.38	1.2 m	Transparent (CL)	4:1	30	339-01909
TFE4-1	25.4	7.06	1 "	0.38	1.2 m	Transparent (CL)	4:1	30	339-02549
TFE4-1 1/4	31.80	8.82	1-1/4 "	0.38	1.2 m	Transparent (CL)	4:1	30	339-03189

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-269

Product Selection for Heat Shrinkable Moulded Shapes

Order Example

Type:

XXX(X)-X(X)-XXXX(XX)

- Adhesive
- Material
- Size
- Series

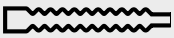
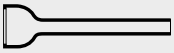
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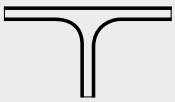
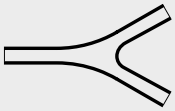
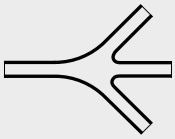
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- Adhesive W24
- G Material
- Short version
- Series 200

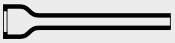
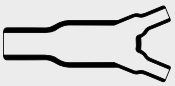
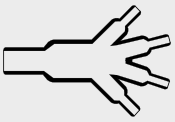
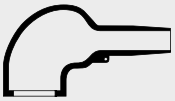
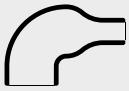


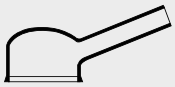
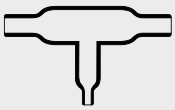
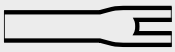
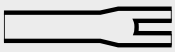
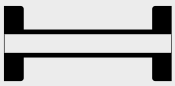
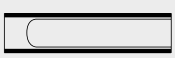
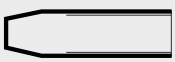
Other product styles are available. Please refer to Moulded Shapes catalogue.

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Materials for Heat Shrinkable Moulded Shapes

Material Specifications

	-9	H	G	B7	B8	L
Material	Modified elastomer blend	Flexible limited fire hazard material	Fluid resistant elastomer	Semi-rigid flame retarded polyolefin	Semi-rigid flame retarded polyolefin	Flexible flame retarded fluoroelastomer
Operating Temperature	-55 °C to 120 °C	-55 °C to +105 °C	-75 °C to +150 °C	-55 °C to +135 °C	-55 °C to +100 °C	-55 °C to +200 °C
Min. Shrink Temperature	+135 °C	+135 °C	+135 °C	+135 °C	+135 °C	+175 °C
Specifications	SCX15112	DEF STAN 59-97, BSG198 Part 5, VG 95343 NAVSEA 5617649	DEF STAN 59-97, BSG198 Part 5, VG 95343 Part 6, 18	MIL-I-81765/1 Type 1, DEF STAN 59-97, BSG198 Part 5	EA-TS 09-11	DEF STAN 59-97, BSG198 Part 5, MIL-81765/4
Tensile Strength	12 MPa	10 MPa	15 MPa	13 MPa	15 MPa	12 MPa
Elongation at break	500%	450%	580%	500%	500%	300%
Dielectric Strength	20 kV/mm	15 kV/mm	14 kV/mm	14 kV/mm	15 kV/mm	8 kV/mm
Flammability for Material	excellent	excellent	excellent	excellent	good	excellent
Typical Application	Military and general high performance harnessing	Ships, submarines & railways	Military and general high performance harnessing	Military and general high performance harnessing	Power/utility shapes	Military and high performance harnessing

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Adhesive for Heat Shrinkable Moulded Shapes

Adhesive Specifications							
	W / W2	**W8**	**W21**	**W24**	**WM250**	**V9500**	**HMT200A**
Adhesive	Hot melt adhesive	Hot melt adhesive	Hot melt adhesive	High performance, pre-coat, 1 part epoxy	Hot melt adhesive	Two part, black, epoxy adhesive	Hot melt adhesive tape
Operating Temperature	-55 °C to +80 °C	-55 °C to +105 °C	-55 °C to 120 °C	-75 °C to +200 °C	-55 °C to +80 °C	-75 °C to +150 °C	-55 °C to +105 °C
Softening Point Adhesive	+95 °C	+110 °C	+120 °C	+80 °C	+95 °C		+110 °C
Supplied Form	pre-applied	pre-applied	pre-applied	pre-applied	pre-applied	cardridge	tape
Shelf Life	5 years	5 years	5 years	5 years	5 years	18 months	5 years
Solvent Resistance	Fair under splash conditions	Fair under splash conditions	Saline: Very good De-icing fluid: Good Diesel: Excellent Lubricating Oil: Good Hydraulic Oil: Excellent Aviation Fuel: Good Automotive Fuel: Good	De-icing fluid: Excellent Petrol: Excellent Lubricating Oil: Excellent Hydraulic Oil: Excellent	Fair under splash conditions	De-icing fluid: Excellent, Petrol: Excellent, Lubricating Oil: Excellent, Hydraulic Oil: Excellent	Fair under splash conditions



A wider range of material / adhesive combinations are available in the Moulded Shapes catalogue.

Low Profile Convolute Boots

Helashrink 313C Series, with adapter lip

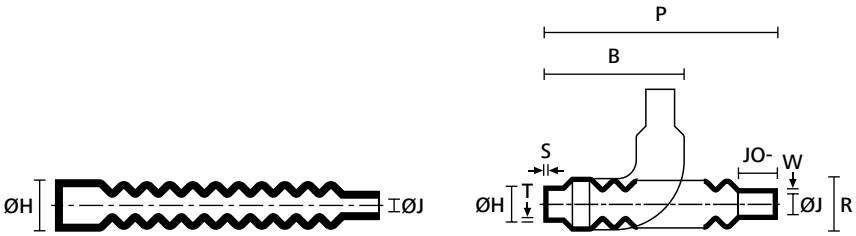
Features and benefits

- For circular grooved adapters to provide strain relief
- Excellent environmental sealing with adhesive
- Convoluted design grants flexibility for different cable outlet angles

For Material / Adhesive information please refer to page 272, 273.



313C722-774 Series supplied / fully recovered.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R max.	JO ± 10 %	W min	B nom	T ± 0.5	S ± 0.5	Article-No.
313C722-9	14.2	6.9	11.1	4.8	120.6	21.1	17.3	1.5	62.4	1.3	1.5	422-00001
313C732-9	22.4	11.7	17.7	8.1	133.3	26.5	19.8	1.5	67.8	1.3	1.5	422-00101
313C743-9	34.0	17.5	26.9	12.7	146.0	32.7	22.3	1.5	73.4	1.3	1.8	422-00201
313C753-9	44.2	22.3	36.5	17.5	158.7	37.8	25.4	1.5	78.2	1.3	1.8	422-00302
313C764-9	53.8	40.6	45.7	22.3	171.4	42.9	28.4	1.5	82.8	2.0	1.8	422-00400
313C774-9	77.2	40.6	54.6	22.8	236.2	62.2	25.4	1.5	138.4	2.0	2.0	422-00501

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

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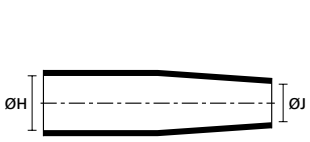
Add items to your watchlist!
www.HT.click/49-274

Low Profile Shim Boots

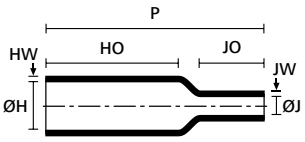
Helashrink 313E Series, without adapter lip

Features and benefits

- Used to build up or shim a cable diameter
- Facilitates better fit for components in cable harness



a: Expanded form (supplied)



b: Fully recovered form (after heating)



313E445-457 Series supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	HO ± 10 %	HW ± 25 %	JW ± 25 %	JO ± 10 %	Article-No.
313E445-9	12.7	12.7	11.1	3.3	63.5	41.1	1.5	1.5	15.7	422-10000
313E447-9	20.8	14.7	20.6	9.9	63.5	41.1	1.5	1.5	16.5	422-10100
313E455-9	22.1	22.1	11.2	3.3	53.3	27.9	2.3	1.5	15.7	422-10200
313E457-9	22.1	22.1	20.6	9.9	53.3	27.9	2.3	1.5	14.0	422-10300

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Low Profile Straight Boots

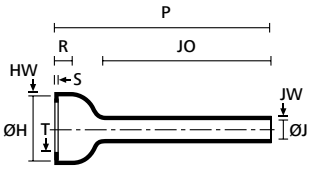
Helashrink 313F Series, with adapter lip

Features and benefits

- Lightweight strain relief for small cable diameters requiring high shrink ratio



a: Expanded form (supplied)



b: Fully recovered form (after heating)



313F322-396 Series supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 15 %	T ± 0.8	JO ± 10 %	HW ± 1.5	JW ± 0.8	S ± 1.5	Article-No.
313F322-9	23.8	9.9	17.2	6.6	105.9	11.6	1.3	86.3	1.5	1.5	1.5	422-20000
313F332-9	27.1	13.2	20.8	7.6	121.1	12.1	1.3	98.5	1.5	1.5	1.5	422-20100
313F343-9	30.9	18.5	24.3	8.9	138.6	12.1	1.3	112.7	1.7	1.5	1.7	422-20200
313F353-9	35.6	22.1	28.7	10.1	159.5	12.1	1.3	130.8	1.7	1.5	1.7	422-20300
313F364-9	38.8	28.2	31.4	10.9	177.8	13.9	1.8	142.2	1.7	1.5	1.7	422-20400
313F374-9	42.2	32.2	38.3	12.7	203.2	15.2	1.8	163.0	1.7	1.5	1.7	422-20500
313F385-9	51.5	45.4	45.4	14.9	203.2	15.2	1.8	157.7	1.7	1.7	1.7	422-20600
313F396-9	62.7	45.4	53.3	16.7	228.6	16.0	1.8	153.1	1.7	1.7	1.7	422-20700

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

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Add items to your watchlist!
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Low Profile Right Angle Boots

Helashrink 333F-Series, with adapter lip, 90° angle

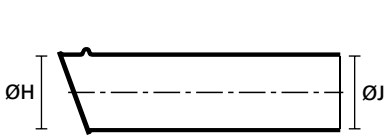
Features and benefits

- Lightweight strain relief for small cable diameters requiring high shrink ratio
- Right angle connector housing with long cable entry and inner lip

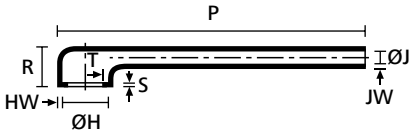


333F322-385 series as supplied / recovered.

For Material / Adhesive information please refer to page 272, 273.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 15 %	T ± 0.8	HW ± 1.5	JW ± 0.8	S ± 1.5	Article-No.
333F322-9	23.8	9.9	17.2	6.6	105.1	18.5	1.3	1.5	1.5	1.5	422-30000
333F332-9	27.1	13.2	20.8	7.6	115.8	19.8	1.3	1.5	1.5	1.5	422-30004
333F343-9	30.9	18.5	24.3	8.9	146.3	20.8	1.3	1.7	1.5	1.7	422-30100
333F353-9	35.3	21.6	28.7	10.1	172.2	21.8	1.3	1.7	1.5	1.7	422-30200
333F364-9	38.8	27.9	31.4	10.9	185.1	24.1	1.8	1.7	1.5	1.7	422-30301
333F374-9	45.2	34.0	38.3	12.1	213.6	27.4	1.8	1.7	1.5	1.7	422-30400
333F385-9	51.5	41.1	44.4	15.0	224.5	29.4	1.7	1.7	1.7	1.7	422-30500

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-276

Low Profile Transition Boots

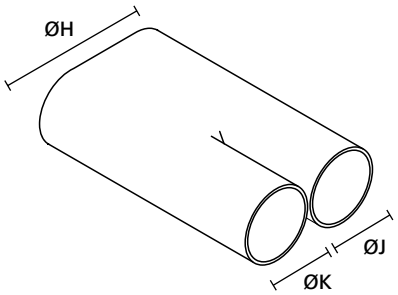
Helashrink 412H Series, side breakout

Features and benefits

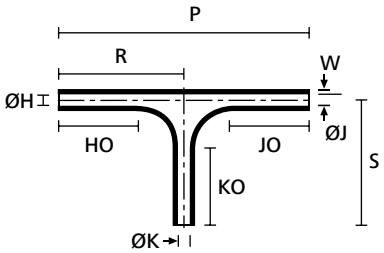
- Connector cable strain relief
- Used with circular adaptors



412H622-625 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ/K min. a	ØJ/K max. b	HO/JO/KO ± 10%	P ± 10%	W min	R/S nom	Article-No.
412H622-9	19.8	6.6	13.2	6.6	25.4	80.7	1.0	40.3	422-40000
412H623-9	34.2	11.4	22.8	11.4	41.1	120.3	1.3	60.1	422-40100
412H624-9	60.1	20.0	40.1	20.0	63.5	175.7	1.5	87.8	422-40200
412H625-9	83.3	33.2	54.8	33.2	88.9	242.3	1.7	121.1	422-40300

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

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Add items to your watchlist!
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Low Profile Transition Boots

Helashrink 492H Series, 1 to 2 cables

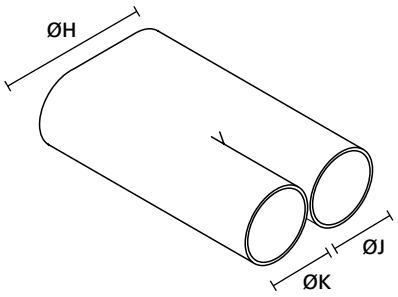
Features and benefits

- For cable harness breakouts or transitions
- Strain relief, sealing and mechanical protection

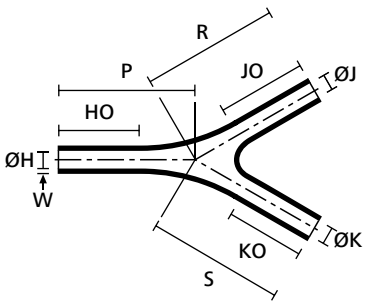
For Material / Adhesive information please refer to page 272, 273.



492H412-415 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ/K min. a	ØJ/K max. b	HO/JO/KO ± 15%	W min	P/R/S nom	Article-No.
492H412-9	19.8	6.6	13.2	6.6	25.4	1.0	40.6	422-50000
492H413-9	34.2	11.4	22.8	11.4	41.1	1.3	62.9	422-50101
492H414-9	60.1	20.0	40.1	20.0	63.5	1.5	94.7	422-50202
492H415-9	83.3	33.2	54.8	33.2	49.7	1.7	133.8	422-50302

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-278

Low Profile Transition Boots

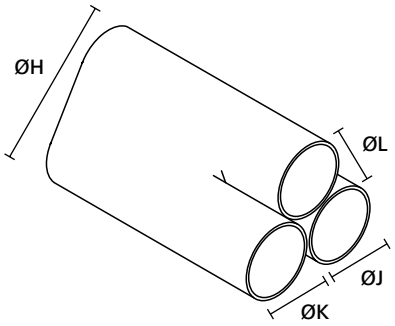
Helashrink 573H Series, 1 to 3 cables

Features and benefits

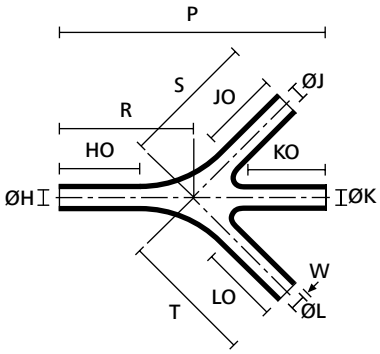
- For cable harness breakouts or transitions
- Strain relief, sealing and mechanical protection



573H532-535 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ/K/L min. a	ØJ/K/L max. b	P nom	R/S/T nom	W min	HO/JO/ KO/LO ± 15%	Article-No.
573H532-9	19.8	6.6	13.2	6.6	85.8	42.9	1.0	25.4	422-60000
573H533-9	34.2	11.4	20.5	11.4	135.6	67.8	1.3	41.1	422-60100
573H534-9	60.1	20.0	36.0	20.0	207.2	103.6	1.5	63.5	422-60202
573H535-9	99.8	33.2	54.8	33.2	294.6	147.3	1.7	88.9	422-60302

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Add items to your watchlist!
www.HT.click/49-279

Bottle Shapes, VG style

Helashrink 150 Series, with rib

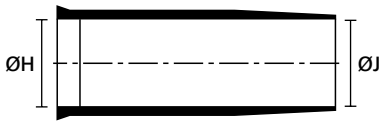
Features and benefits

- Use in conjunction with circular grooved adaptors
- Strengthened strain relief by usage of an additional inner lip
- Excellent protection against environment impacts
- Eliminates moisture ingress to harness

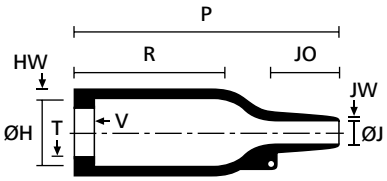


150 Series boot recovered onto a connectors.

For Material / Adhesive information please refer to page 272, 273.



a: Expanded form (supplied)



b: Fully recovered form (after heating)



150 Series supplied.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	JO ± 10 %	HW ± 20 %	JW ± 20 %	V max	T ± 20 %	Designation as per VG-Norm	Article-No.
152-41-G	24.0	10.5	24.0	6.0	26.0	9.0	10.0	1.6	0.5	3.3	1.0	VG 95343 T06 A 001 A	401-52780
152-42-G	24.0	10.5	24.0	6.0	38.0	21.0	10.0	1.6	0.5	3.3	1.0	VG 95343 T06 B 001 A	401-52880
153-41-G	25.0	14.0	9.0	3.5	40.0	13.0	16.0	1.8	0.5	3.3	1.0	VG 95343 T06 A 002 A	401-53780
153-42-G	25.0	14.0	9.0	3.5	55.0	28.0	16.0	1.8	0.5	3.3	1.0	VG 95343 T06 B 002 A	401-53880
154-41-G	30.0	14.0	30.0	6.0	43.0	20.0	13.0	1.8	1.0	3.3	1.0	VG 95343 T06 A 003 A	401-54780
154-42-G	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.3	1.0	VG 95343 T06 B 003 A	401-54880
155-42-G	31.0	18.0	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.3	1.0	VG 95343 T06 B 004 A	401-55880
156-41-G	36.0	22.5	36.0	8.5	60.0	22.0	20.0	2.0	1.0	3.3	1.0	VG 95343 T06 A 005 A	401-56780
156-42-G	36.0	22.5	36.0	8.5	80.0	42.0	20.0	2.0	1.0	3.3	1.0	VG 95343 T06 B 005 A	401-56880
157-41-G	43.0	28.0	43.0	10.0	60.0	21.0	20.0	2.2	1.0	3.3	1.7	VG 95343 T06 A 006 A	401-57780
157-42-G	43.0	28.0	43.0	10.0	79.0	41.0	20.0	2.2	1.0	3.3	1.7	VG 95343 T06 B 006 A	401-57880
157-43-G	43.0	28.0	43.0	10.0	99.0	61.0	20.0	2.2	1.0	3.3	1.7	VG 95343 T06 C 001 A	401-57980
158-41-G	60.0	35.0	60.0	16.0	90.0	32.0	38.0	3.2	1.5	3.3	1.7	VG 95343 T06 A 007 A	401-58780
158-42-G	60.0	35.0	60.0	16.0	110.0	52.0	38.0	3.2	1.5	3.3	1.7	VG 95343 T06 B 007 A	401-58880
158-43-G	60.0	35.0	60.0	16.0	130.0	72.0	38.0	3.2	1.5	3.3	1.7	VG 95343 T06 C 002 A	401-58980
159-41-G	66.0	45.0	66.0	17.0	130.0	50.0	50.0	3.8	2.0	3.3	2.0	VG 95343 T06 A 008 A	401-59780
159-42-G	66.0	45.0	66.0	17.0	150.0	70.0	50.0	3.8	2.0	3.3	2.0	VG 95343 T06 B 008 A	401-59880
159-43-G	66.0	45.0	66.0	17.0	171.0	90.0	50.0	3.8	2.0	3.3	2.0	VG 95343 T18 C 003 A	401-59980
160-41-G	82.0	58.0	82.0	27.0	137.0	37.0	62.0	3.8	3.8	3.3	2.0	VG 95343 T06 A 009 A	401-60780
160-42-G	82.0	58.0	82.0	27.0	158.0	58.0	62.0	3.8	3.8	3.3	2.0	VG 95343 T06 B 009 A	401-60880
160-43-G	82.0	58.0	82.0	27.0	213.0	113.0	62.0	3.8	3.8	3.3	2.0	VG 95343 T06 C 004 A	401-60980

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Bottle Shapes, MIL-Style

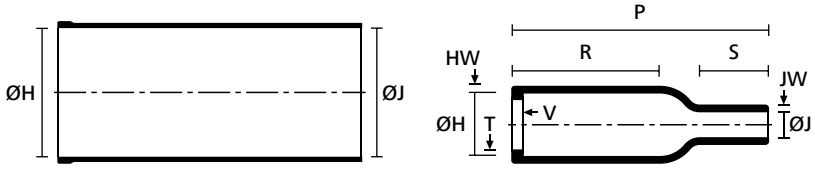
Helashrink 100 Series, with rib

Features and benefits

- With circular grooved adaptor for strain relief
- Combine with complementary adhesives for environmental sealing
- Suitable for small cable diameters



100 series supplied / fully recovered.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	T ± 20 %	S nom	Article-No.
113-4-G	10.7	7.9	4.6	2.0	25.4	14.5	1.3	1.0	3.0	1.0	4.6	401-13480

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Bottle Shapes

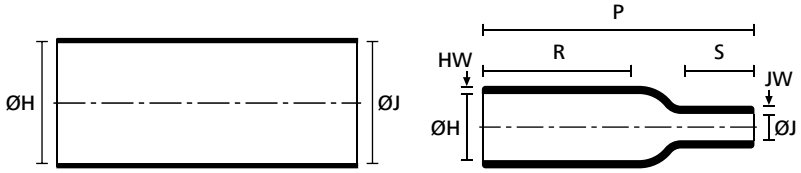
Helashrink 100 Series, without rib

Features and benefits

- Strain relief for connector cable
- Easy re-entry for repair when combined with hot melt adhesive
- For mechanical protection and protection against environment impacts



100 series supplied / fully recovered.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R max.	HW ± 20 %	JW ± 30 %	S nom	Article-No.
113-1-G	10.7	7.9	4.6	2.0	25.4	14.5	1.3	1.0	4.6	401-13180

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
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Long Outlet Shape, VG style

Helashrink 130 Series, with rib, low profile

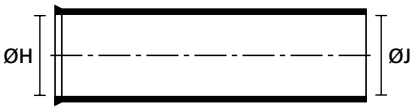
Features and benefits

- Low profile and lightweight
- Typically used on airborne harnesses
- Rib locates on circular backshell

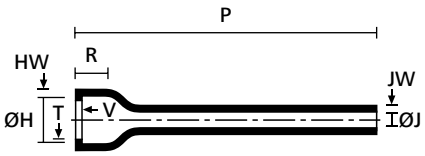
For Material / Adhesive information please refer to page 272, 273.



135-1-G as supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V max	T ± 10 %	Designation as per VG-Norm	Article-No.
129-1-G	22.0	12.0	22.0	6.5	76.0	12.0	1.5	1.1	3.3	1.0	VG 95343 T06 D 001 A	401-29180
130-1-G	25.5	15.0	25.5	7.5	83.0	12.0	1.5	1.1	3.3	1.0	VG 95343 T06 D 002 A	401-30180
131-1-G	29.0	19.0	29.0	8.5	89.0	12.0	1.8	1.1	3.3	1.0	VG 95343 T06 D 003 A	401-31180
132-1-G	34.0	23.0	34.0	10.0	102.0	12.0	1.8	1.1	3.3	1.0	VG 95343 T06 D 004 A	401-32180
133-1-G	37.0	30.0	37.0	11.0	108.0	14.0	2.0	1.1	3.3	1.7	VG 95343 T06 D 005 A	401-33180
134-1-G	43.5	34.0	43.5	12.0	114.0	15.0	2.0	1.1	3.3	1.7	VG 95343 T06 D 006 A	401-34180
135-1-G	50.0	41.0	50.0	14.5	118.0	15.0	2.3	1.4	3.3	1.7	VG 95343 T06 D 007 A	401-35180
136-1-G	62.5	47.0	62.5	18.0	121.0	16.0	2.5	1.4	3.3	2.0	VG 95343 T06 D 008 A	401-36180
138-1-G	69.0	60.0	69.0	20.0	127.0	16.0	2.5	1.4	3.3	2.0	VG 95343 T06 D 009 A	401-38180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
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Bottle Shapes, VG style

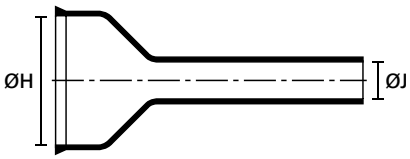
Helashrink 170 Series, with rib

Features and benefits

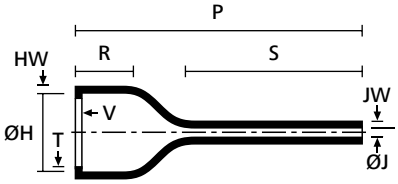
- Cable strain relief for partially loaded connectors
- Small cable diameters
- Use with our W24 adhesive for excellent chemical resistance



177-1-G as supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	T ± 20 %	HW ± 20 %	JW nom.	V max	S nom	Designation as per VG-Norm	Article-No.
176-1-G	19.3	13.0	6.3	2.1	60.0	11.7	1.0	1.5	1.1	3.3	38.0	VG 95343 T06 D 011 A	401-76180
177-1-G	26.1	19.1	7.6	2.6	74.0	12.2	1.0	1.8	1.1	3.3	45.0	VG 95343 T06 D 012 A	401-77180
178-1-G	34.2	26.0	9.6	3.1	84.0	12.2	1.0	1.8	1.1	3.3	51.0	VG 95343 T06 D 013 A	401-78180
179-1-G	43.6	34.1	11.4	3.6	100.0	12.2	1.7	1.8	1.1	3.3	58.0	VG 95343 T06 D 014 A	401-79180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

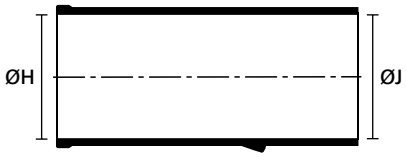
Add items to your watchlist!
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Bottle Shapes, VG style

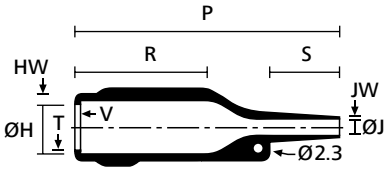
Helashrink 190 Series, with external ribs

Features and benefits

- Specifically for small audio connectors
- Multiple external ribs to improve grip in harsh conditions



a: Expanded form (supplied)



b: Fully recovered form (after heating)



199-4-G supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	T ± 20 %	S nom	Designation as per VG-Norm	Article-No.
199-4-G	17.5	14.0	7.0	4.3	70.0	35.0	1.8	0.5	1.5	1.0	20.0	VG 95343 T06 A 010 A	401-99480

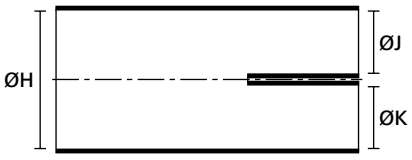
All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

2-Way Outlet Shapes

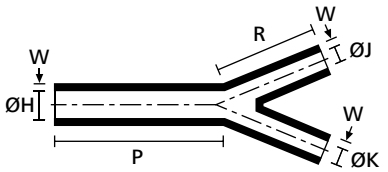
Helashrink 200 Series, low profile

Features and benefits

- For harnesses which route multi-core cables in different directions
- High ratio expansion for quick and easy installation
- Mechanical tension relief



a: Expanded form (supplied)



b: Fully recovered form (after heating)



200 series supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	ØK min. a	ØK max. b	P ± 10%	R ± 10 %	W ± 20 %	Article-No.
201-1-G	19.0	9.4	14.0	6.4	14.0	6.4	50.8	30.5	1.5	402-01180
201-2-G	31.8	9.4	15.7	6.4	15.7	6.4	50.8	30.5	1.5	402-01220

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-284

Date of issue: September 2022

2-Way Outlet Shapes, VG style

Helashrink 200 Series

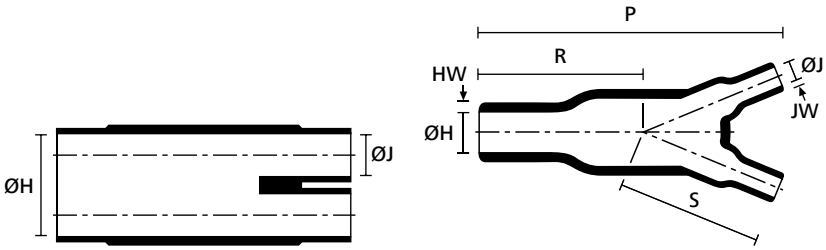
Features and benefits

- Mechanical tension relief in cable harnesses



Two-way outlet shape 223-2 supplied / fully recovered.

For Material / Adhesive information please refer to page 272, 273.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW nom.	S nom	Designation as per VG-Norm	Article-No.
206-1-G	13.0	6.0	7.0	3.0	41.0	22.0	1.5	1.0	19.0	VG 95343 T08 C 001 A	402-06180
212-1-G	14.5	8.0	8.5	5.5	136.0	83.0	2.5	2.0	63.0	VG 95343 T08 C 005 A	402-12180
213-1-G	17.3	7.9	11.1	7.9	140.0	83.1	2.3	-	64.0	-	402-13180
203-1-G	27.0	12.0	13.0	6.0	80.0	38.0	2.5	1.5	43.0	VG 95343 T08 C 002 A	402-03180
204-1-G	39.0	18.0	27.0	12.0	-	-	3.0	2.5	81.0	VG 95343 T08 C 003 A	402-04180

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

JN DVE VG

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-285

3-Way Outlet Shapes, VG style

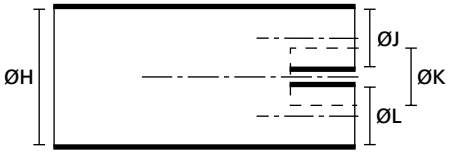
Helashrink 300 Series

Features and benefits

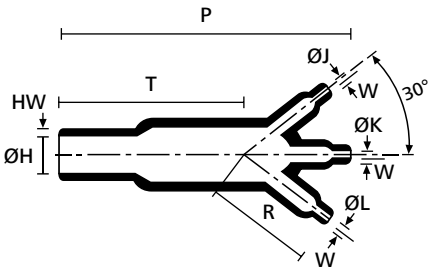
- Cable strain relief and mechanical protection at harness transition points
- All outlets clearly marked to aid orientation during installation



304-1-G supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ/K/L min. a	ØJ/K/L max. b	P ± 10%	R ± 10 %	HW ± 30 %	W ± 20 %	T ± 10 %	Designation as per VG-Norm	Article-No.
306-1-G	13.0	6.5	6.5	3.5	46.0	21.0	1.5	1.0	20.3	VG 95343 T08 D 001 A	403-06180
304-1-G	27.0	13.5	13.0	7.0	93.0	43.0	2.5	1.5	42.9	VG 95343 T08 D 002 A	403-04180
310-1-G	38.5	19.0	19.0	10.0	135.0	62.0	3.0	1.8	61.0	VG 95343 T08 D 003 A	403-10180
311-1-G	55.5	25.5	27.0	12.5	192.0	89.0	4.5	3.1	88.9	VG 95343 T08 D 004 A	403-11180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

4-Way Outlet Shapes, VG style

Helashrink 400 Series

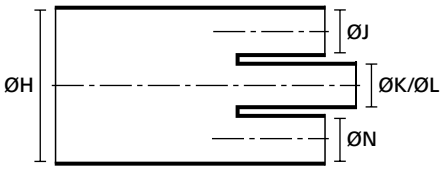
Features and benefits

- All outlets clearly marked to aid orientation during installation
- Cable strain relief and mechanical protection at harness transition points

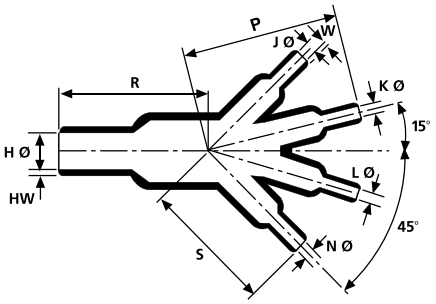


442-1 supplied / fully recovered.

For Material / Adhesive information please refer to page 272, 273.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ/K/L/N min. a	ØJ/K/L/N max. b	P ± 10%	R ± 10 %	HW ± 20 %	W ± 10 %	S nom	Designation as per VG-Norm	Article-No.
411-1-G	19.0	10.0	9.5	5.5	-	35.6	2.0	1.0	32.0	VG 95343 T08 E 002 A	404-11180
403-1-G	27.0	13.0	13.0	7.0	102.0	49.0	2.5	1.5	45.0	VG 95343 T08 E 004 A	404-03180
413-1-G	38.5	19.0	19.0	10.0	-	72.0	3.0	2.0	65.0	VG 95343 T08 E 005 A	404-13180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-287

Right-Angle Shapes, VG-Style

Helashrink 1100 Series, with rib

Features and benefits

- Used in conjunction with a circular grooved adaptor
- Provides strain relief and an environmental seal

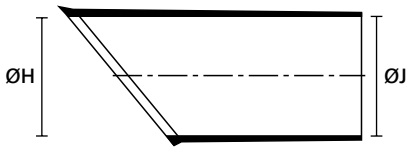


1152-4-G recovered on to a connector.

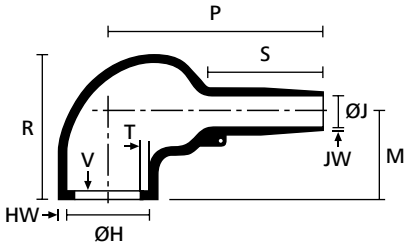
For Material / Adhesive information please refer to page 272, 273.



1155-4 supplied.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V max	T ± 20 %	M nom	S nom	Designation as per VG-Norm	Article-No.
1152-4-G	24.0	10.5	24.0	6.0	32.0	25.0	1.3	0.5	3.3	1.0	19.0	10.0	VG 95343 T06 E 001 A	411-52480
1154-4-G	30.0	14.5	30.0	6.0	41.0	27.0	1.5	0.8	3.3	1.0	19.0	12.0	VG 95343 T06 E 002 A	411-54480
1155-4-G	31.0	18.0	31.0	7.0	51.0	31.0	1.8	1.0	3.3	1.0	21.0	15.0	VG 95343 T06 E 003 A	411-55480
1156-4-G	36.0	22.5	36.0	8.5	59.0	38.0	1.8	1.0	3.3	1.0	26.0	15.0	VG 95343 T06 E 004 A	411-56480
1157-4-G	43.0	28.5	43.0	10.0	71.0	45.0	2.0	1.0	3.3	1.7	30.0	16.0	VG 95343 T06 E 005 A	411-57480
1158-4-G	60.0	35.0	60.0	16.0	-	54.0	3.3	1.5	3.3	1.7	35.0	30.0	VG 95343 T06 E 006 A	411-58480
1159-4-G	66.0	45.0	66.0	17.0	-	68.0	3.8	2.0	3.3	2.0	42.0	51.0	VG 95343 T06 E 007 A	411-59480
1160-4-G	82.0	61.0	82.0	25.0	-	84.0	4.0	4.0	3.3	2.0	52.0	39.0	VG 95343 T06 E 008 A	411-60480

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

DAN DVE VG

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-288

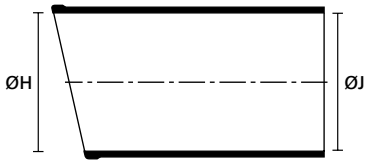
Date of issue: September 2022

Right-Angle Shapes, MIL style

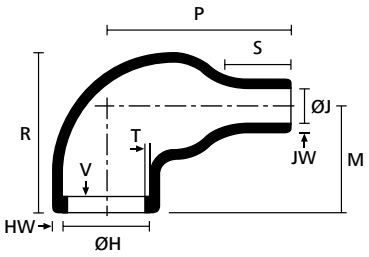
Helashrink 1100 Series, with rib

Features and benefits

- Used in conjunction with a circular grooved adaptor for strain relief



a: Expanded form (supplied)



b: Fully recovered form (after heating)



1108-4 supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 30 %	V max	T ± 20 %	M nom	S nom	Article-No.
1108-4-G	16.5	7.9	16.5	3.8	17.3	20.1	1.0	1.6	3.3	1.0	15.2	5.1	411-08480

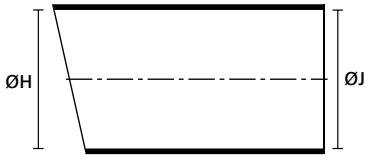
All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Right-Angle Shapes

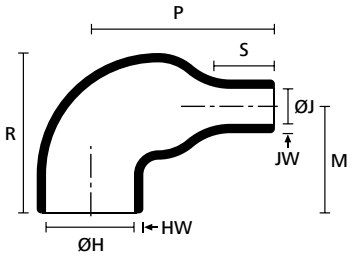
Helashrink 1100 Series, without rib

Features and benefits

- Strain relief for connector cable
- Easy re-entry for repair when combined with hot melt adhesive



a: Expanded form (supplied)



b: Fully recovered form (after heating)



1108-1 supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 30 %	M nom	S nom	Article-No.
1108-1-G	16.5	7.9	16.5	2.5	18.3	20.1	1.0	1.6	15.2	5.1	411-08180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Add items to your watchlist!
www.HT.click/49-289

Right-Angle Shapes, VG style/MIL style

Helashrink 1100 Series, with rib, low profile

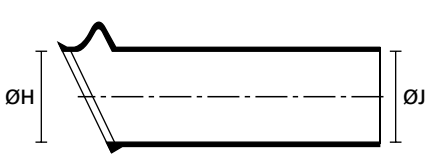
Features and benefits

- Lightweight, low profile, compact strain relief and mechanical protection
- Typically used on airborne harnesses

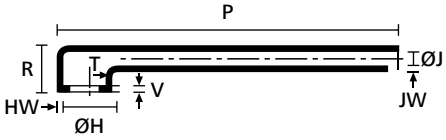
For Material / Adhesive information please refer to page 272, 273.



1123-1-G Supplied and recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 30 %	T ± 10 %	V ± 10 %	Designation as per VG-Norm	Article-No.
1121-1-G	22.0	12.0	22.0	6.5	70.0	19.0	1.5	1.1	1.0	3.0	VG 95343 T06 F 001 A	411-21180
1122-1-G	25.5	15.0	25.5	7.5	79.0	20.0	1.5	1.1	1.0	3.0	VG 95343 T06 F 002 A	411-22180
1123-1-G	29.0	19.0	29.0	8.5	89.0	21.0	1.8	1.1	1.0	3.0	VG 95343 T06 F 003 A	411-23180
1124-1-G	34.0	23.0	34.0	10.0	102.0	22.0	1.8	1.1	1.0	3.0	VG 95343 T06 F 004 A	411-24180
1125-1-G	37.0	30.0	37.0	11.0	108.0	24.0	2.0	1.1	1.7	3.0	VG 95343 T06 F 005 A	411-25180
1126-1-G	43.5	34.0	43.5	12.0	121.0	27.0	2.0	1.1	1.7	3.0	VG 95343 T06 F 006 A	411-26180
1127-1-G	50.0	41.5	50.0	14.5	132.0	30.0	2.3	1.4	1.7	3.0	VG 95343 T06 F 007 A	411-27180
1128-1-G	62.5	47.0	62.5	1.0	133.0	33.0	2.5	1.4	2.0	3.0	VG 95343 T06 F 008 A	411-28180
1129-1-G	69.0	60.0	69.0	20.0	137.0	35.0	2.5	1.4	2.0	3.0	VG 95343 T06 F 009 A	411-29180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Right-Angle Shapes, VG style

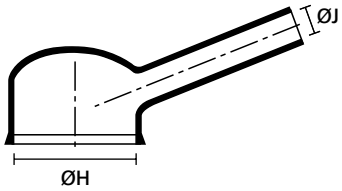
Helashrink 1100 Series, with rib, low profile, high ratio

Features and benefits

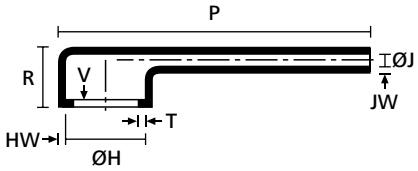
- Use in applications of partially loaded connectors with small cable diameters
- Tail design for easy orientation prior to cooling
- Strain relief for connector cable



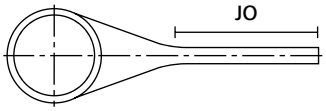
1135-1-G Supplied and recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)



Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	JO ± 10 %	V max	T ± 20 %	Designation as per VG-Norm	Article-No.
1133-1-G	19.0	13.0	6.0	2.0	45.0	16.0	1.5	1.1	21.8	3.3	1.0	VG 95343 T06 F 011 A	411-33180
1134-1-G	26.0	19.0	7.5	2.5	67.0	18.0	1.8	1.1	29.2	3.3	1.0	VG 95343 T06 F 012 A	411-34180
1135-1-G	34.0	26.0	9.5	3.0	81.0	19.0	1.8	1.1	35.3	3.3	1.0	VG 95343 T06 F 013 A	411-35180
1136-1-G	43.5	34.0	11.5	3.5	116.0	21.0	1.8	1.1	47.0	3.3	1.7	VG 95343 T06 F 014 A	411-36180

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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T-Shapes, VG style/MIL style

Helashrink 1200 Series

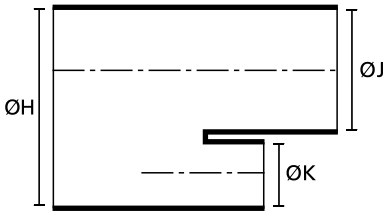
Features and benefits

- Strain relief, sealing and mechanical protection on cable harnesses

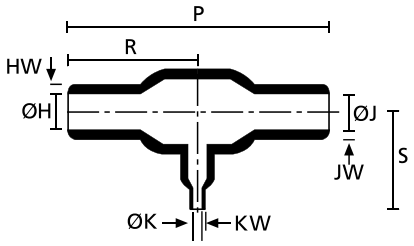
For Material / Adhesive information please refer to page 272, 273.



1202-1-G recovered onto a cable harness.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH/J min. a	ØH/J max. b	ØK min. a	ØK max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 30 %	KW ± 20 %	S ± 10 %	Designation as per VG-Norm	Article-No.
1206-1-G	6.5	3.5	6.5	3.5	30.0	15.0	1.0	1.0	1.0	15.0	VG 95343 T08 A 009 A	412-06180
1203-1-G	13.0	6.0	6.5	3.0	52.0	26.0	1.5	1.5	1.0	19.3	VG 95343 T08 A 001 A	412-03180
1202-1-G	13.0	7.0	13.0	7.0	59.0	29.5	1.5	1.5	1.5	29.2	VG 95343 T08 A 010 A	412-02180
1205-1-G	17.5	9.0	7.5	4.0	51.0	25.5	1.5	1.5	1.0	25.5	-	412-05180
1201-1-G	17.5	9.0	10.0	5.0	47.0	23.5	1.5	1.5	1.0	23.5	VG 95343 T08 A 007 A	412-01180
1207-1-G	27.0	12.4	27.0	13.5	120.0	60.0	2.5	2.5	2.5	59.9	VG 95343 T08 A 011 A	412-07180
1209-1-G	27.0	13.0	13.0	6.0	108.0	54.0	2.5	2.5	1.5	38.6	VG 95343 T08 A 002 A	412-09180

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-292

Date of issue: September 2022

T-Shapes, VG-Style

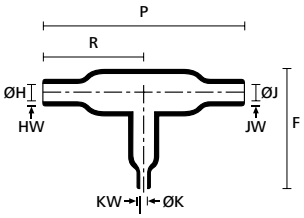
Helashrink 1200 Series, off-set

Features and benefits

- For strain relief, sealing and mechanical protection
- Use adhesive for cable transition on harness, if environmental sealing is required



a: Expanded form (supplied)



b: Fully recovered form (after heating)



1204-1 supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	ØK min. a	ØK max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	KW ± 20 %	F ± 15%	Designation as per VG-Norm	Article-No.
1204-1-G	13.0	7.5	6.5	4.0	6.5	4.0	56.0	33.0	1.5	1.0	1.0	27.0	VG 95343 T08 A 016 A	412-04180
1216-1-G	33.0	13.0	16.5	6.5	16.5	6.5	97.0	54.0	2.5	1.5	1.5	-	VG 95343 T08 A 017 A	412-16180

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Angled T-Shapes, VG style

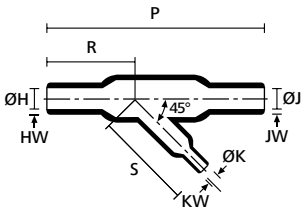
Helashrink 1300 Series, 30° & 45° angle

Features and benefits

- Strain relief, sealing and mechanical protection on cable harnesses
- Branching part 30° & 45° Y-joint
- Mechanical strain relief for cable harnesses



a: Expanded form (supplied)



b: Fully recovered form (after heating)



1303-1-G supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	ØK min. a	ØK max. b	P ± 10%	R ± 10 %	HW ± 30 %	JW ± 30 %	KW ± 20 %	S ± 10 %	Angle	Designation as per VG-Norm	Article-No.
1306-1-G	13.0	6.0	6.5	3.0	6.5	3.0	45.0	23.0	1.5	1.0	1.0	21.5	45°	VG 95343 T06 B 010 A	413-06180
1301-1-G	13.0	7.0	13.0	7.0	7.0	3.5	50.0	23.0	1.5	1.5	1.0	23.0	45°	VG 95343 T08 B 001 A	413-01180
1302-1-G	27.0	13.0	27.0	13.0	7.0	3.5	92.0	41.0	2.5	2.5	1.0	36.0	45°	VG 95343 T08 B 004 A	413-02180
1303-1-G	27.0	14.0	27.0	14.0	13.0	7.5	145.0	70.0	2.5	2.5	1.5	54.0	45°	VG 95343 T08 B 002 A	413-03180
1311-1-G	30.4	15.2	30.4	15.2	20.3	10.2	82.6	31.8	2.5	2.5	1.8	50.8	30°	VG 95343 T08 B 003 A	413-11180

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-293

Angle Shapes

Helashrink 1800 Series, with rib, 30°, 45°, 60° angle

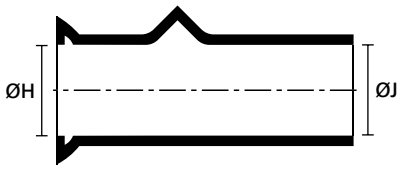
Features and benefits

- Provides strain relief and mechanical protection for harness systems
- Use in conjunction with a circular grooved adaptor

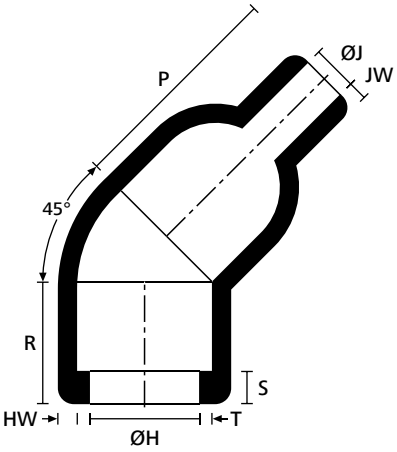
For Material / Adhesive information please refer to page 272, 273.



1821-42 supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	Angle	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	S ± 10 %	T ± 10 %	Article-No.
1830-4-G	30°	31.0	17.9	31.0	7.0	55.0	35.0	1.8	1.8	-	2.0	418-30003
1820-4-G	30°	36.0	21.4	36.0	8.3	46.0	26.0	1.8	1.0	26.0	8.6	418-20001
1821-42-G	45°	20.0	14.2	20.0	4.1	24.0	10.0	2.3	1.8	3.0	1.1	418-21013
1803-4-G	45°	24.0	17.8	12.0	5.6	28.0	14.0	2.8	2.3	3.0	1.0	418-03005
1807-4-G	45°	35.6	18.0	35.6	7.4	43.2	10.2	1.8	1.8	3.0	1.0	418-07003
1831-4-G	45°	36.0	22.1	36.0	8.4	60.0	40.0	2.0	2.0	-	2.0	418-31001
1805-4-G	45°	40.0	18.8	40.0	7.0	28.0	11.0	1.5	1.5	3.0	1.0	418-05003
1806-4-G	45°	42.6	27.9	42.6	9.7	85.0	17.8	2.0	2.0	3.0	1.7	418-06002
1832-4-G	45°	43.0	27.9	43.0	9.9	65.0	45.0	2.2	2.2	-	2.0	418-32000
1819-4-G	60°	43.0	28.2	43.0	9.9	55.0	18.0	2.0	1.0	18.0	3.0	418-19001
1817-4-G	60°	60.0	33.7	60.0	14.8	65.0	32.0	2.0	1.0	32.0	3.0	418-17001

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-294

Angle Shapes

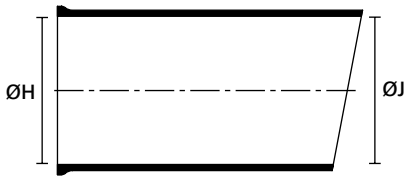
Helashrink 1800 Series, with rib, 45°angle

Features and benefits

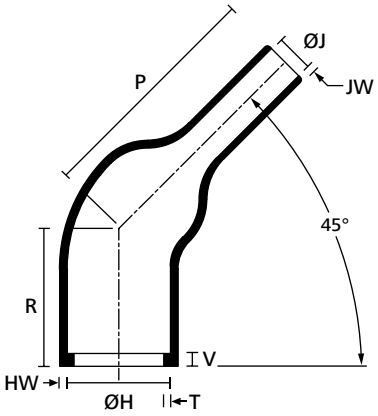
- Provides strain relief and mechanical protection for harness systems
- Use in conjunction with a circular grooved adaptor



1837-4 supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R nom	HW ± 20 %	JW ± 30 %	V max	T ± 20 %	Article-No.
1834-4-G	10.0	6.6	10.0	2.0	14.2	15.2	1.0	0.6	1.5	0.6	418-34001
1835-4-G	17.0	7.6	17.0	3.5	15.7	16.3	1.0	0.6	1.5	0.6	418-35001
1836-4-G	24.0	9.9	24.0	4.0	19.0	12.7	1.0	0.6	1.5	0.6	418-36001
1837-4-G	30.0	13.9	30.0	5.8	29.9	19.0	1.0	0.6	1.5	0.6	418-37001

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Add items to your watchlist!
www.HT.click/49-295

Angle Shapes

Helashrink 1800 Series, with rib, 45°angle

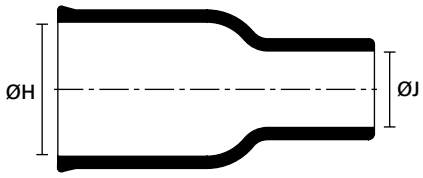
Features and benefits

- Provides strain relief and mechanical protection for harness systems
- Use in conjunction with a circular grooved adaptor
- For use in elevated temperature scenarios

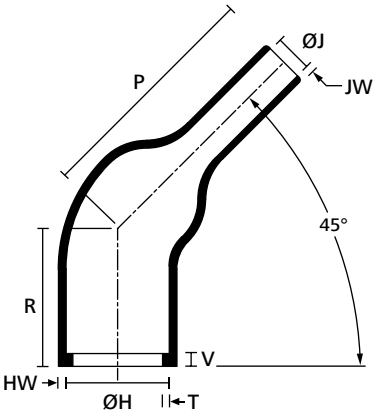
For Material / Adhesive information please refer to page 272, 273.



1837-5 supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R nom	HW ± 20 %	JW ± 30 %	V max	T ± 20 %	Article-No.
1834-5-L	10.0	6.6	4.0	2.0	14.2	15.2	1.0	0.6	1.5	0.6	418-34002
1835-5-L	15.0	7.6	7.0	3.5	15.7	16.3	1.0	0.6	1.5	0.6	418-35002
1836-5-L	19.0	9.9	8.0	4.0	19.0	12.7	1.0	0.6	1.5	0.6	418-36002
1837-5-L	27.0	13.9	11.0	5.8	29.9	19.0	1.0	0.6	1.5	0.6	418-37002

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-296

2-Way Outlet Shapes, Breakout Boots

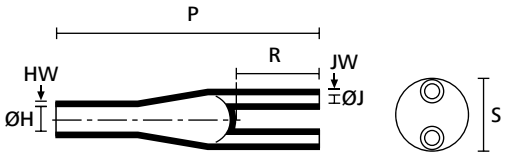
Helashrink 200 Series, in line, low voltage

Features and benefits

- Easy, time-saving insulation of cable branch point where it splits into single wires
- Adhesive is applied to relieve mechanical tension in cable harnesses



a: Expanded form (supplied)



b: Fully recovered form (after heating)



223-2 supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	S nom	Article-No.
216-3-B8W	21.0	9.4	9.0	2.8	76.5	20.0	1.6	1.6	14.0	402-16039
223-2-B8W	33.0	9.4	17.5	4.1	94.0	30.0	1.5	1.2	20.0	402-23058
218-2-B8W	49.0	22.9	20.0	7.6	119.0	34.0	3.2	3.2	30.0	402-18051

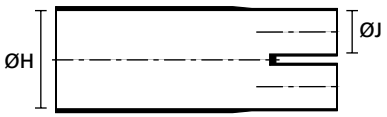
All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

4-Way Outlet Shapes, Breakout Boots

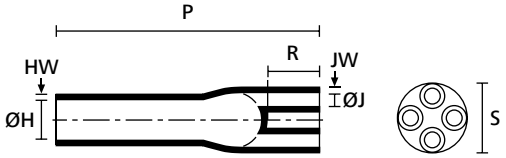
Helashrink 400 Series, in line, low voltage

Features and benefits

- Easy, time-saving insulation of cable branch point where it splits into single wires
- Made of tough, cross-linked, Polyolefin
- Adhesive is applied to relieve mechanical tension in cable harnesses



a: Expanded form (supplied)



b: Fully recovered form (after heating)



400 series supplied / fully recovered.

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	S nom	Article-No.
442-1-B8WM250	28.0	9.0	9.0	1.8	78.0	17.0	2.7	2.0	20.0	404-42009
408-2-B8W2	35.0	12.0	15.0	3.0	95.0	24.0	2.5	2.0	22.0	404-08022
418-4-B8W2	60.0	22.9	30.0	6.4	202.0	38.1	4.1	3.3	38.1	404-18020

All dimensions in mm. Subject to technical changes. For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-297

5-Way Outlet Shapes, Breakout Boots

Helashrink 500 Series, in line, low voltage

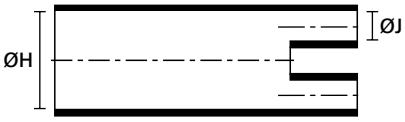
Features and benefits

- Cable breakout boots for insulating and sealing cable crotch or conduit system
- Excellent resistance to abrasion and weathering

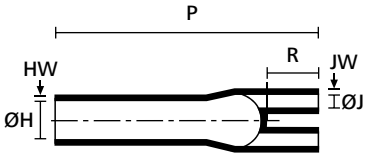
For Material / Adhesive information please refer to page 272, 273.



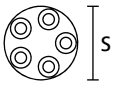
500 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)



Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	S nom	Article-No.
508-5-B8W	41.9	24.5	16.9	7.5	180.0	30.0	3.5	3.0	48.0	405-08049

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-298

Locating Bushes

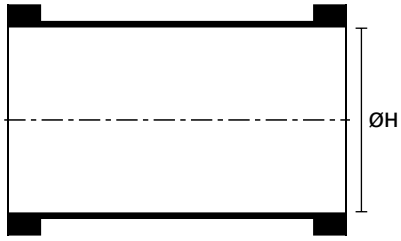
Helashrink 1760, 1790, 1820 Series

Features and benefits

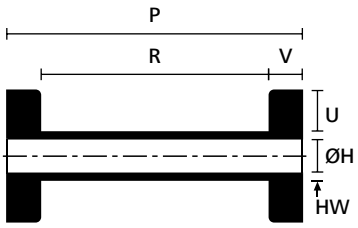
- Provides location, cushioning, shimming and protection on cable runs through bulk head or enclosure entry points
- Available in a range of materials and adhesives for most applications.
- Designed for use on aerospace engine applications



1793-1 supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

TYPE	ØH min. a	ØH max. b	P ± 10%	R ± 10 %	HW ± 20 %	V ± 10 %	U ± 20%	Article-No.
1822-1-G	12.0	5.9	30.0	24.0	6.1	3.0	2.0	418-22001
1796-1-G	15.0	6.4	29.0	24.0	1.5	2.5	2.0	417-96001
1823-1-G	16.0	7.8	32.0	24.0	6.2	4.0	2.0	418-23001
1793-1-G	20.0	9.5	35.0	25.0	1.5	5.0	3.0	417-93001
1795-1-G	26.0	12.7	35.0	25.0	2.0	5.0	3.0	417-95001
1794-1-L	30.0	18.0	35.0	25.0	2.0	5.0	3.0	417-94002

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Add items to your watchlist!
www.HT.click/49-299

Pinched End Caps

Helashrink PEC Series, low voltage

Pinched End Caps can be used for mechanical and environmental protection of stub splices in electrical harnesses. Due to the fast and easy installation, these caps can be used for non-electrical applications as well.

Features and benefits

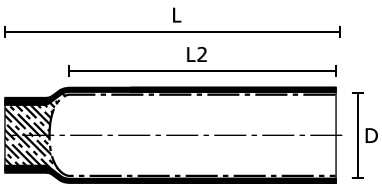
- Small size End Caps
- Fast and easy application
- With Inner adhesive layer for moisture sealing
- 3:1 shrink ratio
- Different diameters for wide application range
- Other lengths available on request



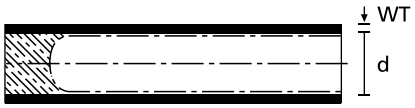
The appropriate end cap for every cable diameter, and cable types.

MATERIAL	Polyolefin, cross-linked (PO-X)
Colour	Black (BK)
Shrink Ratio	3:1
Min. Shrink Temperature	+120 °C
Operating Temperature	-45 °C to +125 °C
Dielectric Strength	15 kV/mm
Flammability	self-extinguishing in 30 seconds according to SAE-AMS-DTL-23053/4

RoHS



PEC-Series expanded



PEC-Series recovered

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Length (L2)	Pack Cont.	Article-No.
PEC-3/1	3.0	1.0	1.00	25.0	20.0	50 pcs.	416-00000
PEC-4.8/1.5	4.8	1.5	1.00	30.0	25.0	50 pcs.	416-00003
PEC-6/2	6.0	2.0	1.00	30.0	25.0	50 pcs.	416-00001
PEC-9/3	9.0	3.0	1.40	35.0	27.0	50 pcs.	416-00002

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-300

End Caps

Helashrink 1600 Series, low voltage

End caps are suitable for use on both polymeric and paper insulated, lead jacketed cables which may include aluminium or steel armouring.

Features and benefits

- Seal cables during storage or transportation
- Insulating cap for live LV cables (0.6/1kV)
- Adhesive lining for excellent environmental seal
- High shrink ratio to minimise number of sizes needed
- Can be fitted with air valves for pressurised cable applications
- High shrink ratio to minimise number of sizes needed

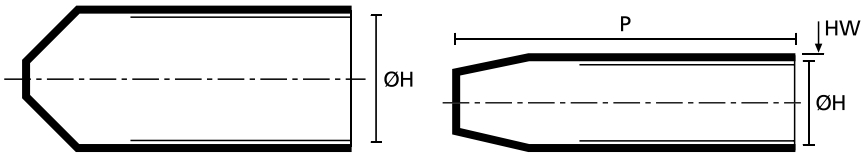


The appropriate end cap for every cable diameter, and cable types.

For Material / Adhesive information please refer to page 272, 273.

MATERIAL	Polyolefin, cross-linked (PO-X)
Colour	Black (BK)
Flexibility	Semi rigid
Shrink Ratio	up to 3:1
Min. Shrink Temperature	+135 °C
Operating Temperature	-55 °C to +80 °C
Dielectric Strength	15 kV/mm
Flammability	ASTM D635

RoHS



a: Expanded form (supplied)

b: Fully recovered form (after heating)

TYPE	Bundle Ø min.	Bundle Ø max.	ØH min. a	ØH max. b	P ± 10%	HW ± 20 %	Article-No.
1612-1-B5W2	4.0	8.0	12.0	4.0	40.0	2.6	416-12046
1613-1-B5W2	6.5	16.0	20.0	6.0	55.0	2.8	416-13060
1602-1-B5W2	10.0	20.0	25.0	8.5	65.0	2.8	416-02008
1614-1-B5W2	16.0	32.0	40.0	15.0	75.0	3.3	416-14047
1615-1-B5W2	26.0	51.0	62.0	23.0	132.0	3.8	416-15035
1617-1-B5W2	32.0	61.0	75.0	32.0	140.0	4.0	416-17033
1616-1-B5W2	48.0	80.0	105.0	45.0	135.0	4.0	416-16053
1609-1-B5W2	65.0	110.0	120.0	60.0	150.0	4.2	416-09000
1610-1-B5W2	90.0	135.0	160.0	82.0	135.0	4.5	416-10000

All dimensions in mm. Subject to technical changes.
For these moulded shapes a wide range of material / adhesive combinations are available. Please refer to the Moulded Shapes catalogue.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-301

Hot Melt Tape for Heat Shrinkable Tubing and Shapes

HMT200A

Designed for use with heat shrink sleeving and mouldings.

Features and benefits

- Hot melt tape flows when heated to seal against moisture
- For heat shrink tubing and mouldings

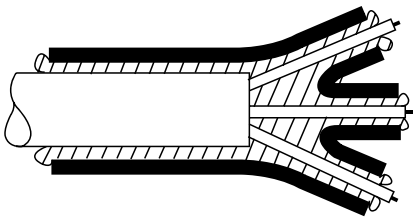


HMT200A-Tape.

www.HellermannTyton.co.uk/HMT200A-cat22



Adhesive tape HMT200A for sealing against humidity.



HMT200A

MATERIAL	Ethylenevinylacetate (EVA)
Operating Temperature	-55 °C to +105 °C

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Colour	Reel Length	Tools	Article-No.
HMT200A	0.25	25.0	Translucent (TT)	10 m	30;32	354-02260
	0.25	25.0	Translucent (TT)	50 m	30;32	354-02259

All dimensions in mm. Subject to technical changes.

Recommended Tools		
	30 H6100	32 CHG900
	566	565

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-302

Two-Component Adhesive for Heat Shrinkable Tubing and Shapes

V9500

Features and benefits

- High performance, two-part epoxy adhesive
- Very resistant to most solvents and fuels, even at elevated temperatures
- Two different packages available
- V9500 available in 10g bags for manual mixing
- Processing set: emery paper, small mixing bowl and wooden spatula
- High performance bonding
- Meets military requirements for heat shrinkable components for harnesses
- VG-approved



V9500 - VG 95343 approved 2K Epoxy Adhesive Kit.

www.HellermannTyton.co.uk/V9500-cat22



The V9500 applicator gun guarantees the clean and precise coating of special fittings.

MATERIAL	Epoxy resins (EP)
Colour	Black (BK)
Curing Temperature	+135 °C
Curing Time	24 hours at +25 °C, 2 hours at +85 °C
Operating Temperature	-75 °C to +150 °C

RoHS

TYPE	Description	Designation as per VG-Norm	Tools	Article-No.
V9500 Epoxy Kit	5 x 10g sachets (50g), 5 x mixing pots, 5 x mixing sticks, 5 x emery papers	VG 95343 T15 A001 A	30	627-95000
	1 x dual cartridge (50g), 5 x mixing pots, 5 x mixing sticks, 5 x emery papers	VG 95343 T15 A 002 B	30	627-95001
V9500 Epoxy Cartridge	Two-component adhesive cartridge	VG 95343 T15 D 002 B	30	627-95002
V9500 Applicator Gun	Applicator gun	VG 95343 T15 DA	-	627-95003
V9500 Applicator Nozzle	Mixing nozzle	VG 95343 T15 MA	-	627-95004

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	30 H6100
	566

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-303

Rubber Tubing, Chloroprene

The chloroprene tubings are ideally suited to rigorous environments such as automotive, aerospace, mass transit and defence markets.

As the material is highly elastic, it's original size can be expanded 500% on application and 200% in continuous use.

To save time and effort when fitting the tubing, try the HellermannTyton three prong tools and the Hellerine lubricant, which are specially designed for use with HellermannTyton chloroprene tubing.

Features and benefits

- Highly elastic, easy to fit chloroprene tubing
- Withstands up to 120 °C intermittent temperature
- Covers many cable diameters with one size
- Available in cut lengths



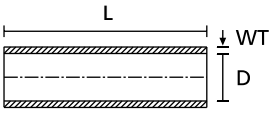
H rubber tubing is highly flexible and easy to apply.

MATERIAL	Chloroprene rubber (CR)
Operating Temperature	-65 °C to +95 °C, intermittent 120 °C
Flammability	UL 94 HB
Elongation at break	min. 500%

RoHS

Helsyn H





Chloroprene tubing

TYPE	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Reel Length	Pack Cont.	Colour	Tools	Article-No.
H12BKX100M	1.2	0.80	2.0	100 m	100 m	Black (BK)	35	608-01200
H15BKX100M	1.5	0.80	3.0	100 m	100 m	Black (BK)	35	608-01201
H25BKX100M	2.5	0.80	4.0	100 m	100 m	Black (BK)	36;39	608-01203
H30BKX100M	3.0	0.80	6.0	100 m	100 m	Black (BK)	36;39	608-01204
H40BKX100M	4.0	1.00	8.0	100 m	100 m	Black (BK)	36;39	608-01205
H50BKX100M	5.0	1.05	9.0	100 m	100 m	Black (BK)	36;39	608-01206
H75BKX25M	7.5	1.25	13.0	25 m	25 m	Black (BK)	37;39-40	608-01207

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



TYPE	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Length (L)	Pack Cont.	Colour	Tools	Article-No.
H12X20BK	1.2	0.80	2.0	20.0	1,000 pcs.	Black (BK)	35	600-02498
H15X20BK	1.5	0.80	3.0	20.0	1,000 pcs.	Black (BK)	35	600-02929
H25X25BK	2.5	0.80	4.0	25.0	1,000 pcs.	Black (BK)	36;39	600-02934
H30X25BK	3.0	0.80	6.0	25.0	1,000 pcs.	Black (BK)	36;39	600-02938
H40X30BK	4.0	1.00	8.0	30.0	500 pcs.	Black (BK)	36;39	600-02947
H50X25BK	5.0	1.05	9.0	25.0	500 pcs.	Black (BK)	36;39	600-02949
H75X30BK	7.5	1.25	13.0	30.0	250 pcs.	Black (BK)	37;39-40	600-02198

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

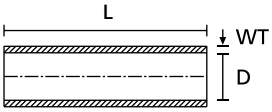
Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-304

Chloroprene tubing and grommets

Helsyn TH - thin wall





Chloroprene tubing

TYPE	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Reel Length	Colour	Tools	Article-No.
TH100BKX25M	10.0	1.00	20.0	25 m	Black (BK)	37;39-40	608-01208
TH120BKX25M	12.0	1.00	23.0	25 m	Black (BK)	38-39;41	608-01209
TH140BKX20M	14.0	1.10	25.0	20 m	Black (BK)	38-39;41	608-01210
TH170BKX20M	17.0	1.20	28.0	20 m	Black (BK)	38-39;41	608-01202

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



TYPE	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Length (L)	Pack Cont.	Colour	Tools	Article-No.
TH100X35BK	10.0	1.00	20.0	35.0	100 pcs.	Black (BK)	37;39-40	600-02493
TH120X50BK	12.0	1.00	23.0	50.0	100 pcs.	Black (BK)	38-39;41	600-02495
TH140X50BK	14.0	1.10	25.0	50.0	100 pcs.	Black (BK)	38-39;41	600-02496
TH170X50BK	17.0	1.20	28.0	50.0	100 pcs.	Black (BK)	38-39;41	600-02497

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools							
	35 NA0/1	36 NA1K/3	37 NA4/5	38 NA8/10	39 VA2.5/5	40 VA2.5/5+8	41 VA2.5/5+18
	565	565	565	565	566	566	566

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-305

Installation aid for tubing and grommets

Hellerine

Hellerine lubricant for tubing and grommets installations.

Features and benefits

- Effective aid for affixing elastomer sleeves
- Universally employable
- Evaporates after installation
- Consists of 99% vegetable oils
- Discoloration-free
- Offered in 250 ml bottle or in cans of 5 lt or 20 lt



Hellerine lubricant in 284ml plastic bottle.

TYPE	Description	Article-No.
HELLERINE 0.25 LITER	Hellerine assembly aid, 0.25 litre	625-00250
HELLERINE 5 LITER	Hellerine assembly aid, 5 litre	625-05000
HELLERINE 20 LITER	Hellerine assembly aid, 20 litre	625-06000

Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-306

HellermannTyton

Close for protection. Close to perfection.

The easy way to protect your cables. Our HelaGuard corrugated conduits offer flexible, abrasion resistant and durable protection for all your cabling needs. With a double-slit design, installing and retrofitting cables is complete in a matter of minutes, while a lateral opening provides easy access to your cables and allows you to stay flexible at all times. That's flexibility made simple.

www.HellermannTyton.co.uk/cable-protection

MADE FOR REAL®



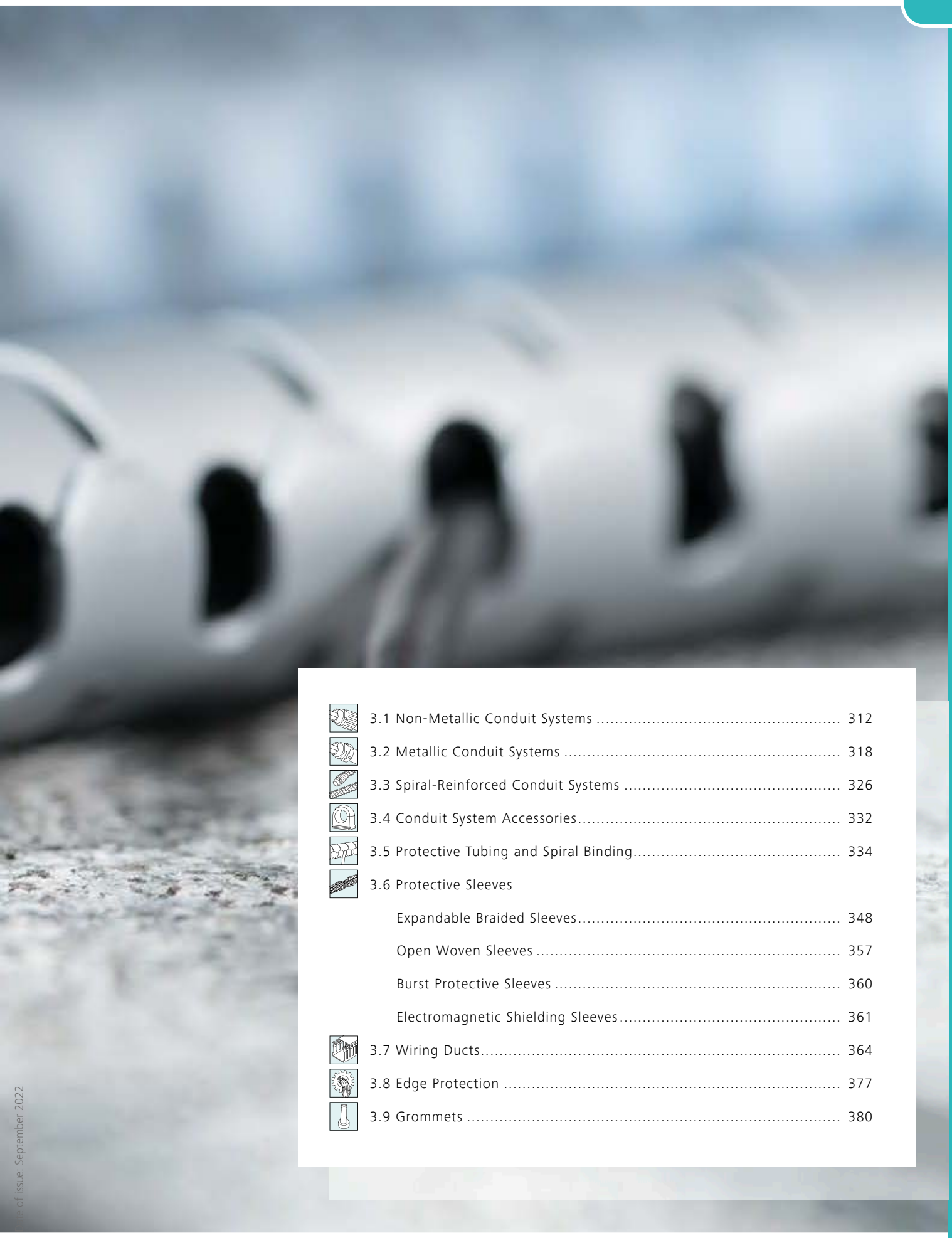
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Inspired by efficiency

Applying protective covers to cables and wiring can be time consuming – removing them for maintenance or modifications even more so. Reduction in the time needed to remove and reapply cable covers inspired us to develop Helawrap. This flexible cable-bundling solution is quick and easy to apply with a simple zipper-like action. Specially designed gaps in the overlapping cover mean installers can safely branch off cables at any point. Whether used in the office, factory, wind or solar installations, we ensure that all our cable protection solutions score highly on their usability and quality – and maximum efficiency.

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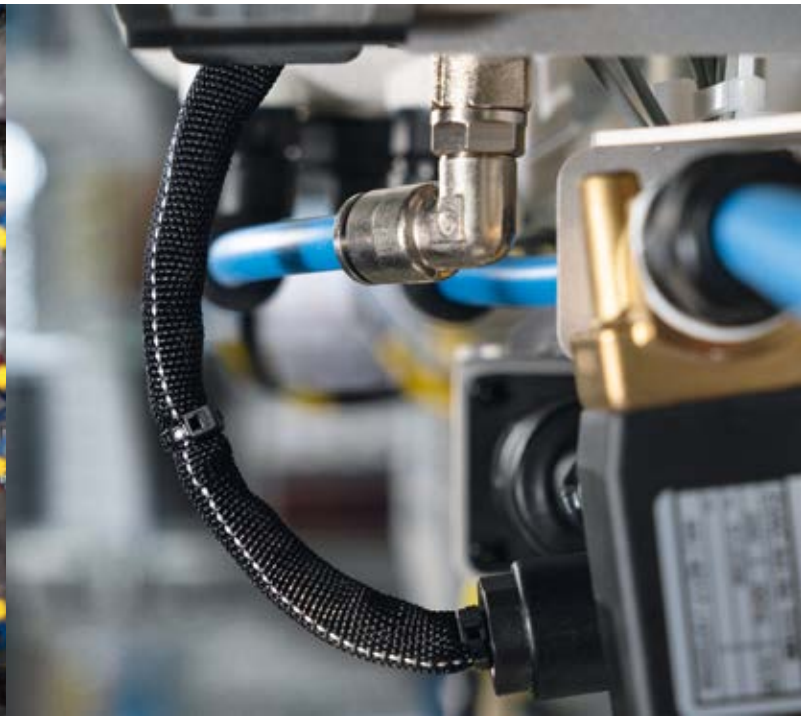
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3.4 Conduit System Accessories

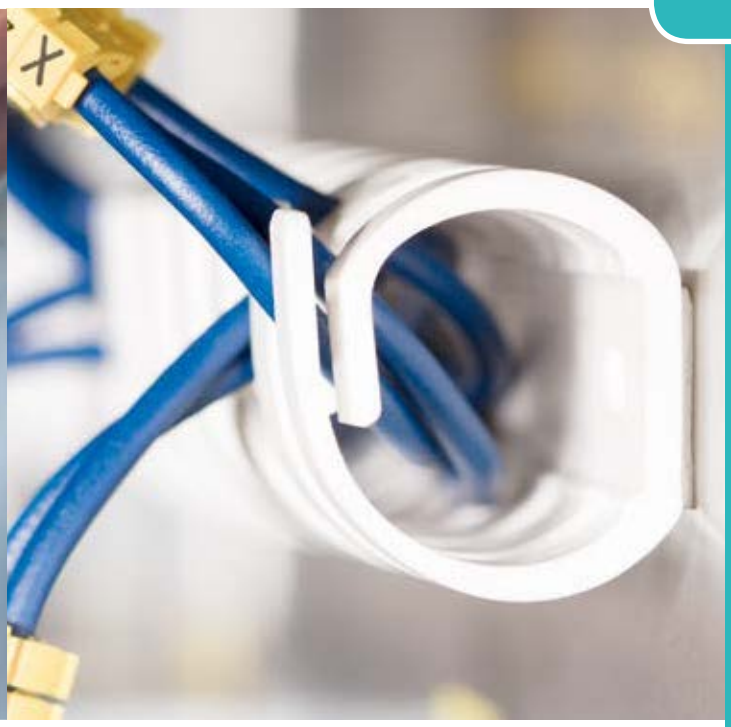
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Non-Metallic Conduits

HG-SW PA6 Standard Weight

Standard weight corrugated flexible conduit for industrial applications, including machine building, plant construction, control panels, public buildings.

Features and benefits

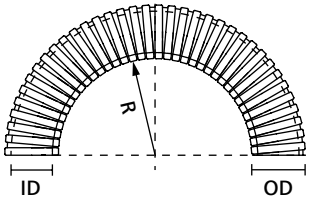
- Very flexible and high fatigue life
- Very abrasion resistant
- High impact strength, recovers if crushed
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Self-extinguishing according to UL94 V2
- Colour: black, grey on request



HelaGuard PA6 Standard for industrial applications.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard non-metallic conduit

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-SW10	10	7.5	10.0	6.3	15	19 g/m	50 m	Black (BK)	166-11100
HG-SW11	11	8.5	11.5	8.2	20	22 g/m	50 m	Black (BK)	166-11101
HG-SW13	13	10	13.0	9.8	25	28 g/m	50 m	Black (BK)	166-11102
HG-SW16	16	12	15.8	11.8	35	38 g/m	25 m	Black (BK)	166-11110
	16	12	15.8	11.8	35	38 g/m	50 m	Black (BK)	166-11103
HG-SW21	21	17	21.2	16.7	45	60 g/m	25 m	Black (BK)	166-11111
	21	17	21.2	16.7	45	60 g/m	50 m	Black (BK)	166-11104
HG-SW28	28	23	28.5	22.8	50	100 g/m	25 m	Black (BK)	166-11105
	28	23	28.5	22.8	50	100 g/m	50 m	Black (BK)	166-11112
HG-SW34	34	29	34.5	28.1	60	135 g/m	25 m	Black (BK)	166-11106
	34	29	34.5	28.1	60	135 g/m	50 m	Black (BK)	166-11118
HG-SW42	42	36	42.5	35.5	70	165 g/m	25 m	Black (BK)	166-11113
HG-SW54	54	48	54.5	47.2	80	235 g/m	25 m	Black (BK)	166-11114
HG-SW67	67	56	67.2	56.3	130	365 g/m	10 m	Black (BK)	166-11109

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-312

Date of issue: September 2022

Non-Metallic Conduits

HG-LW PA6 Light Weight

Light weight corrugated flexible conduit for machine building, plant construction, control panels and public buildings.

Features and benefits

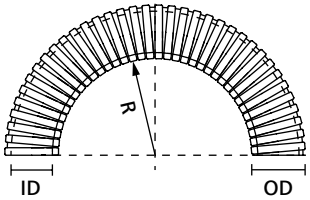
- Light weight
- Very flexible and high fatigue life
- Small bending radius
- High impact strength and recovers if crushed
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Colour: black; grey (RAL 7031) on request



HelaGuard PA6 Light is very flexible and can be used in moving applications.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	self-extinguishing according to EN IEC 61386

HF ✓ RoHS ✓



HelaGuard non-metallic conduit

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-LW10	10	7.5	10.0	6.5	15	18 g/m	50 m	Black (BK)	166-11200
HG-LW11	11	8.5	11.5	8.3	20	22 g/m	50 m	Black (BK)	166-11201
HG-LW13	13	10	13.0	10.0	25	24 g/m	50 m	Black (BK)	166-11202
HG-LW16	16	12	15.8	12.0	35	36 g/m	50 m	Black (BK)	166-11203
HG-LW21	21	17	21.2	16.9	40	56 g/m	50 m	Black (BK)	166-11204
HG-LW28	28	23	28.5	23.0	45	90 g/m	50 m	Black (BK)	166-11205
HG-LW34	34	29	34.5	28.3	55	110 g/m	50 m	Black (BK)	166-11206
HG-LW42	42	36	42.5	35.7	65	150 g/m	25 m	Black (BK)	166-11207
HG-LW54	54	48	54.5	47.4	80	200 g/m	25 m	Black (BK)	166-11208
HG-LW67	67	56	67.2	56.5	110	310 g/m	10 m	Black (BK)	166-11209

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-313

Non-Metallic Conduits

HG-FR PA6 Flame Retardant

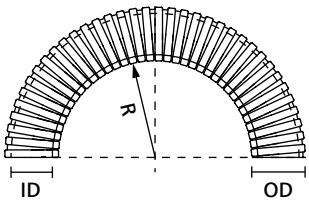
Flame-retardant standard weight corrugated flexible conduit is used where high fire-protection is required, including railway vehicles, tunnels and underground stations as well as public buildings.

Features and benefits

- Highly flame retardant (UL94 V0)
- Low smoke, low toxicity
- Very flexible and high fatigue life
- High impact strength, recovers if crushed
- Abrasion resistant
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Colour: black



Public buildings often require HelaGuard PA6 Flame Retardant due to its high fire protection properties.



HelaGuard non-metallic conduit

MATERIAL	Polyamide 6, flame retardant (PA6FR)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ RoHS ✓

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-FR10	10	7.5	10.0	6.3	15	19 g/m	50 m	Black (BK)	166-11400
HG-FR13	13	10	13.0	9.8	25	28 g/m	50 m	Black (BK)	166-11401
HG-FR16	16	12	15.8	11.8	35	38 g/m	50 m	Black (BK)	166-11402
HG-FR21	21	17	21.2	16.7	45	60 g/m	50 m	Black (BK)	166-11403
HG-FR28	28	23	28.5	21.7	50	100 g/m	50 m	Black (BK)	166-11404
HG-FR34	34	29	34.5	28.1	60	135 g/m	50 m	Black (BK)	166-11405
HG-FR42	42	36	42.5	35.5	70	165 g/m	25 m	Black (BK)	166-11406
HG-FR54	54	48	54.5	47.2	80	235 g/m	25 m	Black (BK)	166-11407

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

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www.HT.click/49-314

Date of issue: September 2022

Non-Metallic Conduits

HG-DC Double Slit

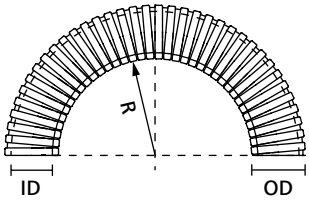
Double slit corrugated conduit for retrofitting is used in control panels, machine building, plant construction.

Features and benefits

- Can be opened and closed repeatedly
- Cables can be inserted laterally
- Abrasion resistant
- Free of halogen, sulphur and phosphorus
- Self-extinguishing to IEC 61386
- Colour: black



HelaGuard HG-DC double slit conduit.



HelaGuard non-metallic conduit

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-DC11	11	8.5	11.5	6.2	45	37 g/m	50 m	Black (BK)	166-11800
HG-DC13	13	10	12.9	7.9	55	46 g/m	50 m	Black (BK)	166-11801
HG-DC16	16	12	16.2	10.3	60	72 g/m	50 m	Black (BK)	166-11802
HG-DC21	21	17	21.0	13.7	90	110 g/m	50 m	Black (BK)	166-11803
HG-DC28	28	23	28.4	19.8	105	166 g/m	50 m	Black (BK)	166-11804
HG-DC34	34	29	34.2	26.6	150	180 g/m	25 m	Black (BK)	166-11805
HG-DC42	42	36	43.5	32.3	170	293 g/m	25 m	Black (BK)	166-11806
HG-DC54	54	48	53.3	44.0	170	400 g/m	25 m	Black (BK)	166-11807

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

www.HellermannTyton.co.uk/HG-Brochure-cat22

For more information on our complete HelaGuard range of conduits and fittings, please see our HelaGuard catalogue.



Add items to your watchlist!
www.HT.click/49-315

Fittings with fixed external thread

HG-S Straight, IP66

Straight external thread.

Features and benefits

- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts

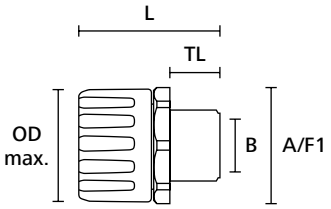
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard HG-S Straight, IP66.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG10-S-M12	10	M12	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21000
HG10-S-M16	10	M16	9.5	19	35	19	11	10 pcs.	Black (BK)	166-21020
HG11-S-M12	11	M12	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21021
HG13-S-M12	13	M12	7.5	24	35	23	9	10 pcs.	Black (BK)	166-21022
HG13-S-M16	13	M16	11.0	24	37	23	11	10 pcs.	Black (BK)	166-21001
HG13-S-M20	13	M20	12.5	24	40	23	14	10 pcs.	Black (BK)	166-21023
HG16-S-M16	16	M16	11.0	29	41	28	11	10 pcs.	Black (BK)	166-21002
HG16-S-M20	16	M20	14.5	29	34	28	14	10 pcs.	Black (BK)	166-21003
HG20-S-M20	20	M20	14.5	32	44	30	14	10 pcs.	Black (BK)	166-21025
HG21-S-M20	21	M20	14.5	32	44	30	14	10 pcs.	Black (BK)	166-21004
HG25-S-M25	25	M25	19.5	39	49	37	15	10 pcs.	Black (BK)	166-21026
HG28-S-M25	28	M25	19.5	44	49	42	15	10 pcs.	Black (BK)	166-21005
HG28-S-M32	28	M32	26.5	44	50	42	16	10 pcs.	Black (BK)	166-21027
HG34-S-M32	34	M32	26.5	51	53	49	16	10 pcs.	Black (BK)	166-21006
HG34-S-M40	34	M40	32.5	51	53	49	16	10 pcs.	Black (BK)	166-21028
HG42-S-M40	42	M40	32.5	63	60	60	16	2 pcs.	Black (BK)	166-21007
HG42-S-M50	42	M50	40.5	63	60	60	16	2 pcs.	Black (BK)	166-21029
HG54-S-M50	54	M50	42.0	76	65	73	16	2 pcs.	Black (BK)	166-21008
HG54-S-M63	54	M63	53.0	76	65	73	16	2 pcs.	Black (BK)	166-21030
HG67-S-M63	67	M63	56.0	90	70	87	16	1 pc.	Black (BK)	166-21009

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-316

Date of issue: September 2022

Fittings with fixed external thread

HG-90 90° Elbow, IP66

90° elbow external thread.

Features and benefits

- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts

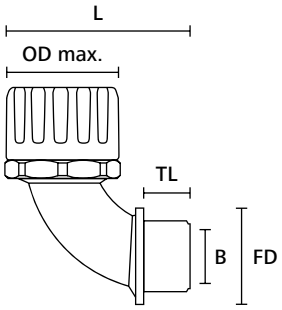
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard HG-90 90° Elbow, IP66.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard fitting, 90° with fixed internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG10-90-M12	10	M12	6.5	19	32	17	8	10 pcs.	Black (BK)	166-22200
HG11-90-M12	11	M12	6.5	19	32	17	8	10 pcs.	Black (BK)	166-22220
HG13-90-M16	13	M16	10.5	24	46	22	11	10 pcs.	Black (BK)	166-22201
HG16-90-M16	16	M16	10.5	29	49	22	11	10 pcs.	Black (BK)	166-22202
HG16-90-M20	16	M20	14.0	29	51	27	13	10 pcs.	Black (BK)	166-22203
HG21-90-M20	21	M20	14.0	32	53	27	13	10 pcs.	Black (BK)	166-22204
HG25-90-M25	25	M25	19.0	39	63	32	15	10 pcs.	Black (BK)	166-22222
HG28-90-M25	28	M25	19.0	44	66	32	15	10 pcs.	Black (BK)	166-22205
HG34-90-M32	34	M32	24.5	51	75	40	16	10 pcs.	Black (BK)	166-22206
HG42-90-M40	42	M40	32.5	63	98	50	16	2 pcs.	Black (BK)	166-22207
HG42-90-M50	42	M50	39.0	63	99	60	16	2 pcs.	Black (BK)	166-22223
HG54-90-M50	54	M50	39.0	76	104	60	16	2 pcs.	Black (BK)	166-22208
HG54-90-M63	54	M63	49.5	76	104	72	16	2 pcs.	Black (BK)	166-22224
HG67-90-M63	67	M63	49.5	90	120	72	16	1 pc.	Black (BK)	166-22209

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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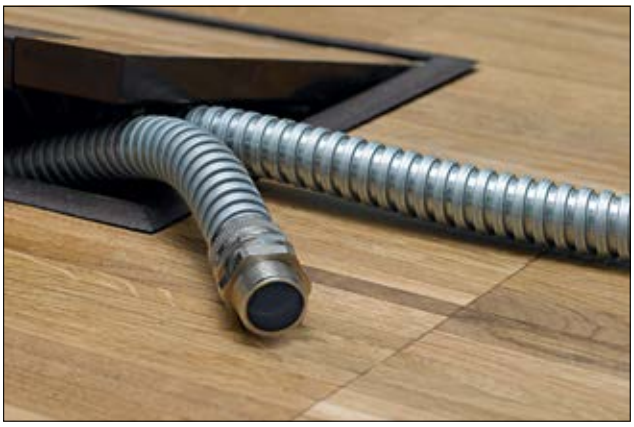
Metallic conduits

SC Galvanised Steel Conduit

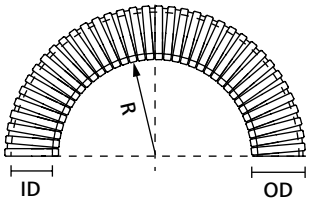
General purpose flexible steel conduit offers high mechanical protection and is typically used in machines, plants, underfloor wiring, data cabling and protection of hydraulic or pneumatic hoses.

Features and benefits

- High compression, tensile and impact strength
- Very flexible



HelaGuard SC Galvanised Steel Conduit.



HelaGuard metallic conduit

MATERIAL	Galvanised Steel (GS)
Operating Temperature	-100 °C to +300 °C

HF ✓ RoHS ✓

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
SC10	10	9.1	6.8	25	110 g/m	50 m	Metal (ML)	166-30100
SC12	12	13.2	10.0	30	113 g/m	50 m	Metal (ML)	166-30101
SC16	16	16.4	12.9	40	152 g/m	25 m	Metal (ML)	166-30102
SC20	20	20.6	16.9	45	295 g/m	25 m	Metal (ML)	166-30103
SC25	25	24.6	21.1	55	321 g/m	25 m	Metal (ML)	166-30104
SC32	32	32.0	28.1	70	450 g/m	25 m	Metal (ML)	166-30105
SC40	40	42.5	37.6	80	519 g/m	25 m	Metal (ML)	166-30106
SC50	50	53.2	48.4	90	802 g/m	25 m	Metal (ML)	166-30107

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-318

Metallic conduits

SSC Stainless Steel Conduit

Stainless steel, corrosion-resistant flexible conduit used for protection of sensor cables, instrumentation tubing, as well as hydraulic and pneumatic hoses, particularly in corrosive environments. Commonly used in hospitals and clinics.

Features and benefits

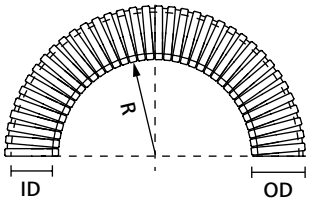
- Highly resistant to rust and corrosion
- High compression, tensile and impact strength
- Very flexible



The HelaGuard SSC stainless steel conduit offers superior mechanical protection in corrosive environments.

MATERIAL	Stainless Steel (SS316)
Operating Temperature	-100 °C to +600 °C

HF ✓ RoHS ✓



HelaGuard metallic conduit

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
SSC10	10	9.1	6.8	25	110 g/m	25 m	Metal (ML)	166-30200
SSC12	12	12.3	10.0	40	126 g/m	25 m	Metal (ML)	166-30201
SSC16	16	16.4	13.0	40	162 g/m	25 m	Metal (ML)	166-30202
SSC20	20	20.4	16.9	45	202 g/m	25 m	Metal (ML)	166-30203
SSC25	25	24.3	21.1	55	300 g/m	25 m	Metal (ML)	166-30204
SSC32	32	31.7	28.1	70	340 g/m	25 m	Metal (ML)	166-30205
SSC40	40	42.1	37.6	80	410 g/m	10 m	Metal (ML)	166-30206
SSC50	50	52.8	48.4	90	516 g/m	10 m	Metal (ML)	166-30207

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

www.HellermannTyton.co.uk/HG-Brochure-cat22

For more information on our complete HelaGuard range of conduits and fittings, please see our HelaGuard catalogue.



Add items to your watchlist!
www.HT.click/49-319

Fittings for metallic conduits

SC-FM Fixed External Thread

Fixed external thread, nickel plated brass.

Features and benefits

- Multi-part fitting of shell and body with external thread
- Provides tight, reliable hold of conduit
- Can be secured with locknut

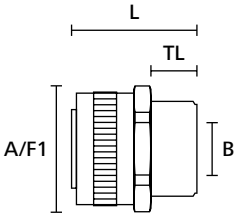
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard SC-FM Fixed External Thread.

MATERIAL	Nickel Plated Brass (NPB)
Operating Temperature	-100 °C to +300 °C

HF RoHS



HelaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
SC10-FM-M12	10	M12	5.6	21.0	13	7.0	10 pcs.	Metal (ML)	166-30300
SC12-FM-M16	12	M16	8.5	23.0	17	10.0	10 pcs.	Metal (ML)	166-30301
SC16-FM-M16	16	M16	11.5	25.0	20	10.0	10 pcs.	Metal (ML)	166-30302
SC16-FM-M20	16	M20	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-30303
SC20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-30304
SC25-FM-M25	25	M25	19.1	29.5	29	10.0	10 pcs.	Metal (ML)	166-30305
SC32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-30306
SC40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-30307
SC50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pc.	Metal (ML)	166-30308

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-320

Metallic conduits with plastic coating

PCS Galvanised Steel Conduit, PVC Coating

Flexible galvanised steel conduit with PVC coating, typically used in machine and plant construction and electrical installations.

Features and benefits

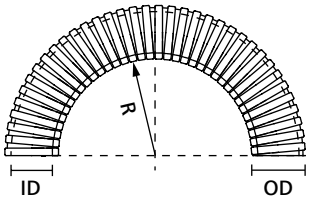
- High compression, tensile and impact strength
- Very flexible
- Good resistance to alkalis and acids
- Good resistance to chemicals
- Colour: black, grey



HelaGuard PCS Galvanised Steel Conduit with PVC Coating.

MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-15 °C to +70 °C

RoHS



HelaGuard metallic conduit, plastic coating

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PCS10	10	10.1	6.8	25	140 g/m	50 m	Black (BK)	166-30700
PCS12	12	14.2	10.2	30	143 g/m	50 m	Black (BK)	166-30701
PCS16	16	17.1	13.0	40	196 g/m	25 m	Black (BK)	166-30702
PCS20	20	21.6	16.9	45	345 g/m	25 m	Black (BK)	166-30703
PCS25	25	26.0	21.1	55	411 g/m	25 m	Black (BK)	166-30704
PCS32	32	34.0	28.1	60	560 g/m	25 m	Black (BK)	166-30705
PCS40	40	44.2	37.6	80	719 g/m	25 m	Black (BK)	166-30706
PCS50	50	55.0	48.4	90	1,052 g/m	25 m	Black (BK)	166-30707
PCS63	63	64.5	57.5	115	1,091 g/m	10 m	Black (BK)	166-30708
PCS75	75	79.2	70.0	150	1,459 g/m	10 m	Black (BK)	166-30709

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-321

Fittings for metallic conduits with plastic coating

PCS-FM Fixed External Thread, IP54

Fixed external thread, nickel plated brass.

Features and benefits

- Two-part fitting of shell and body with external thread
- Provides tight, reliable hold of conduit
- Can be secured with locknut

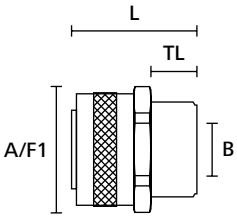
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard PCS-FM Fixed External Thread.

MATERIAL	Nickel Plated Brass (NPB)
Operating Temperature	-100 °C to +300 °C

HF RoHS



HelaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS10-FM-M12	10	M12	5.6	21.0	13	8.0	10 pcs.	Metal (ML)	166-31000
PCS12-FM-M16	12	M16	8.5	23.0	17	8.0	10 pcs.	Metal (ML)	166-31001
PCS16-FM-M16	16	M16	11.5	25.0	20	10.0	10 pcs.	Metal (ML)	166-31002
PCS16-FM-M20	16	M20	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-31003
PCS20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-31004
PCS25-FM-M25	25	M25	19.1	32.5	29	10.0	10 pcs.	Metal (ML)	166-31005
PCS32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-31006
PCS40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-31007
PCS50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pc.	Metal (ML)	166-31008
PCS63-FM-M63	63	M63	54.5	50.0	70	18.0	1 pc.	Metal (ML)	166-31009
PCS75-FM-M75	75	M75	66.5	60.0	84	20.0	1 pc.	Metal (ML)	166-31019

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-322

Fittings for metallic conduits with plastic coating

PCS-FMC Fixed Thread Compression Fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

Features and benefits

- Multipart compression fitting including elastomeric seal
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened

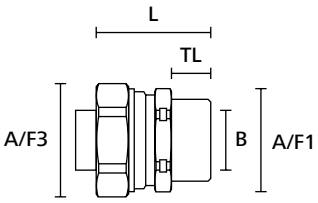
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard PCS-FMC Compression Fitting.

MATERIAL	Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
Operating Temperature	-50 °C to +135 °C	

HF RoHS



HelaGuard compression fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS10-FMC-M12	10	M12	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-31400
PCS12-FMC-M16	12	M16	8.6	29.8	20	22	10.0	10 pcs.	Metal (ML)	166-31401
PCS16-FMC-M16	16	M16	11.5	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-31402
PCS16-FMC-M20	16	M20	11.5	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-31403
PCS20-FMC-M20	20	M20	15.3	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-31404
PCS25-FMC-M25	25	M25	19.1	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-31405
PCS32-FMC-M32	32	M32	26.0	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-31406
PCS40-FMC-M40	40	M40	34.6	47.5	56	58	16.0	2 pcs.	Metal (ML)	166-31407
PCS50-FMC-M50	50	M50	44.7	51.0	70	70	16.0	1 pc.	Metal (ML)	166-31408

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-323

Metallic conduits with liquid-tight cover

LTS Galvanised steel conduit, PVC cover

Flexible galvanised steel conduit with smooth, liquid-tight PVC cover. Fulfills IP66, IP67, IP68 and IP69k with LTS-fittings. LTS is used in machine tools and outdoor installations, wherever liquid-tight is a requirement.

Features and benefits

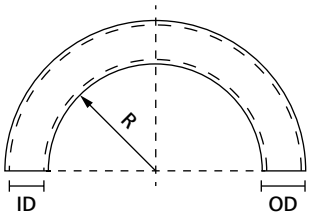
- Liquid-tight (IP68 and IP69k with LTS fittings)
- High compression, tensile and impact strength
- Good flexibility
- Smooth outer cover does not wrinkle when bent
- Good resistance to acids, petrol, oils and greases
- Suitable for outdoor use



HelaGuard LTS.

MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +105 °C

RoHS



HelaGuard liquid-tight metallic conduit, plastic coating

TYPE	Nominal Ø	US Trade Size	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
LTS10	10	1/4 "	11.8	7.0	35	185 g/m	50 m	Black (BK)	166-31900
LTS12	12	5/16 "	14.2	10.0	40	203 g/m	25 m	Black (BK)	166-31901
LTS16	16	3/8 "	17.8	12.6	45	311 g/m	25 m	Black (BK)	166-31902
LTS20	20	1/2 "	21.1	16.0	65	407 g/m	25 m	Black (BK)	166-31903
LTS25	25	3/4 "	26.4	21.1	100	503 g/m	25 m	Black (BK)	166-31904
LTS32	32	1 "	33.1	26.5	135	732 g/m	25 m	Black (BK)	166-31905
LTS40	40	1 1/4 "	41.8	35.4	175	885 g/m	25 m	Black (BK)	166-31906
LTS50	50	1 1/2 "	47.9	40.4	230	1,240 g/m	25 m	Black (BK)	166-31907
LTS63	63	2 "	59.7	51.6	280	1,470 g/m	10 m	Black (BK)	166-31908

All dimensions in mm. Subject to technical changes.
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-324

Date of issue: September 2022

Fittings for metallic conduits with liquid-tight cover

LTS-FMC Fixed Thread Compression Fitting, IP68

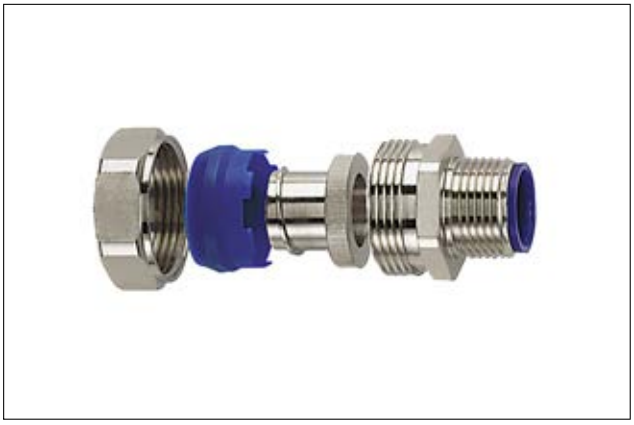
External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

Features and benefits

- Multipart compression fitting including elastomeric seal
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened

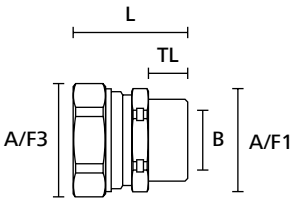
Fittings with PG and swivel threads are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



HelaGuard LTS-FMC Compression Fitting.

MATERIAL	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
Operating Temperature	-50 °C to +135 °C

HF ✓ RoHS ✓



HelaGuard compression fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
LTS10-FMC-M12	10	M12	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-32200
LTS10-FMC-M16	10	M16	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-32201
LTS12-FMC-M16	12	M16	8.6	29.8	20	22	10.0	10 pcs.	Metal (ML)	166-32203
LTS16-FMC-M16	16	M16	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-32204
LTS16-FMC-M20	16	M20	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-32205
LTS20-FMC-M20	20	M20	14.5	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-32206
LTS25-FMC-M25	25	M25	18.0	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-32207
LTS32-FMC-M32	32	M32	24.6	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-32208
LTS40-FMC-M40	40	M40	32.7	47.5	50	52	16.0	1 pc.	Metal (ML)	166-32209
LTS50-FMC-M50	50	M50	37.7	53.0	58	58	18.0	1 pc.	Metal (ML)	166-32210
LTS63-FMC-M63	63	M63	49.0	58.8	70	70	20.0	1 pc.	Metal (ML)	166-32211

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-325

Spiral-reinforced PVC Conduits

PSR Conduit

Flexible, smooth bore conduit with spiral rigid PVC reinforcement and flexible PVC cover. PSR conduits are typically use in machine building, plant construction, shipbuilding, automation, and electrical installations.

Features and benefits

- Extremely flexible
- Withstands torsional movement
- Self-extinguishing
- Easy to feed cables into conduit
- Can be used with PSR fittings
- Colour: grey; black, green (oil resistant) or blue (high temperature resistant) upon request

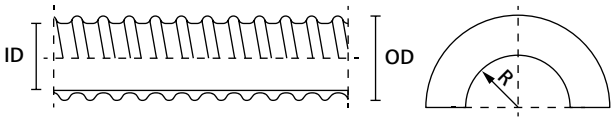


PSR is extremely flexible and allows for easy insertion of cables.

PSR conduit with higher resistance to oil (color: green) and temperature (colour: blue) available on request.

MATERIAL	Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +70 °C
Flammability	self-extinguishing according to EN IEC 61386

RoHS



HelaGuard spiral reinforced conduit

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PSR12	12	14.5	10	25	71 g/m	30 m	Grey (GY)	166-40001
PSR16	16	16.5	12	25	76 g/m	30 m	Grey (GY)	166-40002
PSR20	20	21.0	16	35	112 g/m	30 m	Grey (GY)	166-40003
PSR25	25	27.5	22	45	153 g/m	30 m	Grey (GY)	166-40004
PSR32	32	33.5	28	60	327 g/m	30 m	Grey (GY)	166-40005
PSR40	40	41.0	35	80	448 g/m	30 m	Grey (GY)	166-40006
PSR50	50	46.4	40	105	725 g/m	30 m	Grey (GY)	166-40007
PSR63	63	57.0	50	120	948 g/m	30 m	Grey (GY)	166-40008

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-326

Date of issue: September 2022

Fittings for spiral-reinforced PVC Conduits

PSR-S Straight fitting

Straight PA66 fitting, fixed external thread.

Fulfils IP65 with PSR conduits.

Fulfils IP66 and IP67 with PSRSC conduits.

Features and benefits

- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts
- Fits both PSR and PSRSC conduits

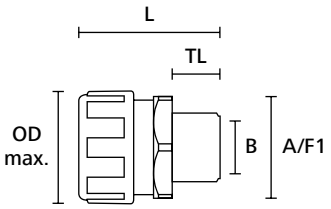
Fittings with PG-Thread and in 90° and 45° are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



PSR-S Straight.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PSR12-S-M16	12	M16	9.0	24	38	23	11	10 pcs.	Grey (GY)	166-40701
PSR16-S-M16	16	M16	10.5	28	40	25	11	10 pcs.	Grey (GY)	166-40702
PSR16-S-M20	16	M20	10.5	28	41	25	14	10 pcs.	Grey (GY)	166-40703
PSR20-S-M20	20	M20	14.5	33	43	30	14	10 pcs.	Grey (GY)	166-40704
PSR25-S-M25	25	M25	19.0	42	45	37	15	10 pcs.	Grey (GY)	166-40705
PSR32-S-M32	32	M32	24.5	48	48	45	16	10 pcs.	Grey (GY)	166-40706
PSR40-S-M40	40	M40	33.0	60	59	60	16	2 pcs.	Grey (GY)	166-40707
PSR50-S-M50	50	M50	39.0	64	55	60	16	2 pcs.	Grey (GY)	166-40708
PSR63-S-M63	63	M63	48.0	76	56	73	16	1 pc.	Grey (GY)	166-40709

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-327

Fittings for spiral-reinforced PVC Conduits

PSR-90 90° elbow fitting

90° PA66 fitting, fixed external thread.

Fulfils IP65 with PSR conduits.

Fulfils IP66 and IP67 with PSRSC conduits.

Features and benefits

- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts
- Fits both PSR and PSRSC conduits

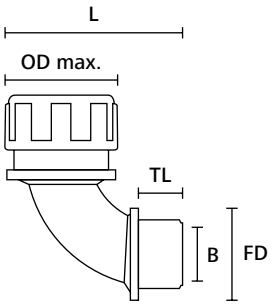
Fittings with PG-Thread and in 90° and 45° are also available. For our complete range of conduits and fittings, please see our HelaGuard catalogue.



PSR-90 90° Elbow.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Article-No.
PSR16-90-M16	16	M16	10.5	28	49	22	11	10 pcs.	166-40801
PSR16-90-M20	16	M20	10.5	28	51	27	13	10 pcs.	166-40802
PSR20-90-M20	20	M20	14.5	33	52	27	13	10 pcs.	166-40803
PSR25-90-M25	25	M25	19.0	42	63	33	15	10 pcs.	166-40804
PSR32-90-M32	32	M32	24.5	48	74	40	16	2 pcs.	166-40805
PSR40-90-M40	40	M40	33.0	60	113	50	16	2 pcs.	166-40806

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-328

FlexiGuard Conduits & Fittings

FlexiGuard PVC Protective Conduits

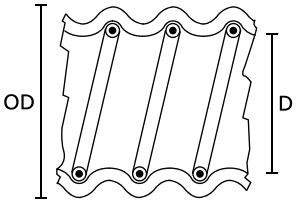
FlexiGuard protective hoses are used to protect cables in machines and plant construction, and robotics as well as leads to switch cabinets.

Features and benefits

- Extremely flexible
- Excellent mechanical protection
- Resistant to oils, acids, alkalis and chemicals



FlexiGuard FG with FG-UH fitting.



FlexiGuard

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC), Steel (ST)
Operating Temperature	-20 °C to +70 °C, (+80 °C, 200 h)
Flammability	UL 94 HB

RoHS

TYPE	Nominal Ø	Inside Ø (ID)	Outside Ø (OD)	Min. Bending Radius (R)	Reel Length	Colour	Pack Cont.	Article-No.
FG14	14	10	14	14	10 m	Grey (GY)	10 m	167-00209
FG17	17	13	17	17	10 m	Grey (GY)	10 m	167-00211
FG19	19	15	19	19	10 m	Grey (GY)	10 m	167-00213
FG21	21	16	21	21	10 m	Grey (GY)	10 m	167-00216
FG27	27	21	27	27	10 m	Grey (GY)	10 m	167-00221
FG36	36	30	36	36	10 m	Grey (GY)	10 m	167-00229
FG45	45	38	45	45	10 m	Grey (GY)	10 m	167-00236
FG56	56	48	56	56	10 m	Grey (GY)	10 m	167-00248

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

www.HellermannTyton.co.uk/HG-Brochure-cat22

For more information on our complete HelaGuard range of conduits and fittings, please see our HelaGuard catalogue.



Add items to your watchlist!
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FlexiGuard Conduits & Fittings

FG-M Fittings

Straight swivel external thread.

Fulfils IP54 with FlexiGuard FG conduits.

Features and benefits

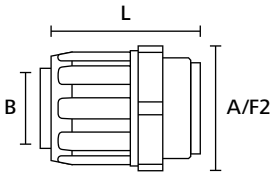
- One piece, easy fit
- Swivel thread
- Vibration and tension resistant
- Large bore size
- Inner ferrule protects cables
- Good resistance to chemicals



FG conduit fitting.

MATERIAL	Polypropylene (PP)
Operating Temperature	-35 °C to +80 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



FlexiGuard fitting, straight with swivel thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Thread (A/F2)	Colour	Pack Cont.	Article-No.
FG14-M16	14	M16	8.8	41.5	20	Grey (GY)	10 pcs.	167-00530
FG14-PG9	14	PG9	8.8	41.5	20	Grey (GY)	10 pcs.	167-00510
FG17-M20	17	M20	11.1	45.0	24	Grey (GY)	10 pcs.	167-00531
FG17-PG11	17	PG11	11.1	45.0	24	Grey (GY)	10 pcs.	167-00511
FG19-PG13	19	PG13.5	13.0	47.5	27	Grey (GY)	10 pcs.	167-00512
FG21-M25	21	M25	14.8	49.5	30	Grey (GY)	10 pcs.	167-00533
FG21-PG16	21	PG16	14.8	49.5	30	Grey (GY)	10 pcs.	167-00513
FG27-M32	27	M32	19.4	52.0	36	Grey (GY)	10 pcs.	167-00534
FG27-PG21	27	PG21	19.4	52.0	36	Grey (GY)	10 pcs.	167-00514
FG36-M40	36	M40	27.9	54.8	46	Grey (GY)	10 pcs.	167-00535
FG36-PG29	36	PG29	27.9	54.8	46	Grey (GY)	10 pcs.	167-00515
FG45-M50	45	M50	35.6	58.0	55	Grey (GY)	10 pcs.	167-00536
FG45-PG36	45	PG36	35.6	58.0	55	Grey (GY)	10 pcs.	167-00516
FG56-M63	56	M63	45.9	60.0	65	Grey (GY)	10 pcs.	167-00537
FG56-PG48	56	PG48	45.9	60.0	65	Grey (GY)	10 pcs.	167-00517

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

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FlexiGuard Conduits & Fittings

FG-UH Fittings with Bracket

Straight swivel bracket.

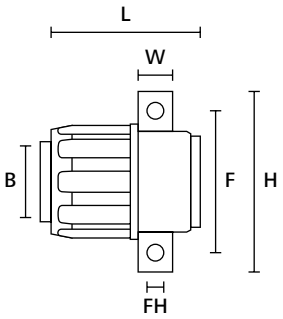
Fulfils IP54 with FlexiGuard FG conduits.

Features and benefits

- One piece, easy fit
- Swivel bracket
- Vibration and tension resistant
- Large bore size
- Inner ferrule protects cables
- Good resistance to chemicals



FG-UH fitting with bracket.



FlexiGuard fitting, straight with bracket

MATERIAL	Polypropylene (PP)
Operating Temperature	-35 °C to +80 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Fixing Hole Centres (F)	Colour	Pack Cont.	Article-No.
FG14-UH	14	8.8	41.5	10.0	40.0	5.7	29.0	Grey (GY)	10 pcs.	167-00520
FG17-UH	17	11.1	45.0	12.0	50.0	5.7	37.0	Grey (GY)	10 pcs.	167-00521
FG19-UH	19	13.0	47.5	12.0	50.0	5.7	37.0	Grey (GY)	10 pcs.	167-00522
FG21-UH	21	14.8	49.5	12.0	50.0	5.7	37.0	Grey (GY)	10 pcs.	167-00523
FG27-UH	27	19.4	52.0	12.5	57.0	5.7	43.0	Grey (GY)	10 pcs.	167-00524
FG36-UH	36	27.9	54.8	13.0	67.0	6.7	53.0	Grey (GY)	10 pcs.	167-00525
FG45-UH	45	35.6	58.0	14.0	79.5	6.7	65.0	Grey (GY)	10 pcs.	167-00526
FG56-UH	56	45.9	60.0	16.5	92.5	6.7	76.0	Grey (GY)	10 pcs.	167-00527

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
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HelaGuard Accessories

PACC Clip for Corrugated Conduits

Features and benefits

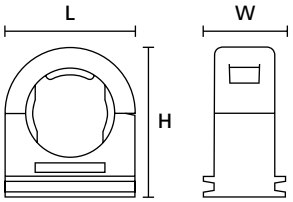
- Easy and quick assembly with non-metallic conduits
- Lid is integrated
- Hole for fastening with screw
- Inner rib prevents conduit from slipping
- Can be used in C-shaped DIN rails



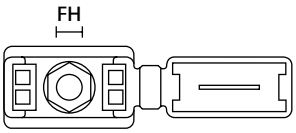
HelaGuard PACC Conduit Clip.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HelaGuard conduit clip, side views



HelaGuard conduit clip, top view

TYPE	Nominal Ø	Height (H)	Width (W)	Length (L)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
PACC10	10	26	12	23	M5	10 pcs.	Black (BK)	166-25707
PACC13	13	26	12	23	M5	10 pcs.	Black (BK)	166-25700
PACC16	16	30	12	26	M5	10 pcs.	Black (BK)	166-25701
PACC21	21	36	15	32	M6	10 pcs.	Black (BK)	166-25702
PACC28	28	45	15	41	M6	10 pcs.	Black (BK)	166-25703
PACC34	34	51	15	48	M6	10 pcs.	Black (BK)	166-25704
PACC42	42	60	15	57	M6	5 pcs.	Black (BK)	166-25705
PACC54	54	72	15	70	M6	5 pcs.	Black (BK)	166-25706

All dimensions in mm. Subject to technical changes.
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www.HellermannTyton.co.uk/HG-Brochure-cat22

For more information on our complete HelaGuard range of conduits and fittings, please see our HelaGuard catalogue.



Add items to your watchlist!
www.HT.click/49-332

Date of issue: September 2022

HelaGuard Accessories

AFCS Fixing Clip, Plated Steel and PVC Liner

The AFCS clip is used to secure metallic conduits.

Features and benefits

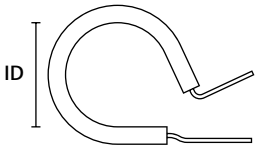
- Simple, secure fixing of metallic conduits
- Liner prevents damage due to abrasion



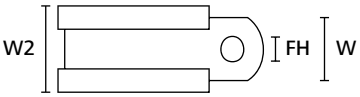
HelaGuard AFCS Fixing Clip, Galvanised Steel and PVC Liner.

MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +105 °C

RoHS



HelaGuard fixing clip, side view



HelaGuard fixing clip, top view

TYPE	Nominal Ø	Inside Ø (ID)	Width (W)	Width (W2)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
AFCS10	10	11.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50600
AFCS12	12	14.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50601
AFCS16	16	17.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50602
AFCS20	20	21.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50603
AFCS25	25	25.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50604
AFCS32	32	34.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50605
AFCS40	40	44.0	25.4	30.5	14.2 x 17.5	5 pcs.	Metal (ML), Black (BK)	166-50606
AFCS50	50	54.0	25.4	30.5	14.2 x 17.5	5 pcs.	Metal (ML), Black (BK)	166-50607
AFCS63	63	70.0	25.4	30.5	14.2 x 17.5	1 pc.	Metal (ML), Black (BK)	166-50608
AFCS75	75	76.2	25.4	30.5	14.2 x 17.5	1 pc.	Metal (ML), Black (BK)	166-50609

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-333

Helawrap cable cover

HWPP for industrial applications

Helawrap is used to bundle and protect cables and wires in the electrical industry, panel building, machine building and many other industrial applications. Helawrap is the time-saving solution for industrial applications.

Features and benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included



Protecting and fixing cables with the Helawrap cable cover and accessory set, for instance in wiring cabinets.

www.HellermannTyton.co.uk/HWPP-cat22

MATERIAL	Polypropylene (PP)
Operating Temperature	-60 °C to +110 °C, intermittent +140 °C
Flammability	UL 94 HB

HF RoHS

TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPP8	9	Black (BK)	25 m	HAT8	161-64101
	9	Grey (GY)	25 m	HAT8	161-64102
	9	Silver (SR)	25 m	HAT8	161-64103
	9	White (WH)	25 m	HAT8	161-64104
HWPP16	16	Black (BK)	25 m	HAT16	161-64201
	16	Grey (GY)	25 m	HAT16	161-64202
	16	Silver (SR)	25 m	HAT16	161-64203
	16	White (WH)	25 m	HAT16	161-64207
HWPP20	21	Black (BK)	25 m	HAT20	161-64301
	21	Grey (GY)	25 m	HAT20	161-64302
	21	Silver (SR)	25 m	HAT20	161-64303
	21	White (WH)	25 m	HAT20	161-64304
HWPP25	27	Black (BK)	25 m	HAT25	161-64401
	27	Grey (GY)	25 m	HAT25	161-64402
	27	Silver (SR)	25 m	HAT25	161-64403
	27	White (WH)	25 m	HAT25	161-64407
HWPP30	32	Black (BK)	25 m	HAT30	161-64501
	32	Grey (GY)	25 m	HAT30	161-64502
	32	Silver (SR)	25 m	HAT30	161-64503
	32	White (WH)	25 m	HAT30	161-64504
HWPP40	42	Black (BK)	15 m	HAT40	161-64601

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

ECE R-118

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-334

Date of issue: September 2022

Helawrap cable cover

HWPP for home and office use

Helawrap HWPP in practical 2 metre lengths is designed for home and office use. It puts an end to the cable chaos of PCs, TVs and Hi-Fi systems.

Features and benefits

- Ideal solution for bundling, protecting, mounting and routing cables
- Quick and effortless to apply
- Good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included



HelaWrap - Office Desktop Cable Management.

To order additional HAT application tools, see page 339.

Complete set including application tool.



HelaWrap Cable Cover - HWPP - 2 m black.



Insert one or more cables into the insertion slot of the applicator tool.



Place the HAT applicator tool in one end of the Helawrap cable cover.



Simply slide the HAT applicator tool through the Helawrap cover.

TYPE	Bundle Ø max.	Colour	Length (L)	Application Tool	Article-No.
HWPP16L2	16	Black (BK)	2 m	HAT16	161-64204
	16	Grey (GY)	2 m	HAT16	161-64205
	16	Silver (SR)	2 m	HAT16	161-64206
	16	White (WH)	2 m	HAT16	161-64215
HWPP25L2	27	Black (BK)	2 m	HAT25	161-64404
	27	Grey (GY)	2 m	HAT25	161-64405
	27	Silver (SR)	2 m	HAT25	161-64406
	27	White (WH)	2 m	HAT25	161-64415

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

ECE R-118

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-335

Cable Cover, Material: PA6, UL94V0

Helawrap HWPA-V0

Helawrap HWPAV0 is used to bundle and protect cable and wires, especially if there is vibration and abrasion. HWPAV0 has excellent flame-retardant properties and is halogen-free.

Features and benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Self-extinguishing according to UL94 V0
- Very good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included



Cables can be branched off at any point for better, more flexible protection.

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +90 °C, intermittent +120 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL2, R23 HL2

HF ✓ RoHS ✓

To order additional HAT application tools, see page 339.

TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPAV08	9	Black (BK)	25 m	HAT8	161-63101
HWPAV016	16	Black (BK)	25 m	HAT16	161-63201
HWPAV020	21	Black (BK)	25 m	HAT20	161-63301
HWPAV025	27	Black (BK)	25 m	HAT25	161-63401
HWPAV030	32	Black (BK)	25 m	HAT30	161-63501

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-336

Date of issue: September 2022

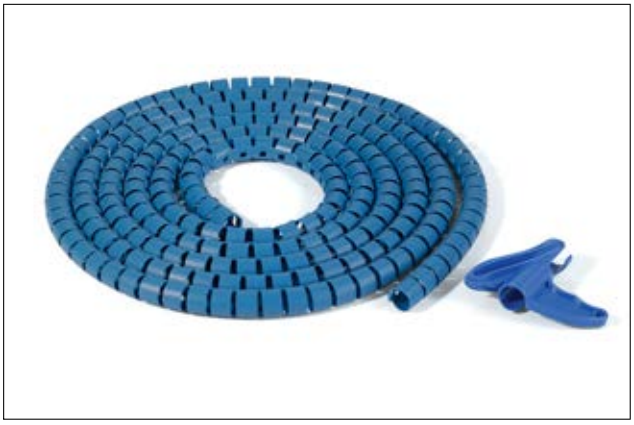
Metal-Content Cable Cover

Helawrap HWPPMC

HWPPMC is particularly suitable for installation and maintenance for food-processing machines and in food-processing plants.

Features and benefits

- High metal-content for reliable detection with standard detection equipment
- Quick and effortless to apply
- Stainless steel preserves resistance to corrosion
- Blue colour for enhanced visibility
- Ideal solution for bundling and protecting cables and hoses
- Highly flexible
- Very good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reused
- Handy applicator tool included



HWPPMC metal-content cable cover.

MATERIAL	Polypropylene (PP), Stainless Steel (SS)
Operating Temperature	-60 °C to +100 °C, intermittent +140 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

Can support quality assurance in the production of food stuffs, for example HACCP.

To order additional HAT application tools, see page 339.

TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPPMC8	9	Blue (BU)	25 m	HAT8	161-66000
HWPPMC16	16	Blue (BU)	25 m	HAT16	161-66100
HWPPMC20	21	Blue (BU)	25 m	HAT20	161-66200
HWPPMC25	27	Blue (BU)	25 m	HAT25	161-66300
HWPPMC30	32	Blue (BU)	25 m	HAT30	161-66400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-337

Acessories for retaining Helawrap Open Cable Cover

HWClips

To complete the Helawrap cable management system various Helawrap Clips in compatible sizes are available. The mounting clips can be combined and adjusted individually. Attached to a mounting base the assembly can be screw mounted or adhered to the surface.

Features and benefits

- Mounts and routes Helawrap cable cover flexibly and efficiently
- Fit snugly around the cable cover and holds it tight
- Each clip can be joined to mounting plate or other clips of any size
- Each clip rotates freely
- Easily released and re-used
- Mounting plates fixed with screws, cable ties or adhesive

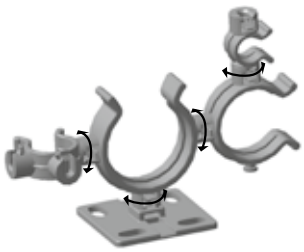


The Helawrap accessory set for bundling, fixing and protecting multiple cable runs.

MATERIAL	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)	-35 °C to +50 °C
Flammability	UL 94 HB	UL 94 V2

HF ✓ RoHS ✓

RoHS ✓



Multiple clips can be joined. Clips swivel freely.



For secure hold, R1 loop can be used (for HWClip25 and HWClip30 only).

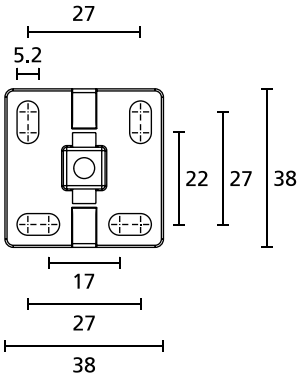
TYPE	for Helawrap size	Material	Colour	Pack Cont.	Article-No.
HWCLIP08	8	PA66HIRHS	Black (BK)	50 pcs.	161-64002
HWCLIP16	16	PA66HIRHS	Black (BK)	50 pcs.	161-64004
HWCLIP20	20	PA66HIRHS	Black (BK)	50 pcs.	161-64006
HWCLIP25	25	PA66HIRHS	Black (BK)	50 pcs.	161-64008
HWCLIP30	30	PA66HIRHS	Black (BK)	50 pcs.	161-64010
R1	25, 30	PVC	Black (BK)	500 pcs.	201-20010

Subject to technical changes.

HWBase

Features and benefits

- Mounting plates can be fixed with screws, cable ties or adhesive
- Can be used to mount any size HWClip



Helawrap HWBase/HWBaseA

TYPE	Adhesive	Colour	Pack Cont.	Article-No.
HWBASE	-	Black (BK)	50 pcs.	161-64015
HWBASEA	Acrylate with base of polyurethane foam	Black (BK)	50 pcs.	161-64013

Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-338

Date of issue: September 2022

Application Tools for Helawrap Cable Cover

HAT Tools

The HAT application tools are used with Helawrap HWPP, HWPAV0 and HWPPMC cable covers to bundle and protect cables rapidly and efficiently. There is a specially designed HAT application tool for each size Helawarp cable cover.

Features and benefits

- Bundle cable rapidly and effortlessly
- Glides smoothly and securely through cover
- Easy insertion of cable



Applicator tools HAT are available for every Helawrap cover size.

TYPE	Colour	Pack Cont.	Article-No.
HAT8	Blue (BU)	10 pcs.	161-60001
HAT16	Blue (BU)	10 pcs.	161-60002
HAT20	Blue (BU)	10 pcs.	161-60003
HAT25	Blue (BU)	10 pcs.	161-60004
HAT30	Blue (BU)	10 pcs.	161-60005
HAT40	Blue (BU)	5 pcs.	161-60006

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-339

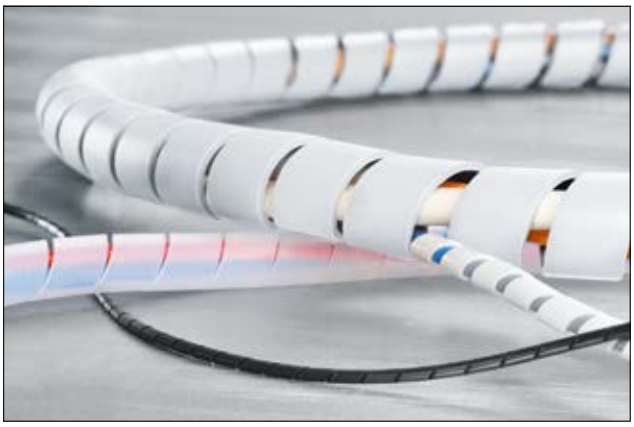
Standard Polyethylene Spiral Binding for general applications

SBPE

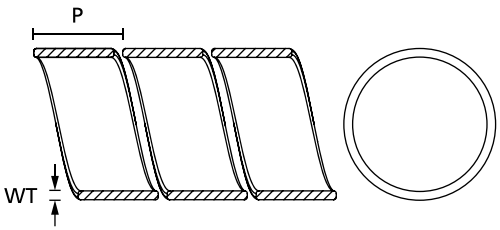
SBPE spiral binding is suitable for standard electrical applications and panel building and plant engineering. Sizes 4 and 9 are also available in practical 5 metre lengths.

Features and benefits

- Organises and protects cables and hoses
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



Spiral binding SBPE.



Spiral binding

MATERIAL	Polyethylene (PE)
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPE1.5	1.5	0.8	6.0	1.6	8	Black (BK)	30 m	161-41001
	1.5	0.8	6.0	1.6	8	Grey (GY)	30 m	161-41002
	1.5	0.8	6.0	1.6	8	Natural (NA)	30 m	161-41000
SBPE4	4	1.0	7.8	5	20	Black (BK)	30 m	161-41101
	4	1.0	7.8	5	20	Grey (GY)	30 m	161-41102
	4	1.0	7.8	5	20	Natural (NA)	30 m	161-41100
SBPE6	6	1.2	10.0	7.5	40	Black (BK)	30 m	161-41151
	6	1.2	10.0	7.5	40	Grey (GY)	30 m	161-41154
	6	1.2	10.0	7.5	40	Natural (NA)	30 m	161-41150
SBPE9	9	1.4	12.5	10	100	Black (BK)	30 m	161-41201
	9	1.4	12.5	10	100	Grey (GY)	30 m	161-41202
	9	1.4	12.5	10	100	Natural (NA)	30 m	161-41200
SBPE16	16	1.6	16.0	20	150	Black (BK)	30 m	161-41301
	16	1.6	16.0	20	150	Grey (GY)	30 m	161-41302
	16	1.6	16.0	20	150	Natural (NA)	30 m	161-41300

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPE4D	4	1.0	7.8	5	20	Black (BK)	5 m	161-41104
	4	1.0	7.8	5	20	Grey (GY)	5 m	161-41105
	4	1.0	7.8	5	20	Natural (NA)	5 m	161-41103
SBPE6D	6	1.2	10.0	7.5	40	Black (BK)	5 m	161-41153
	6	1.2	10.0	7.5	40	Grey (GY)	5 m	161-41155
	6	1.2	10.0	7.5	40	Natural (NA)	5 m	161-41152
SBPE9D	9	1.4	12.5	10	100	Black (BK)	5 m	161-41204
	9	1.4	12.5	10	100	Grey (GY)	5 m	161-41205
	9	1.4	12.5	10	100	Natural (NA)	5 m	161-41203

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-340

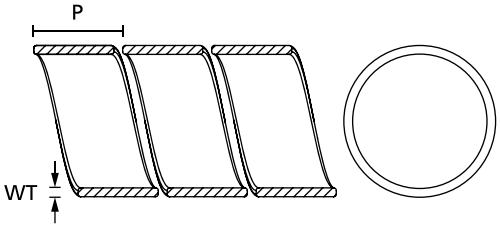
Polyethylene Spiral Binding for enhanced flame protection

SBPEFR

The flame-retardant properties of SBPEFR make it suitable for applications in the automobile and electrical industries, where enhanced fire protection is needed.

Features and benefits

- Organises and protects cables and hoses
- Self-extinguishing according to UL94 V2
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



Spiral binding



Spiral binding SBPEFR is available in a wide range of diameters and in colours black and white.

MATERIAL	Polyethylene (PEFR), Flame retardant
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL 94 V2, FMVSS 302, Type B

RoHS

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPEFR1.5	1.5	0.8	6.0	1.6	8	Black (BK)	30 m	161-43001
	1.5	0.8	6.0	1.6	8	White (WH)	30 m	161-43000
SBPEFR4	4	1.0	7.8	5	20	Black (BK)	30 m	161-43101
	4	1.0	7.8	5	20	White (WH)	30 m	161-43100
SBPEFR6	6.0	0.8	10.0	7.5	40.0	Black (BK)	30 m	161-43151
	6.0	0.8	10.0	7.5	40.0	White (WH)	30 m	161-43150
SBPEFR9	9	1.4	12.5	10	100	Black (BK)	30 m	161-43201
	9	1.4	12.5	10	100	White (WH)	30 m	161-43200
SBPEFR16	16	1.6	16.0	20	150	Black (BK)	30 m	161-43301
	16	1.6	16.0	20	150	White (WH)	30 m	161-43300

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

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Polyamide Spiral Binding for added strength and protection against abrasion

SBPA

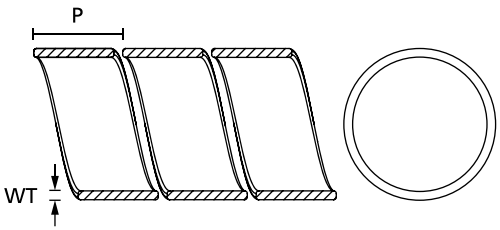
SBPA spiral binding is used for cable harnesses in the automobile industry and for many demanding industrial applications.

Features and benefits

- Organises and protects cables and hoses
- Very good protection against abrasion
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



SBPA spiral binding made of polyamide offers excellent protection against abrasion.



Spiral binding

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +95 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPA1.5	1.5	0.4	6.0	1.6	8	Natural (NA)	30 m	161-42000
SBPA4	4	0.6	7.8	5	20	Natural (NA)	30 m	161-42100
SBPA6	6	0.8	10.0	7.5	40	Natural (NA)	30 m	161-42150
SBPA9	9	1.0	12.5	10	100	Natural (NA)	30 m	161-42200
SBPA16	16	1.2	16.0	20	150	Natural (NA)	30 m	161-42300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

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Polyethylene Spiral Binding with UL94V0 classification

SBPAV0

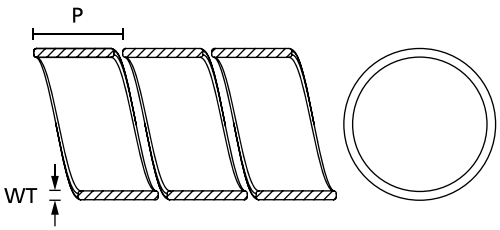
Due to its excellent flame protection properties, SBPAV0 spiral binding is particularly suitable for the rail and aviation industries as well as public buildings.

Features and benefits

- Organises and protects cables and hoses
- Self-extinguishing according to UL94 V0
- Very good protection against abrasion
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters



Spiral binding SBPAV0.



Spiral binding

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +95 °C, intermittent +130 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL2, R23 HL2

HF ✓ RoHS ✓

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPAV01.5	1.5	0.4	6.0	1.6	8	Black (BK)	30 m	161-44000
SBPAV04	4	0.6	7.8	5	20	Black (BK)	30 m	161-44100
SBPAV06	6	0.8	10.0	7.5	40	Black (BK)	30 m	161-44150
SBPAV09	9	1.0	12.5	10	100	Black (BK)	30 m	161-44200
SBPAV016	16	1.2	16.0	20	150	Black (BK)	30 m	161-44300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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PTFE Spiral Binding for superior protection

SBPTFE

Wherever superior protection against chemical and extreme temperatures are important, the use of SBPTFE is recommended.

Features and benefits

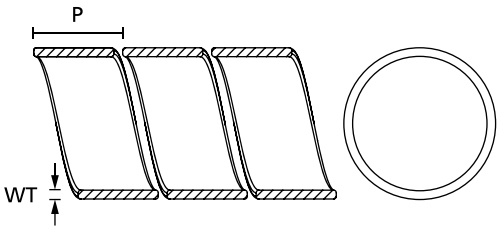
- High temperature resistance
- Excellent fire protection
- Self-extinguishing according to UL94 V0
- Very good solvent and acid resistance
- Organises and protects cables and hoses
- Suitable for retro-fitting
- Cables branch out at any point



Spiral binding SBTFE - ideal for extreme conditions.

MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-60 °C to +260 °C, intermittent +350 °C
Flammability	UL 94 V0

RoHS



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPTFE1.5	1.5	0.5	6.0	1.6	8	Natural (NA)	5 m	161-45000
SBPTFE4	4	0.7	7.8	5	20	Natural (NA)	5 m	161-45100
SBPTFE9	9	1.0	12.5	10	100	Natural (NA)	5 m	161-45200

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

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PE Metal Detectable Spiral Binding

SBPEMC

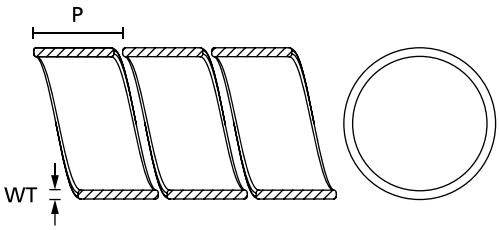
SBPEMC is designed for applications in food-processing plants and machines.

Features and benefits

- High metal-content for reliable detection with standard detection equipment
- Stainless steel preserves resistance to corrosion
- Blue colour for enhanced visibility
- Ideal solution for bundling and protecting cables and hoses
- Highly flexible
- Suitable for retro-fitting
- Branching off cable at any point



Detectable, metal-content spiral binding protects cables on food-processing machines.



Spiral binding

MATERIAL	Polyethylene (PE), Stainless Steel (SS)
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

Can support quality assurance in the production of food stuffs, for example HACCP.

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPEMC1.5	1.5	0.8	6.0	1.6	8	Blue (BU)	30 m	161-46000
SBPEMC4	4	1.0	7.8	5	20	Blue (BU)	30 m	161-46100
SBPEMC9	9	1.4	12.5	10	100	Blue (BU)	30 m	161-46200
SBPEMC16	16	1.6	16.0	20	150	Blue (BU)	30 m	161-46300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-345

PP High Abrasion-resistant Narrow Pitch Spiral Binding

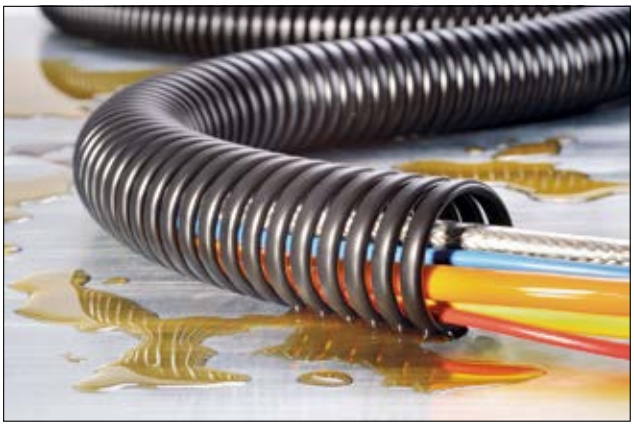
SBPPHDR

Spiral binding is used to route and bind cables that need high mechanical protection, for instance in the automotive industry as well as in control panels and cabinets. It is also used in electrical installation, where safety is a primary consideration. Spiral binding provides a tidy solution for many applications.

Features and benefits

- For organising and protecting cables and hoses
- Heavy-walled and very robust
- Excellent protection from mechanical stress
- Very high abrasion resistance
- Very good resistance to oils
- Available in diameters up to 50 mm
- Ideal for larger cable bundles

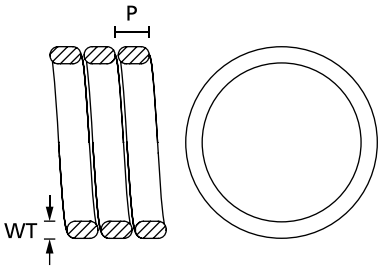
More colours and sizes availabe on request.



SBPPHDR - Heavy Duty Round Spiral Wrap.

MATERIAL	Polypropylene (PP)
Operating Temperature	-30 °C to +100 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Length (L)	Article-No.
SBPPHDR10	10	2.0	5.0	10	14	Black (BK)	1.0 m	162-30000
SBPPHDR15	15	2.5	5.0	15	20	Black (BK)	1.0 m	162-30100
SBPPHDR20	20	2.5	5.5	20	25	Black (BK)	1.0 m	162-30200
SBPPHDR25	25	2.5	6.0	25	30	Black (BK)	1.0 m	162-30300
SBPPHDR30	30	3.5	6.5	30	37	Black (BK)	1.0 m	162-30400
SBPPHDR35	35	3.5	6.5	35	42	Black (BK)	1.0 m	162-30500
SBPPHDR40	40	4.0	7.0	40	48	Black (BK)	1.0 m	162-30600
SBPPHDR50	50	4.5	8.0	50	59	Black (BK)	1.0 m	162-30700

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

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Date of issue: September 2022

PP High Abrasion-resistant Wide Pitch Spiral Binding

SBPPHDF

SBPPHDF spiral binding is especially suitable wherever high abrasion resistance and much larger cable diameters are needed, for example in the petrochemical industry and in plant construction.

Features and benefits

- For organising and protecting cables and hoses
- Heavy-walled and very robust
- Excellent protection from mechanical stress
- Very high abrasion resistance
- Very good resistance to oils
- Available in diameters up to 50 mm
- Ideal for larger cable bundles

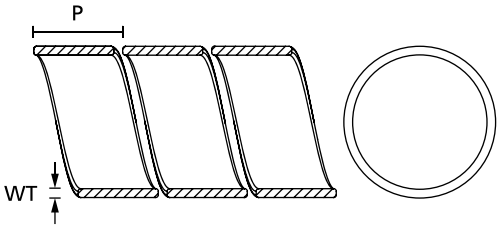
More colours and sizes availabe on request.



SBPPHDF - Heavy Duty Flat Spiral Wrap.

MATERIAL	Polypropylene (PP)
Operating Temperature	-30 °C to +100 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Length (L)	Article-No.
SBPPHDF10	10	1.5	10	10	13	Black (BK)	1.0 m	162-31000
SBPPHDF15	15	1.5	13	15	18	Black (BK)	1.0 m	162-31100
SBPPHDF20	20	1.5	18	20	23	Black (BK)	1.0 m	162-31200
SBPPHDF25	25	2.0	19	25	29	Black (BK)	1.0 m	162-31300
SBPPHDF30	30	2.0	20	30	34	Black (BK)	1.0 m	162-31400
SBPPHDF35	35	2.0	20	35	39	Black (BK)	1.0 m	162-31500
SBPPHDF40	40	2.5	20	40	45	Black (BK)	1.0 m	162-31600
SBPPHDF50	50	3.0	22	50	56	Black (BK)	1.0 m	162-31700

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-347

Standard polyester braided sleeving

Helagaine HEGP

Helagaine HEGP braided sleeving is used in the automotive industry and in machine construction. It is also used for smaller electrical appliances to avoid pockets of high temperature. HEGP fulfils the strict requirement of DIN5510-2 and is therefore also optimal for railway applications.

Features and benefits

- Made of sturdy polyester
- Highly flexible
- High abrasion resistance
- Very high surface coverage
- 13 sizes for diameters from 1 - 66 mm for an optimal fit



Helagaine HEGP braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
Flammability	UL 94 V2, FMVSS 302
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGP03	1	5	Black (BK)	200 m	45	170-10300
HEGP04	2	7	Black (BK)	200 m	45	170-10400
HEGP05	3	9	Black (BK)	200 m	45	170-10500
HEGP06	4	11	Black (BK)	100 m	45	170-10600
HEGP08	5	12	Black (BK)	100 m	45	170-10800
HEGP10	7	15	Black (BK)	100 m	45	170-11000
HEGP12	8	17	Black (BK)	100 m	45	170-11200
HEGP15	10	20	Black (BK)	100 m	45	170-11500
HEGP20	14	26	Black (BK)	50 m	45	170-12000
HEGP25	18	34	Black (BK)	50 m	45	170-12500
HEGP30	20	40	Black (BK)	50 m	45	170-13000
HEGP40	30	50	Black (BK)	50 m	45	170-14000
HEGP50	40	66	Black (BK)	50 m	45	170-15000

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2 ECE R-118

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Standard polyester braided sleeving, expansion rate: 3:1

Helagaine HEGPX

Helagaine HEGPX is used whenever a higher expansion rate is required. HEGPX is particularly suitable for use in the automotive industry, panel building and in electrical appliances.

Features and benefits

- Made of sturdy polyester
- Highly flexible
- High rate of expansion
- Easy to apply over irregular shapes
- Good abrasion resistance



HEGPX - Expandable abrasion protection sleeve.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
Flammability	UL 94 V2, FMVSS 302
EN 45545-2 Classification	R22 HL2, R23 HL2

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGPX06	3	9	Black (BK)	200 m	45	170-00060
HEGPX09	5	16	Black (BK)	100 m	45	170-00090
HEGPX12	6	19	Black (BK)	100 m	45	170-00120
HEGPX20	12	32	Black (BK)	100 m	45	170-00200
HEGPX30	19	45	Black (BK)	50 m	45	170-00300
HEGPX40	32	70	Black (BK)	50 m	45	170-00400

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-349

Flame-retardant polyester braided sleeving

Helagaine HEGPETFR

This sleeve is particularly designed for abrasion protection of bundles of electrical cables. Helagaine HEGPETFR is therefore particularly recommended in applications such as public transport, aircraft industry, telecommunications, underground cables, etc.

Features and benefits

- Made of sturdy polyester
- Self-extinguishing
- Highly flexible
- Easy to apply over irregular shapes
- Good abrasion resistance



Helagaine HEGPETFR braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
Flammability	FMVSS 302, Type B, UL 1441 VW-1

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGPETFR04	3	7	Black with Grey Identification Yarn (BKIDGY)	200 m	45	170-81001
HEGPETFR05	4	9	Black with Grey Identification Yarn (BKIDGY)	200 m	45	170-81002
HEGPETFR06	5	11	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81003
HEGPETFR08	7	13	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81004
HEGPETFR10	9	15	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81005
HEGPETFR12	11	17	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81006
HEGPETFR15	13	20	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81007
HEGPETFR20	18	25	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81008
HEGPETFR25	22	30	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81009
HEGPETFR30	27	40	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81010
HEGPETFR40	35	50	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81011
HEGPETFR50	45	60	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81012

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-350

Date of issue: September 2022

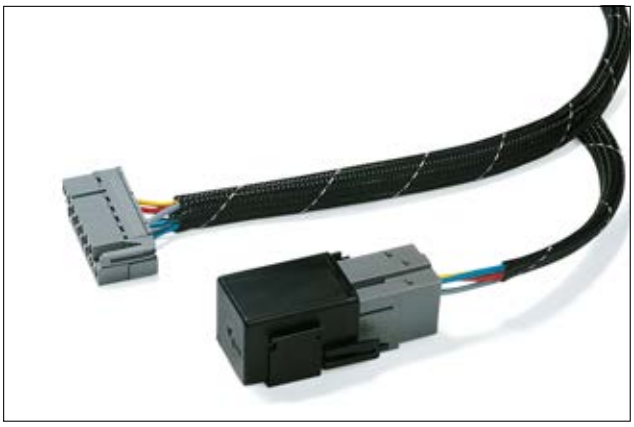
Flame-retardant, high-expansion polyester braided sleeving

Helagaine HEGPETFRX

Helagaine HEGPETFRX is especially suitable for areas wherever fire protection is important as well as a higher expansion ratio of the braided sleeve. Helagaine HEGPETFRX offers superior cable protection for machine tools, robotics and automatic equipment.

Features and benefits

- Made of sturdy polyester
- Self-extinguishing
- Highly flexible
- High rate of expansion
- Easy to apply over irregular shapes
- Good abrasion resistance



Helagaine HEGPETFRX.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
Flammability	FMVSS 302, Type B, UL 1441 VW-1

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGPETFRX03	2	6	Black with Grey Identification Yarn (BKIDGY)	200 m	45	170-81100
HEGPETFRX06	3	10	Black with Grey Identification Yarn (BKIDGY)	200 m	45	170-81101
HEGPETFRX09	5	16	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81102
HEGPETFRX12	6	19	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81103
HEGPETFRX20	12	32	Black with Grey Identification Yarn (BKIDGY)	100 m	45	170-81104
HEGPETFRX30	19	45	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81105
HEGPETFRX40	32	70	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81106
HEGPETFRX50	38	76	Black with Grey Identification Yarn (BKIDGY)	50 m	45	170-81107

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-351

Polyamide braided sleeving for excellent abrasion resistance

Helagaine HEGPA66

Helagaine HEGPA66 is particularly suitable for vehicle manufacturing as well as plant construction.

Features and benefits

- Made from heavy-duty polyamide yarn
- Excellent abrasion resistance
- Highly flexible
- Easy to apply over irregular shapes
- Eases application by expanding when compressed
- Very high surface covering



Various types of Helagaine braided sleeving.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-60 °C to +150 °C
Melting Point	+255 °C
Flammability	UL 94 V2, FMVSS 302
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGPA6604	3	6	Black (BK)	200 m	45	170-40400
HEGPA6606	4	8	Black (BK)	100 m	45	170-40600
HEGPA6608	5	10	Black (BK)	100 m	45	170-40800
HEGPA6610	7	12	Black (BK)	100 m	45	170-41000
HEGPA6612	8	14	Black (BK)	100 m	45	170-41200
HEGPA6616	12	18	Black (BK)	50 m	45	170-41600
HEGPA6620	15	23	Black (BK)	50 m	45	170-42000
HEGPA6625	18	28	Black (BK)	50 m	45	170-42500
HEGPA6630	25	32	Black (BK)	50 m	45	170-43000
HEGPA6640	30	44	Black (BK)	50 m	45	170-44000
HEGPA6650	40	55	Black (BK)	50 m	45	170-45000
HEGPA6660	50	65	Black (BK)	50 m	45	170-46000

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2 ECE R-118

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-352

Date of issue: September 2022

Light weight standard polyester braided sleeving

Helagaine HEGPL

Helagaine HEGPL is used primarily in automobile interiors, motor compartments, car bodies and underfloors.

Features and benefits

- Made of sturdy polyester
- Expansion rate of 3:1
- Easier application over irregular shapes
- Highly flexible
- Good abrasion resistance



Helagaine HEGPL braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
Flammability	UL 94 V2, FMVSS 302, Type B

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HEGPL03	3	8	Black (BK)	1,000 m	45	170-80503
HEGPL06	5	12	Black (BK)	400 m	45	170-80506
HEGPL12	8	21	Black (BK)	300 m	45	170-80512
HEGPL20	12	30	Black (BK)	300 m	45	170-80520
HEGPL30	18	55	Black (BK)	200 m	45	170-80530
HEGPL40	24	66	Black (BK)	150 m	45	170-80540
HEGPL50	30	82	Black (BK)	150 m	45	170-80550

All dimensions in mm. Subject to technical changes.
Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-353

Standard braided sleeving in dispenser boxes

Helagaine HLB

Helagaine HLB is supplied in practical dispenser boxes and covers a wide range of applications with only a few sizes. It is ideal for both the professional and the home user. Helagaine HLB bundles and effectively protects cables and wires, for instance in HiFi systems and in industrial plants. Helagaine HLB also provides good resistance to abrasion.

Features and benefits

- In practical, space-saving 10 m dispenser boxes
- Expands to 3x nominal diameter
- Bundling diameters from 5 mm to 54 mm
- Three sizes for very wide range of applications
- Extraction of sleeves



Helagaine HLB: The expansion rate makes it possible. Only three sizes in a handy dispenser box for almost all standard diameters.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓

TYPE	Ø (D)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
HLB15	15	5	21	Black (BK)	10 m	45	170-80150
HLB25	25	10	30	Black (BK)	10 m	45	170-80250
HLB35	35	18	54	Black (BK)	10 m	45	170-80350

All dimensions in mm. Subject to technical changes.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-354

Meta-aramid braided sleeving

Helagaine HEGMAN

Helagaine HEGMAN provides excellent mechanical protection for applications involving high temperatures and fire-protection, particularly in the aerospace, military, railway and ship-building industries.

Features and benefits

- Made of non-flammable meta-aramid
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation and fluids



Helagaine HEGMAN braided sleeving.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (PMPI)
Operating Temperature	-60 °C to +240 °C
Melting Point	Does not melt / Carbonisation above +370 °C
Flammability	UL 94 V0 (Raw material), UL 224 VW-1

RoHS

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGMAN-02	1	2	Green (GN)	100 m	170-02100
HEGMAN-04	2	4	Green (GN)	100 m	170-02101
HEGMAN-06	4	8	Green (GN)	100 m	170-02102
HEGMAN-08	6	12	Green (GN)	50 m	170-02103
HEGMAN-10	8	16	Green (GN)	50 m	170-02104
HEGMAN-15	10	20	Green (GN)	50 m	170-02105
HEGMAN-20	12	24	Green (GN)	50 m	170-02106
HEGMAN-25	15	30	Green (GN)	50 m	170-02107
HEGMAN-30	20	40	Green (GN)	50 m	170-02108

All dimensions in mm. Subject to technical changes.
Cuts in any lengths. NOMEX® is a registered trademark of DuPont. Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-355

Water and oil repellent meta-aramid braided sleeving

Helagaine HEGMANWO

Helagaine HEGMANWO is especially resistant to water and oil and is designed for applications requiring mechanical protection at high temperatures, particularly in the aerospace, military, railway and ship-building industries.

Features and benefits

- Made of non-flammable meta-aramid
- Water and oil-repellent
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation, microorganisms and fluids
- Also very resistant to acids and alkali



Helagaine HEGMANWO braided sleeving.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (PMPI)
Operating Temperature	-60 °C to +240 °C
Melting Point	Does not melt / Carbonisation above +370 °C
Flammability	UL 94 V0 (Raw material), UL 224 VW-1

RoHS

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGMANWO-02	1	2	Green (GN)	100 m	170-02000
HEGMANWO-04	2	4	Green (GN)	100 m	170-02001
HEGMANWO-06	4	8	Green (GN)	100 m	170-02002
HEGMANWO-08	6	12	Green (GN)	50 m	170-02003
HEGMANWO-10	8	16	Green (GN)	50 m	170-02004
HEGMANWO-15	10	20	Green (GN)	50 m	170-02005
HEGMANWO-20	12	24	Green (GN)	50 m	170-02006
HEGMANWO-25	15	30	Green (GN)	50 m	170-02007
HEGMANWO-30	20	40	Green (GN)	50 m	170-02008

All dimensions in mm. Subject to technical changes.
Cuts in any lengths. NOMEX® is a registered trademark of DuPont. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-356

Polyester self-closing sleeving

Helagaine Twist-In

Helagaine Twist-In is used to bundle and protect pre-terminated cables in machine-building and automation, electrical installations and automobile and truck manufacturing.

Helagaine Twist-In is also available in practical 2 m and 5 m lengths for use in the home or office.

Features and benefits

- Self-closing sleeve made of polyester
- Very good protection against abrasion
- Ideal for retro-fitting
- Quick and easy installation and removal
- Allows to bundle for inspection, maintenance and assembly
- Small range of sizes covers a wide range of applications

www.HellermannTyton.co.uk/Twist-In-cat22



Helagaine Twist-In enables easy access to cables and wires for assembly, inspection and maintenance.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +125 °C
Melting Point	+255 °C
Flammability	self-extinguishing, FMVSS 302

HF RoHS

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
Twist-In 05	4	5	Black (BK)	150 m	45	170-01000
Twist-In 08	5	8	Black (BK)	100 m	45	170-01001
Twist-In 13	10	13	Black (BK)	50 m	45	170-01002
Twist-In 19	16	19	Black (BK)	25 m	45	170-01004
Twist-In 25	19	25	Black (BK)	25 m	45	170-01005
Twist-In 29	25	29	Black (BK)	15 m	45	170-01006
Twist-In 32	29	32	Black (BK)	15 m	45	170-01007
Twist-In 38	32	38	Black (BK)	15 m	45	170-01008
Twist-In 50	38	50	Black (BK)	15 m	45	170-01010

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
Twist-In 05-5 m	4	5	Black (BK)	5 m	45	170-01011
Twist-In 08-5 m	5	8	Black (BK)	5 m	45	170-01012
Twist-In 13-5 m	10	13	Black (BK)	5 m	45	170-01013
Twist-In 19-2 m	16	19	Black (BK)	2 m	45	170-01014
Twist-In 25-2 m	19	25	Black (BK)	2 m	45	170-01015
Twist-In 29-2 m	25	29	Black (BK)	2 m	45	170-01016
Twist-In 32-2 m	29	32	Black (BK)	2 m	45	170-01017
Twist-In 38-2 m	32	38	Black (BK)	2 m	45	170-01018

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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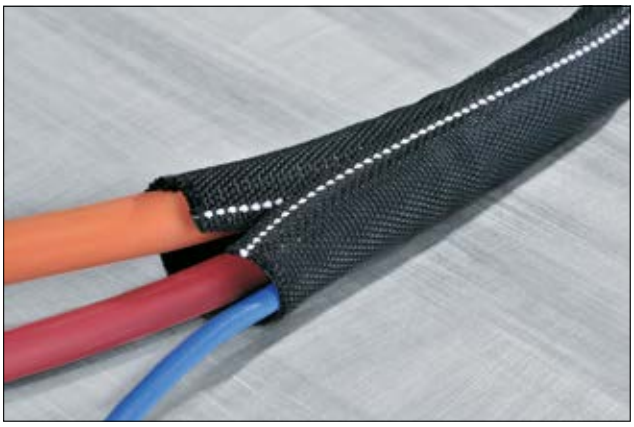
Polyester self-closing sleeving, flame-retardent

Helagaine Twist-In-FR

Helagaine Twist-In-FR can be used in areas where fire protection is important, such as railway, aerospace and shipbuilding.

Features and benefits

- Self-closing sleeve made from polyester
- Optimal fire protection
- Ideal for retro-fitting
- Very easy, quick installation and removal
- Quick and easy access to bundle for inspection, maintenance and assembly
- Small range of sizes covers a wide range of applications



Helagaine Twist-In-FRX with the white identification yarn.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +125 °C
Melting Point	+240 °C
Flammability	FMVSS 302, self-extinguishing
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Tools	Article-No.
Twist-In-FR 05	4	5	Black with White Identification Yarn (BKIDWH)	150 m	45	170-01100
Twist-In-FR 08	5	8	Black with White Identification Yarn (BKIDWH)	100 m	45	170-01101
Twist-In-FR 13	10	13	Black with White Identification Yarn (BKIDWH)	50 m	45	170-01102
Twist-In-FR 19	16	19	Black with White Identification Yarn (BKIDWH)	25 m	45	170-01104
Twist-In-FR 25	19	25	Black with White Identification Yarn (BKIDWH)	25 m	45	170-01105
Twist-In-FR 29	25	29	Black with White Identification Yarn (BKIDWH)	15 m	45	170-01106
Twist-In-FR 32	29	32	Black with White Identification Yarn (BKIDWH)	15 m	45	170-01107
Twist-In-FR 38	32	38	Black with White Identification Yarn (BKIDWH)	15 m	45	170-01108
Twist-In-FR 50	38	50	Black with White Identification Yarn (BKIDWH)	15 m	45	170-01109

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

EN 45545-2 ECE R-118

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-358

Date of issue: September 2022

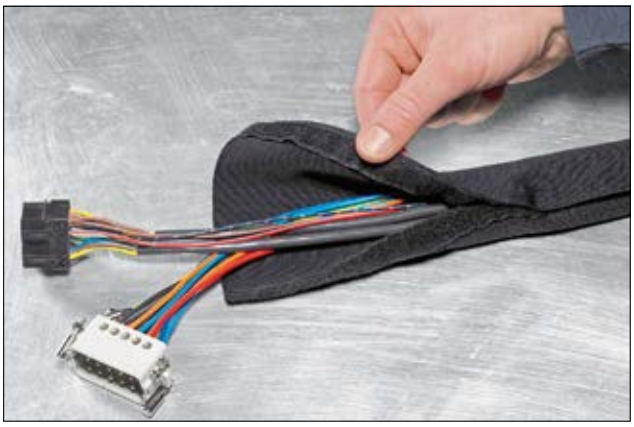
Re-sealable protective sleeving for post-termination cable organisation

HELAHOOK

HELAHOOK is used in industrial machines, electrical appliances, shipbuilding, railway vehicles and in the aerospace industry. HELAHOOK is also employed in automobiles or commercial vehicles. It is the ideal solution for post-termination cable organisation and wherever repeated use is a necessity.

Features and benefits

- Re-sealable cable protection made of polyester
- Very elastic, fits snugly around the cables
- Hook and loop sealing system can be used for retro-fitting
- High abrasion-resistance



HELAHOOK protective sleeving allows for retrospective fitting and repeated use.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Flammability	UL 94 V2, FMVSS 302

HF ✓ RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HELAHOOK10	3	15	Black (BK)	25 m	170-05100
HELAHOOK15	10	20	Black (BK)	25 m	170-05150
HELAHOOK20	15	30	Black (BK)	25 m	170-05200
HELAHOOK25	20	40	Black (BK)	25 m	170-05250
HELAHOOK30	25	50	Black (BK)	25 m	170-05300

All dimensions in mm. Subject to technical changes.
Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-359

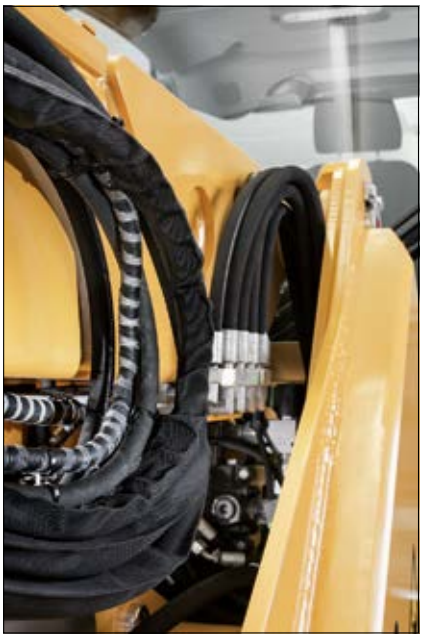
Burst Protection Sleeving for Hydraulic Hoses

Helagaine HEGWS

Helagaine HEGWS is burst protection sleeve highly resistant to abrasion and tears. HEGWS is used to protect hydraulic hoses and prevent injuries due to leaks emitting high-pressure liquid jets. HEGWS is typically used with earth moving machinery and where the is high mechanical vibration.

Features and benefits

- Exceptional tear-resistance
- Very good protection against abrasion
- Optimal protection of hydraulic hoses
- Reduces risk of liquid-jet injuries
- Fullfils the standards of Earth Moving Machinery EN ISO 3457 and Mechanical Vibration and Shock EN 1299



Helagaine HEGWS: The ideal protective sleeve for hydraulic hoses.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +125 °C
Melting Point	+220 +/- 10 °C
Flammability	UL 94 V2, FMVSS 302, Type B

HF ✓ RoHS ✓

TYPE	Inside Ø (ID)	Wall (WT)	Colour	Reel Length	Tools	Article-No.
HEGWS20	12	1.1	Black (BK)	50 m	45	170-01300
HEGWS25	15	1.1	Black (BK)	50 m	45	170-01301
HEGWS30	19	1.1	Black (BK)	50 m	45	170-01302
HEGWS35	22	1.1	Black (BK)	50 m	45	170-01303
HEGWS40	25	1.1	Black (BK)	50 m	45	170-01304
HEGWS45	28	1.1	Black (BK)	50 m	45	170-01305
HEGWS50	31	1.1	Black (BK)	50 m	45	170-01306
HEGWS60	38	1.1	Black (BK)	50 m	45	170-01307
HEGWS70	44	1.1	Black (BK)	50 m	45	170-01308
HEGWS80	50	1.1	Black (BK)	50 m	45	170-01309
HEGWS90	57	1.1	Black (BK)	50 m	45	170-01310
HEGWS100	60	1.1	Black (BK)	50 m	45	170-01311
HEGWS115	70	1.1	Black (BK)	50 m	45	170-01312
HEGWS145	90	1.1	Black (BK)	50 m	45	170-01313
HEGWS176	110	1.1	Black (BK)	50 m	45	170-01314
HEGWS200	125	1.1	Black (BK)	50 m	45	170-01315

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Recommended Tools	
	45 HSG0
	570

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-360

Date of issue: September 2022

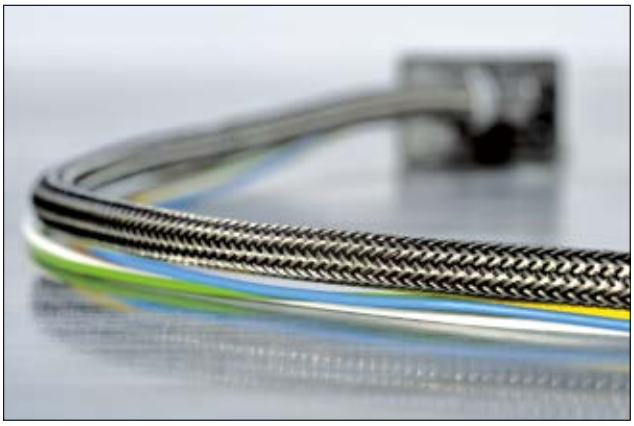
Electromagnetic protection braided sleeving

Helagaine HEGEMIP

Helagaine HEGEMIP braided sleeving is used for highly sensitive electronics, such as electrical appliances and machines, radio equipment, military and automotive engineering.

Features and benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- Superior abrasion protection
- No kinks or tears, even when bending the sleeve 90°
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP braided sleeving: reliable protection from electromagnetic radiation.

MATERIAL	Polyester, halogen free (PET), Tin Plated copper (SNCU)
Operating Temperature	-40 °C to +150 °C
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
Flammability	UL 94 V2, FMVSS 302

HF ✓ RoHS ✓

TYPE	Ø (D)	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP04	4	4	6	Tin coloured and Black	22 g/m	100 m	173-00400
HEGEMIP06	6	5	10	Tin coloured and Black	29 g/m	100 m	173-00600
HEGEMIP08	8	8	11	Tin coloured and Black	36 g/m	100 m	173-00800
HEGEMIP10	10	8	13	Tin coloured and Black	44 g/m	50 m	173-01000
HEGEMIP12	12	10	15	Tin coloured and Black	48 g/m	50 m	173-01200
HEGEMIP14	14	12	18	Tin coloured and Black	58 g/m	100 m	173-01400
HEGEMIP16	16	14	20	Tin coloured and Black	73 g/m	100 m	173-01600
HEGEMIP18	18	16	22	Tin coloured and Black	79 g/m	50 m	173-01800
HEGEMIP20	20	18	25	Tin coloured and Black	100 g/m	50 m	173-02000

All dimensions in mm. Subject to technical changes.
Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-361

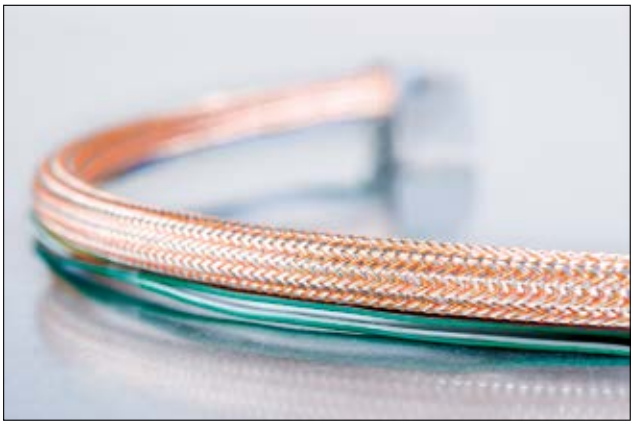
Electromagnetic protection braided sleeving for hybrid automobiles

Helagaine HEGEMIP-HY

Helagaine HEGEMIP-HY provides electromagnetic protection in hybrid automobiles.

Features and benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- No kinks or ruptures even when bent at sharp angles
- Superior abrasion protection
- Special copper alloy for enhanced protection against salt spray
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP-HY braided sleeving: EMI protection for hybrid automobiles.

MATERIAL	Polyester (PET), Tin Plated copper (SNCU)
Operating Temperature	-40 °C to +150 °C
EMI requirements	10 kHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
Flammability	UL 94 V2, FMVSS 302

HF ✓ RoHS ✓

TYPE	Ø (D)	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP-HY20	20	19	27	Orange (OG)	72 g/m	50 m	173-02001
HEGEMIP-HY30	30	25	35	Orange (OG)	101 g/m	50 m	173-03000
HEGEMIP-HY35	35	30	40	Orange (OG)	120 g/m	50 m	173-03501
HEGEMIP-HY40	40	30	50	Orange (OG)	180 g/m	50 m	173-04000
HEGEMIP-HY50	50	40	60	Orange (OG)	193 g/m	50 m	173-05000

All dimensions in mm. Subject to technical changes.
Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-362

Electromagnetic protection braided sleeving for defence applications

Helagaine HEGEMIP-VG

Helagaine HEGEMIP-VG provides electromagnetic protection for the defence industry.

Features and benefits

- Excellent electromagnetic protection
- Very flexible, expandable and easy to apply
- Especially suitable for applications in tight areas or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Very good abrasion resistance
- Approved to military norm VG 96936-10 / Type A



HEGEMIP-VG braided sleeving with VG approval for defence applications.

MATERIAL	Tin Plated copper (SNCU)
Operating Temperature	-65 °C to +150 °C
Flammability	UL 94 V2, FMVSS 302

RoHS

TYPE	Ø (D)	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP-VG03	3	3.5	5.0	Metal (ML)	19 g/m	500 m	173-00200
HEGEMIP-VG04	4	4.5	7.0	Metal (ML)	30 g/m	500 m	173-00201
HEGEMIP-VG06	6	5.5	8.5	Metal (ML)	37 g/m	500 m	173-00202
HEGEMIP-VG07.5	7.5	7.5	13.5	Metal (ML)	71 g/m	500 m	173-00203
HEGEMIP-VG10	10	13.0	17.5	Metal (ML)	96 g/m	250 m	173-00204
HEGEMIP-VG12.5	12.5	15.0	19.5	Metal (ML)	100 g/m	200 m	173-00205
HEGEMIP-VG20	20	19.0	30.0	Metal (ML)	265 g/m	100 m	173-00206

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

VG For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-363

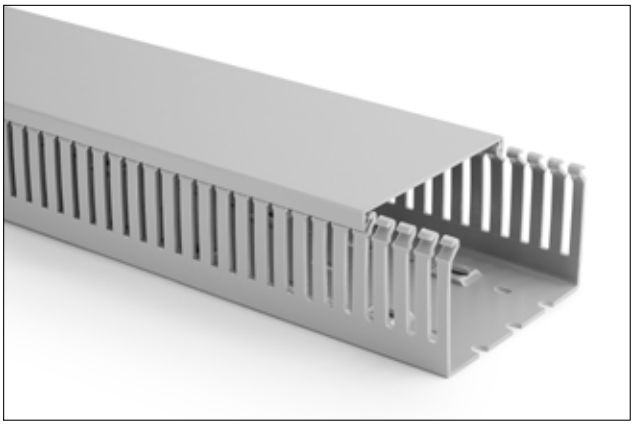
Rigid PVC wiring ducts

HelaDuct HTWD-PN for small-diameter wires (metric sizes)

HelaDuct HTWD-PN wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Raised mounting points for easily and securely fastening wire retainers and other accessores prior to cabling
- Wire retainers and accessories leave no protruding parts below surface of duct
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Additional retainer nub on fingers on ducts height 80 and above to prevent cables from slipping
- Base perforation according to DIN EN 50085

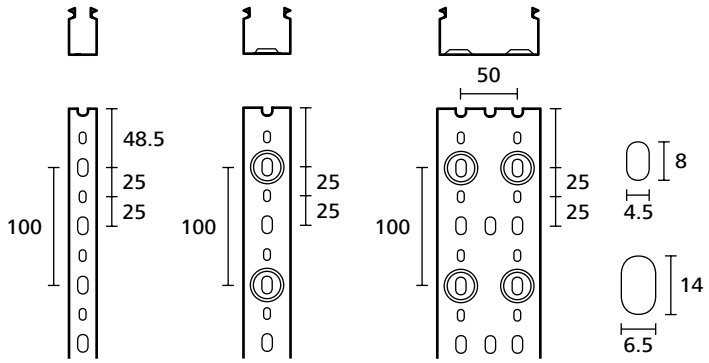


HelaDuct HTWD-PN - narrow finger wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Colour	Grey (GY)
Length (L)	2 m
Operating Temperature	-5 °C to +65 °C
Flammability	UL 94 V0

RoHS

Nominal Dimensions HTWD-PN/ HTWD-PW



Width 25 *Width 40-60* *Width 80-120* *Hole dimensions*

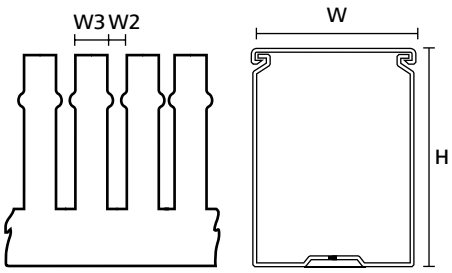
www.HellermannTyton.co.uk/HTWD-PN-cat22

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Rigid PVC wiring ducts

HelaDuct HTWD-PN for small-diameter wires (metric sizes)



Wiring duct HTWD-PN

TYPE	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PN-25X40	25	40	4	6	72 m	184-10068
HTWD-PN-25X60	25	60	4	6	48 m	184-10138
HTWD-PN-25X80	25	80	4	6	48 m	184-10198
HTWD-PN-40X40	40	40	4	6	40 m	184-10078
HTWD-PN-40X60	40	60	4	6	36 m	184-10148
HTWD-PN-40X80	40	80	4	6	32 m	184-10208
HTWD-PN-40X100	40	100	4	6	16 m	184-10258
HTWD-PN-60X40	60	40	4	6	24 m	184-10088
HTWD-PN-60X60	60	60	4	6	24 m	184-10158
HTWD-PN-60X80	60	80	4	6	24 m	184-10218
HTWD-PN-60X100	60	100	4	6	8 m	184-10268
HTWD-PN-80X40	80	40	4	6	24 m	184-10098
HTWD-PN-80X60	80	60	4	6	24 m	184-10168
HTWD-PN-80X80	80	80	4	6	24 m	184-10228
HTWD-PN-80X100	80	100	4	6	8 m	184-10329
HTWD-PN-100X40	100	40	4	6	16 m	184-10108
HTWD-PN-100X60	100	60	4	6	16 m	184-10178
HTWD-PN-100X80	100	80	4	6	16 m	184-10238
HTWD-PN-100X100	100	100	4	6	8 m	184-10278
HTWD-PN-120X60	120	60	4	6	16 m	184-10188
HTWD-PN-120X80	120	80	4	6	16 m	184-10248

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-365

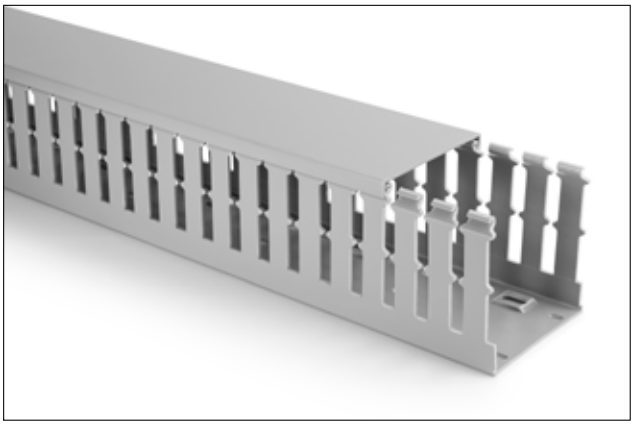
Rigid PVC wiring ducts

HelaDuct HTWD-PW for large-diameter wires (metric sizes)

HelaDuct HTWD-PW wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Wide slots suitable for large-diameter wires
- Wide fingers provide additional wire support
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Raised mounting points for easily, quickly and securely fastening wire retainers and other accessories prior to cabling
- Wire retainers and accessories leave no protruding parts below surface of duct
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Additional retainer nub on fingers on ducts height 80 and above to prevent cables from slipping
- Base perforation according to DIN EN 50085



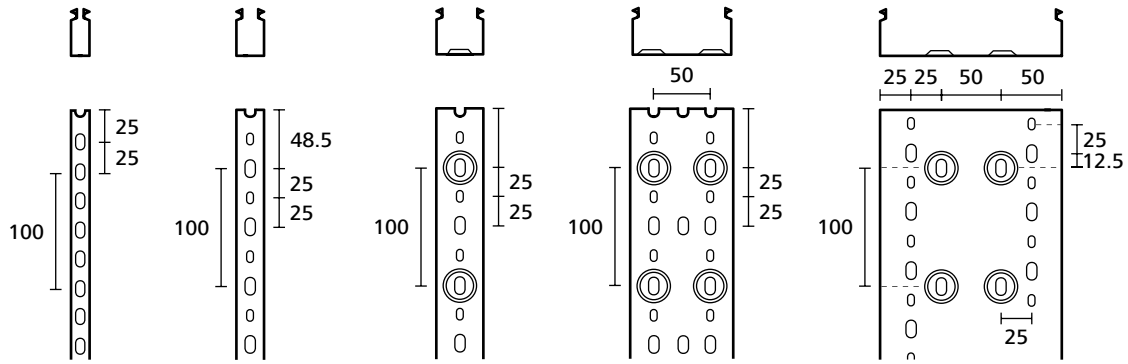
HelaDuct HTWD-PW - wide finger wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Colour	Grey (GY)
Length (L)	2 m
Operating Temperature	-5 °C to +65 °C
Flammability	UL 94 V0

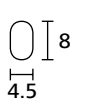
RoHS

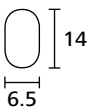
www.HellermannTyton.co.uk/HTWD-PW-cat22

Nominal Dimensions HTWD-PN/ HTWD-PW



Width 15 *Width 25* *Width 40-60* *Width 80-120* *Width 150*





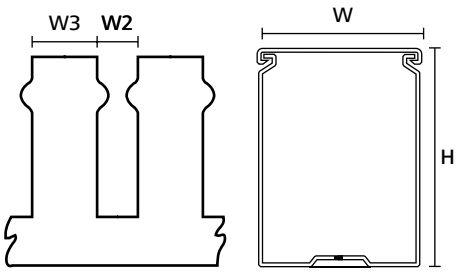
Hole dimensions

c UL us For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Rigid PVC wiring ducts

HelaDuct HTWD-PW for large-diameter wires (metric sizes)



Wiring duct HTWD-PW/ HTWD-PWB

TYPE	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PW-15X18	15	18	5	7.5	72 m	181-10018
HTWD-PW-15X30	15	30	5	7.5	64 m	181-10038
HTWD-PW-15X40	15	40	5	7.5	48 m	181-10058
HTWD-PW-15X60	15	60	5	7.5	32 m	181-10118
HTWD-PW-25X30	25	30	5	7.5	72 m	181-10028
HTWD-PW-25X40	25	40	8	12	72 m	181-10068
HTWD-PW-25X60	25	60	8	12	48 m	181-10138
HTWD-PW-25X80	25	80	8	12	48 m	181-10198
HTWD-PW-25X100	25	100	8	12	16 m	181-10328
HTWD-PW-40X40	40	40	8	12	40 m	181-10078
HTWD-PW-40X60	40	60	8	12	36 m	181-10148
HTWD-PW-40X80	40	80	8	12	32 m	181-10208
HTWD-PW-40X100	40	100	8	12	16 m	181-10258
HTWD-PW-60X40	60	40	8	12	24 m	181-10088
HTWD-PW-60X60	60	60	8	12	24 m	181-10158
HTWD-PW-60X80	60	80	8	12	24 m	181-10218
HTWD-PW-60X100	60	100	8	12	8 m	181-10268
HTWD-PW-80X40	80	40	8	12	24 m	181-10098
HTWD-PW-80X60	80	60	8	12	24 m	181-10168
HTWD-PW-80X80	80	80	8	12	24 m	181-10228
HTWD-PW-80X100	80	100	8	12	8 m	181-10329
HTWD-PW-100X40	100	40	8	12	16 m	181-10108
HTWD-PW-100X60	100	60	8	12	16 m	181-10178
HTWD-PW-100X80	100	80	8	12	16 m	181-10238
HTWD-PW-100X100	100	100	8	12	8 m	181-10278
HTWD-PW-120X60	120	60	8	12	16 m	181-10188
HTWD-PW-120X80	120	80	8	12	16 m	181-10248
HTWD-PW-150X100	150	100	8	12	8 m	181-10288

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-367

Rigid PVC wiring ducts

HelaDuct HTWD-PD (DIN-sizes)

HelaDuct HTWD-PD wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Base perforation according to DIN EN 50085

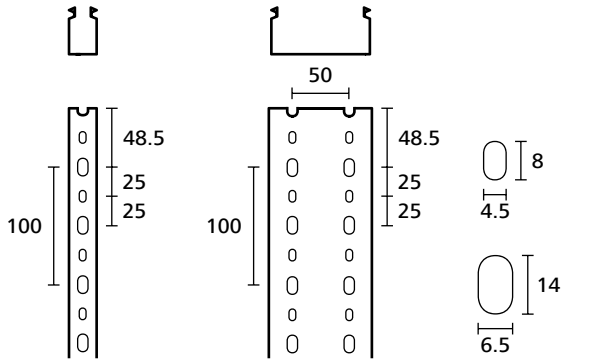


HelaDuct HTWD-PD - DIN sized wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Colour	Grey (GY)
Length (L)	2 m
Operating Temperature	-5 °C to +60 °C
Flammability	UL 94 V0

RoHS

Nominal Dimensions HTWD-PD DIN



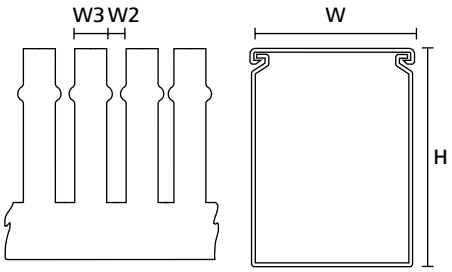
Width 20-50 *Width 75-125* *Hole dimensions*

c UL us For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Rigid PVC wiring ducts

HelaDuct HTWD-PD (DIN-sizes)



Wiring duct HTWD-PD

TYPE	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PD-20X20	20	20	4	6	64 m	185-42020
HTWD-PD-20X37.5	20	37.5	4	6	32 m	185-42037
HTWD-PD-20X50	20	50	4	6	20 m	185-42050
HTWD-PD-25X25	25	25	5	7.5	48 m	185-42525
HTWD-PD-25X50	25	50	5	7.5	18 m	185-42550
HTWD-PD-25X75	25	75	5	7.5	32 m	185-42575
HTWD-PD-37.5X25	37.5	25	5	7.5	64 m	185-43725
HTWD-PD-37.5X37.5	37.5	37.5	5	7.5	32 m	185-43737
HTWD-PD-37.5X50	37.5	50	5	7.5	40 m	185-43750
HTWD-PD-37.5X75	37.5	75	5	7.5	40 m	185-43775
HTWD-PD-50X50	50	50	5	7.5	48 m	185-45050
HTWD-PD-50X75	50	75	5	7.5	20 m	185-45075
HTWD-PD-50X100	50	100	5	7.5	24 m	185-45010
HTWD-PD-75X50	75	50	5	7.5	20 m	185-47550
HTWD-PD-75X75	75	75	5	7.5	16 m	185-47575
HTWD-PD-75X100	75	100	5	7.5	16 m	185-47510
HTWD-PD-100X50	100	50	5	7.5	24 m	185-41050
HTWD-PD-100X75	100	75	5	7.5	16 m	185-41075
HTWD-PD-100X100	100	100	5	7.5	8 m	185-41010
HTWD-PD-125X50	125	50	5	7.5	18 m	185-41250
HTWD-PD-125X75	125	75	5	7.5	12 m	185-41275

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-369

Halogen-free wiring ducts

HelaDuct HTWD-HF (metric sizes)

HelaDuct HTWD-HF wiring ducts are used to route and protect wires in control panels and switching systems where there are high demands on personal or material safety in case of fire, such as in public transport, tunnels, data-processing centers or public buildings.

Features and benefits

- Excellent fire-safety characteristics according to UL94 und EN 45545-2
- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Duct covers hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of duct
- Base perforation according to DIN EN 50085

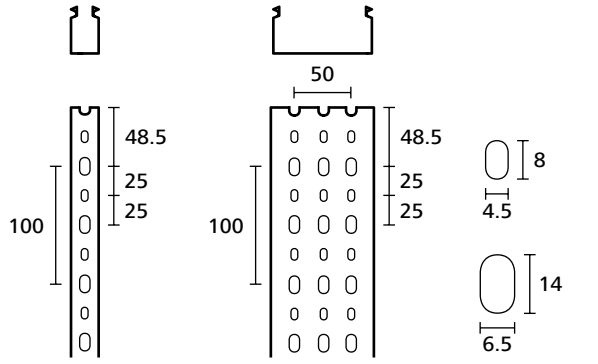


HelaDuct HTWD-HF - halogenfree wiring duct.

MATERIAL	Acrylonitrile Butadiene Styrene alloyed with Polycarbonate (PC/ABS)
Colour	Grey (GY)
Length (L)	2.0 m
Operating Temperature	-25 °C to +90 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL2, R23 HL2

HF ✓ RoHS ✓

Hole pattern acc. to DIN EN 50085



Width 25-60 *Width 80-120* *Hole dimesions*

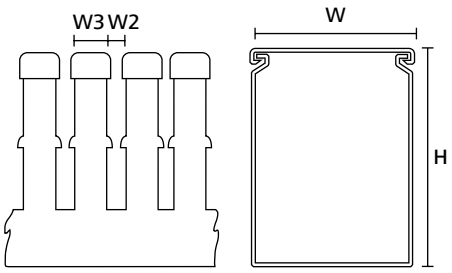
EN 45545-2 c UL us

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Halogen-free wiring ducts

HelaDuct HTWD-HF (metric sizes)



HelaDuct Wiring ducts HTWD-HF

TYPE	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-HF-25X25	25.0	25.0	6	6.5	50.0 m	183-22525
HTWD-HF-25X40	25.0	40.0	6	6.5	48.0 m	183-22540
HTWD-HF-25X60	25.0	60.0	6	6.5	60.0 m	183-25060
HTWD-HF-25X80	25.0	80.0	6	6.5	20.0 m	183-22580
HTWD-HF-40X25	40.0	25.0	6	6.5	48.0 m	183-24025
HTWD-HF-40X40	40.0	40.0	6	6.5	50.0 m	183-24040
HTWD-HF-40X60	40.0	60.0	6	6.5	40.0 m	183-24060
HTWD-HF-40X80	40.0	80.0	6	6.5	20.0 m	183-24080
HTWD-HF-60X40	60.0	40.0	6	6.5	40.0 m	183-26040
HTWD-HF-60X60	60.0	60.0	6	6.5	24.0 m	183-26060
HTWD-HF-60X80	60.0	80.0	6	6.5	20.0 m	183-26080
HTWD-HF-60X100	60.0	100.0	6	6.5	12.0 m	183-26010
HTWD-HF-80X40	80.0	40.0	6	6.5	20.0 m	183-28040
HTWD-HF-80X60	80.0	60.0	6	6.5	20.0 m	183-28060
HTWD-HF-80X80	80.0	80.0	6	6.5	12.0 m	183-28080
HTWD-HF-80X100	80.0	100.0	6	6.5	10.0 m	183-28010
HTWD-HF-100X40	100.0	40.0	6	6.5	20.0 m	183-22040
HTWD-HF-100X60	100.0	60.0	6	6.5	16.0 m	183-21060
HTWD-HF-100X80	100.0	80.0	6	6.5	12.0 m	183-21080
HTWD-HF-100X100	100.0	100.0	6	6.5	8.0 m	183-21010
HTWD-HF-120X60	120.0	60.0	6	6.5	12.0 m	183-21260
HTWD-HF-120X80	120.0	80.0	6	6.5	16.0 m	183-21280

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-371

Flexible cable support

HelaDuct flexible cable supports are commonly used in switching cabinets. They are also used in the furniture industry, where cables need to be routed rapidly and attractively.

Features and benefits

- Space-saving wiring system
- Highly flexible, can be installed at angles of 90° and higher
- Cable clearly open to view
- Rapid mounting with screws or adhesive strip with high-quality foam bonding layer



HelaDuct Flex can be installed at angles above 90°.

MATERIAL	Polypropylene (PP)
Operating Temperature	-20 °C to +70 °C, (+80 °C, 200 h)
Adhesive	Synthetic rubber with base of polyethylene foam
Flammability	UL 94 V0 (excluding adhesive)

HF ✓ RoHS ✓

HelaDuct Flex Screw Mounting

TYPE	Nominal Ø	Fixation Method	No. of Wires		Colour	Length (L)	Pack Cont.	Article-No.
HelaDuct Flex10	10	Screw Mounting	6 x 1.50 mm²	4 x 2.50 mm²	White (WH)	500	100 pcs.	164-11008
HelaDuct Flex20	20	Screw Mounting	22 x 1.50 mm²	14 x 2.50 mm²	White (WH)	500	70 pcs.	164-21008
HelaDuct Flex30	30	Screw Mounting	50 x 1.50 mm²	34 x 2.50 mm²	White (WH)	500	40 pcs.	164-31008
HelaDuct Flex40	40	Screw Mounting	81 x 2.50 mm²	60 x 2.50 mm²	White (WH)	500	24 pcs.	164-41008

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

HelaDuct Flex Screw Mounting with Adhesive

TYPE	Nominal Ø	Fixation Method	No. of Wires		Colour	Length (L)	Pack Cont.	Article-No.
HelaDuct Flex10SK	10	Screw Mounting and Adhesive	6 x 1.50 mm²	4 x 2.50 mm²	White (WH)	500	100 pcs.	164-11108
HelaDuct Flex20SK	20	Screw Mounting and Adhesive	22 x 1.50 mm²	14 x 2.50 mm²	White (WH)	500	70 pcs.	164-21108
HelaDuct Flex30SK	30	Screw Mounting and Adhesive	50 x 1.50 mm²	34 x 2.50 mm²	White (WH)	500	40 pcs.	164-31108
HelaDuct Flex40SK	40	Screw Mounting and Adhesive	81 x 2.50 mm²	60 x 2.50 mm²	White (WH)	500	24 pcs.	164-41108

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-372

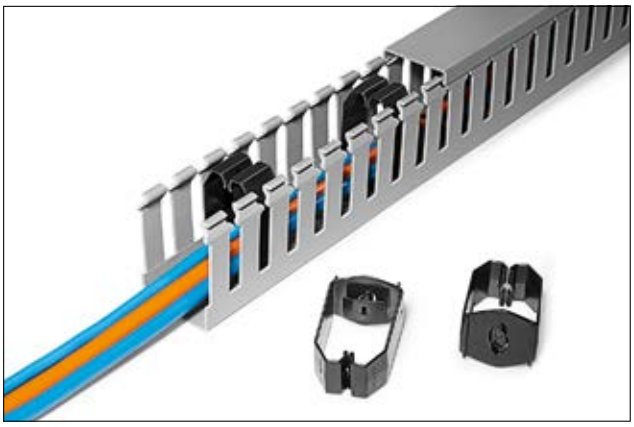
For mounting prior to wiring

HelaDuct HTWD-BWR Base Wire Retainers

HelaDuct Base Wire Retainers HTWD-BWR are anchored securely on the raised mounting points of HTWD-PN and HTWD-PW ducts to allow insertion of wires. Wires are held in place during wiring, for instance in a vertical position or during ceiling installation.

Features and benefits

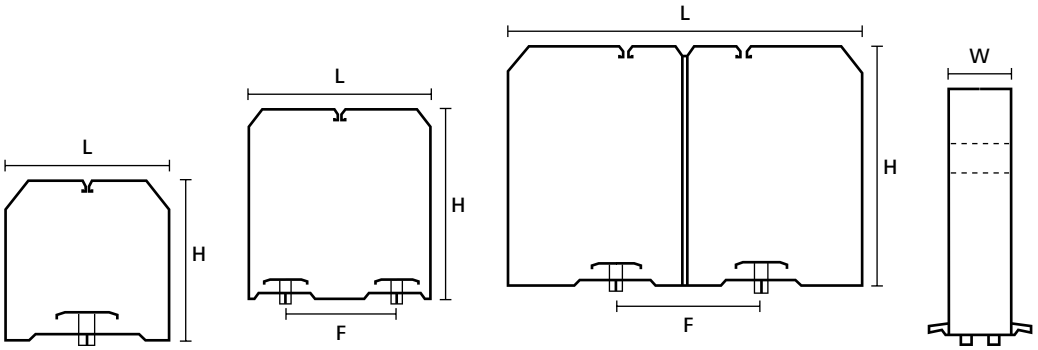
- Quickly and easily fastend on raised mounting points with a 1/4 turn of a screwdriver
- Wires easily inserted and firmly held in place
- Anchor of retainer remains inside raised mounting point and does not protrude below surface of duct base
- Reduces strain on duct fingers especially at corners and eliminates bulging against sidewall
- Available for all duct sizes of width and height larger than 40
- Fits snuggly in duct for minimal loss of installation space



HTWD-BWR wire retainers are easy to mount and hold wires firmly during wiring.

MATERIAL	Acrylonitrile Butadiene Styrene alloyed with Polycarbonate (PC/ABS)
Operating Temperature	-5 °C to +80 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓



Width 40-60 *Width 80-120* *Width 150* *HTWD-BWR*

TYPE	Length (L)	Height (H)	Width (W)	Fixing Hole Centres (F)	Colour	Pack Cont.	Article-No.
HTWD-BWR-40X80	34	75	20	-	Black (BK)	20 pcs.	181-50480
HTWD-BWR-40X40	35	36	20	-	Black (BK)	40 pcs.	181-50440
HTWD-BWR-40X60	35	56	20	-	Black (BK)	40 pcs.	181-50460
HTWD-BWR-60X60	54	55	20	-	Black (BK)	20 pcs.	181-50660
HTWD-BWR-60X80	54	75	20	-	Black (BK)	20 pcs.	181-50680
HTWD-BWR-60X100	54	95	20	-	Black (BK)	20 pcs.	181-50690
HTWD-BWR-60X40	55	35	20	-	Black (BK)	40 pcs.	181-50640
HTWD-BWR-80X60	74	55	20	50	Black (BK)	10 pcs.	181-50860
HTWD-BWR-80X80	74	74	20	50	Black (BK)	10 pcs.	181-50880
HTWD-BWR-80X100	74	94	20	50	Black (BK)	30 pcs.	181-50890
HTWD-BWR-100X100	93	94	20	50	Black (BK)	5 pcs.	181-51090
HTWD-BWR-100X60	94	55	20	50	Black (BK)	10 pcs.	181-51060
HTWD-BWR-100X80	94	75	20	50	Black (BK)	10 pcs.	181-51080
HTWD-BWR-120X80	113	74	20	50	Black (BK)	10 pcs.	181-51280
HTWD-BWR-120X60	114	54	20	50	Black (BK)	10 pcs.	181-51260
HTWD-BWR-150X100	143	94	20	50	Black (BK)	5 pcs.	181-51590

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-373

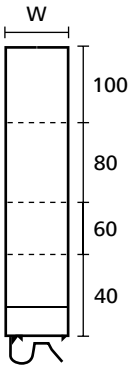
For mounting to duct fingers

HelaDuct HTWD-NFWR and HTWD-WFWR Wire Retainers

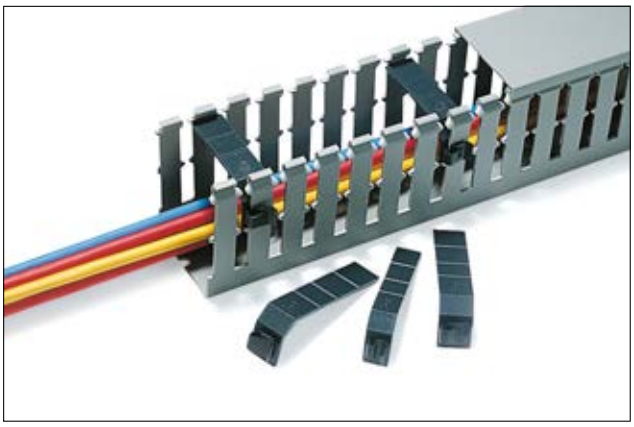
The Narrow Finger and Wide Finger Wire Retainers HTWD-NFWR and HTWD-WFWR are easily attached to HelaDuct wiring duct fingers to hold wires securely in place during installation and when the cover is removed.

Features and benefits

- Prevents wires from falling out even when vertical routed
- Easily inserted onto single fingers of duct
- Height can be freely adjusted
- Does not block insertion of wirings into slots
- One retainer for all duct widths: length of retainer can be shortened at break-off points to duct width
- HTWD-NFWR is compatible with HelaDuct HTWD-PN and HTWD-HF (metric sizes)
- HTWD-WFWR is compatible with HelaDuct HTWD-PW ducts



HTWD-NFWR, -WFWR



HTWD-NFWR and HTWD-WFWR hold wires in place even when cover is removed.

MATERIAL	Acrylonitrile Butadiene Styrene (ABS)
Operating Temperature	-40 °C to +80 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

TYPE	For Wiring Ducts	Width (W)	Colour	Pack Cont.	Article-No.
HTWD-NFWR	HTWD-PN, HTWD-HF	14	Black (BK)	100 pcs.	181-10020
HTWD-WFWR	HTWD-PW	18	Black (BK)	100 pcs.	181-10010

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-374

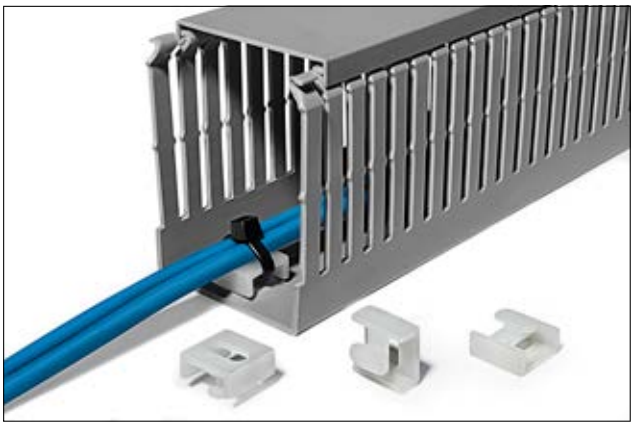
For fixing cable ties to base of ducts

HelaDuct HTWD-CTH cable tie holder

HelaDuct HTWD-CTH is used to anchor a cable tie securely to the base of a duct.

Features and benefits

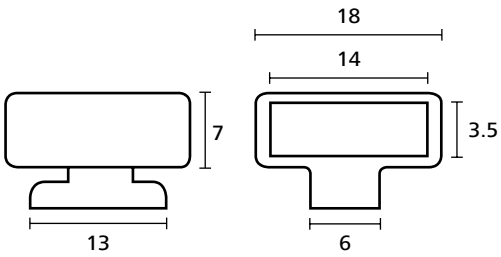
- Holds all components firmly in place
- Cable tie easily laced through HTWD-CTH
- Anchor of mount remains inside raised mounting point and does not protrude below surface of duct base



HTWD-CTH for fixing cable ties to base of ducts.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +80 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



HTWD-CTH Mount *HTWD-CTH Mount*

TYPE	For Wiring Ducts	Colour	Pack Cont.	Article-No.
HTWD-CTH	HTWD-PN, HTWD-PW	White (WH)	50 pcs.	181-45029

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-375

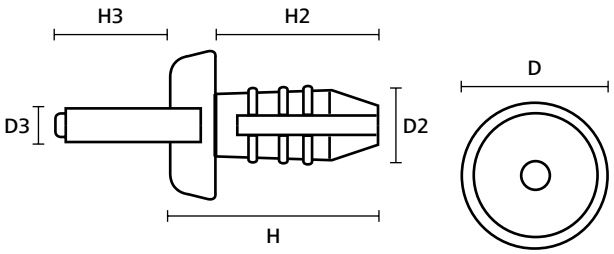
For installing wiring ducts into fixing holes

HelaDuct HTWD-R4 and HTWD-R6 rivets

HTWD-R4 and HTWD-R6 are used to rapidly mount and secure wiring ducts into fixing holes without the use of screws.

Features and benefits

- Very good mechanical properties
- Good resistance to vibration
- Easily and rapidly applied with HTWD-RT4 and HTWD-RT6 rivet tools
- Colour-coded for easy identification for use with rivet tools



HTWD-R4, -R6



HTWD-R4 and HTWD-R6 Rivet.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +80 °C
Flammability	UL 94 V2

HF RoHS

TYPE	Height (H)	Height (H2)	Height (H3)	Ø (D)	Ø (D2)	Ø (D3)	Colour	Pack Cont.	Article-No.
HTWD-R4	14.0	12.0	11.5	9.0	5.0	2.0	Blue (BU)	1,000 pcs.	181-42400
HTWD-R6	16.0	12.7	13.0	11.0	6.0	3.0	Black (BK)	250 pcs.	181-42600
	16.0	14.0	13.5	11.0	7.5	4.0	Orange (OG)	500 pcs.	181-42500

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For inserting R4 and R6 rivets

HelaDuct HTWD-RT4 and HTWD-RT6 Rivet Tools

HelaDuct HTWD-RT4 and HTWD-RT6 tools are used to insert HTWD-R4 and HTWD-R6 rivets into fixing holes and thus mounting ducts without the use of screws.

Features and benefits

- Durable and reliable
- Long aluminum body enables insertion even into very high ducts
- Soft plastic ergonomic handle
- Colour-coded for easy identification for use with correct rivets



Rivet Tools HTWD-RT4, -RT6.

MATERIAL	Metal (MET), Plastic (PL)

RoHS

TYPE	For Wiring Duct Rivets	Colour	Article-No.
HTWD-RT4	R4	Blue (BU)	181-41542
HTWD-RT6	R6	Orange (OG)	181-41564

Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-376

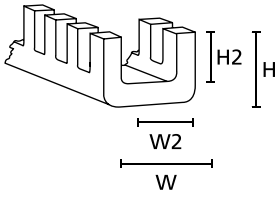
Edge protection for cut-out sections

Flexiform G51P PE grommet strip

Flexiform edge protection is used to protect cables and wires routed through sharp-edged cut-out sections.

Features and benefits

- Very flexible
- Easily and securely applied without adhesives
- Provides effective, orderly-looking protection
- Flexiform G51P made of polyethylene offers general purpose edge protection
- Flexiform G51N made of PA6 offers very good abrasion resistance
- Flexiform G51T made of PTFE offers excellent resistance to high temperatures and most chemicals



Flexiform edge protection



Optimal protection of cables and wires at panel edges.

MATERIAL	Polyethylene (PE)
Operating Temperature	-30 °C to +80 °C
Flammability	UL 94 HB

HF ✓ RoHS ✓

TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51PAA	0.4 - 0.9	2.3	0.9	2.7	1.8	PE	Natural (NA)	25 m	251-10009
G51PA	0.4 - 1.3	3.9	1.5	4.3	2.7	PE	Natural (NA)	25 m	251-10109
G51PB	1.3 - 2.1	4.6	2.4	4.3	2.7	PE	Natural (NA)	25 m	251-10209
G51PC	2.1 - 3.3	5.7	3.5	4.3	2.7	PE	Natural (NA)	25 m	251-10309
G51PD	3.3 - 4.8	8.4	5.1	6.2	4.3	PE	Natural (NA)	25 m	251-10409
G51PE	4.8 - 6.5	9.9	6.7	6.4	4.5	PE	Natural (NA)	25 m	251-10509
G51PF	6.5 - 8.1	11.4	8.3	6.8	4.8	PE	Natural (NA)	25 m	251-10609
G51PG	8.1 - 9.7	13.2	10.1	6.8	4.8	PE	Natural (NA)	25 m	251-10709
G51PH	9.7 - 12.9	16.4	13.2	6.8	4.8	PE	Natural (NA)	25 m	251-10809

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.

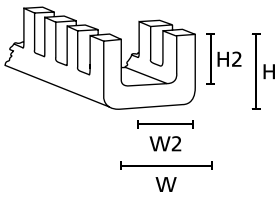
Add items to your watchlist!
www.HT.click/49-377

Edge protection for cut-out sections

Flexiform G51T PTFE grommet strip

MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-60 °C to +260 °C, intermittent +350 °C
Flammability	UL 94 V0

RoHS



Flexiform edge protection

TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51TA	0.4 - 1.3	3.9	1.5	4.3	2.7	PTFE	Natural (NA)	3 m	251-30109
G51TB	1.3 - 2.1	4.6	2.4	4.3	2.7	PTFE	Natural (NA)	3 m	251-30209
G51TC	2.1 - 3.3	5.7	3.5	4.3	2.7	PTFE	Natural (NA)	3 m	251-30309
G51TD	3.3 - 4.8	8.4	5.1	6.2	4.3	PTFE	Natural (NA)	3 m	251-30409
G51TE	4.8 - 6.5	9.9	6.7	6.4	4.5	PTFE	Natural (NA)	3 m	251-30509
G51TF	6.5 - 8.1	11.4	8.3	6.8	4.8	PTFE	Natural (NA)	3 m	251-30609
G51TG	8.1 - 9.7	13.2	10.1	6.8	4.8	PTFE	Natural (NA)	3 m	251-30709
G51TH	9.7 - 12.9	16.4	13.2	6.8	4.8	PTFE	Natural (NA)	3 m	251-30809

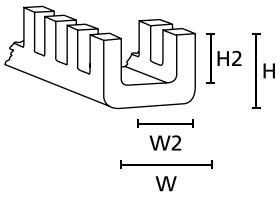
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.

Edge protection for cut-out sections

Flexiform G51N PA6 grommet strip

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +95 °C
Flammability	UL 94 HB

HF RoHS



Flexiform edge protection

TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51NA	0.4 - 1.3	3.9	1.5	4.3	2.7	PA6	Natural (NA)	25 m	251-21109
G51NB	1.3 - 2.1	4.6	2.4	4.3	2.7	PA6	Natural (NA)	25 m	251-21209
G51NC	2.1 - 3.3	5.7	3.5	4.3	2.7	PA6	Natural (NA)	25 m	251-21309
G51ND	3.3 - 4.8	8.4	5.1	6.2	4.3	PA6	Natural (NA)	25 m	251-21409
G51NE	4.8 - 6.5	9.9	6.7	6.4	4.5	PA6	Natural (NA)	25 m	251-21509
G51NF	6.5 - 8.1	11.4	8.3	6.8	4.8	PA6	Natural (NA)	25 m	251-21609
G51NG	8.1 - 9.7	13.2	10.1	6.8	4.8	PA6	Natural (NA)	25 m	251-21709
G51NH	9.7 - 12.9	16.4	13.2	6.8	4.8	PA6	Natural (NA)	25 m	251-21809

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.

NASM For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-378

Date of issue: September 2022

Beading Edge Protection

EdgeGuard

PVC Beading strip is used to protect cables routed through sharp-edged cutout sections. It can also be used to provide an attractive finish to panel edges.

Features and benefits

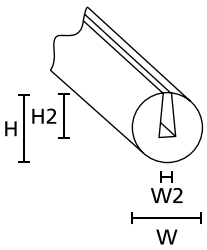
- Very flexible
- Easy to apply
- Protects cables from chafing on bulkheads



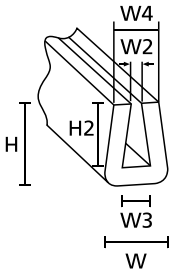
EdgeGuard protects against shart panel edges.

MATERIAL	Polyvinylchloride (PVC)
Operating Temperature	-65 °C to +105 °C, intermittent +135 °C
Flammability	UL 94 HB

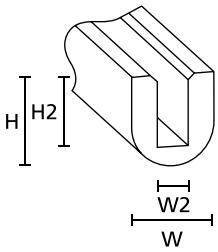
RoHS



PS1



SM1



RA1

TYPE	Width (W)	Width (W2)	Width (W3)	Width (W4)	Height (H)	Height (H2)	Colour	Pack Cont.	Article-No.
PS1	1.2	0.6	-	-	5.0	3.2	Black (BK)	75 m	800-00200
SM1	5.0	1.0	1.8	4.2	6.3	4.9	Black (BK)	75 m	800-00004
RA1	6.4	2.4	-	-	7.1	5.6	Black (BK)	75 m	800-00001

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-379

Push-on Caps

Push-on caps

The protective push-on caps and elbow grommets are specially constructed to insulate and protect flat pin bushings. The caps and grommets are used in all areas of automotive electronics and in electrical connection systems.

Features and benefits

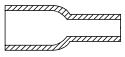
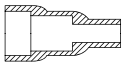
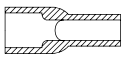
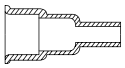
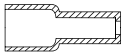
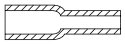
- Protects effectively against spraying water
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



Push-on caps and elbow grommets in various dimensions.

MATERIAL	Polyvinylchloride (PVC)	Polyvinylchloride, flame retardant (PVC-FR)	Polyethylene (PE)
Operating Temperature	-30 °C to +60 °C		-10 °C to +70 °C
Shore Hardness A	70±5	55±5	Nom. 45
Flammability	UL 94 HB	UL 94 V0	UL 94 HB

RoHS RoHS HF RoHS

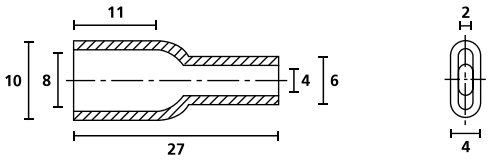
TYPE	Drawing	Material	Colour	Pack Cont.	Article-No.
HV4819		PVC-FR	Black (BK)	2,000 pcs.	631-08190
		PVC-FR	Natural (NA)	2,000 pcs.	631-08199
HV4820		PVC	Black (BK)	2,000 pcs.	631-08200
		PVC	Natural (NA)	2,000 pcs.	631-08209
HV4823		PVC	Natural (NA)	2,000 pcs.	631-08239
HV4825		PVC	Natural (NA)	2,000 pcs.	631-08259
OP4827		PE	Natural (NA)	2,000 pcs.	631-58279
OP4828		PE	Natural (NA)	2,000 pcs.	631-58289

Subject to technical changes.

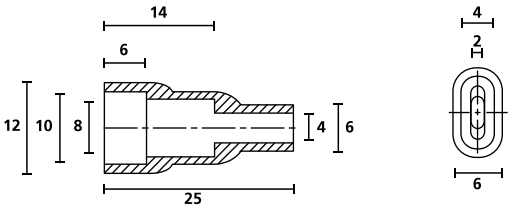
Add items to your watchlist!
www.HT.click/49-380

Push-on Caps

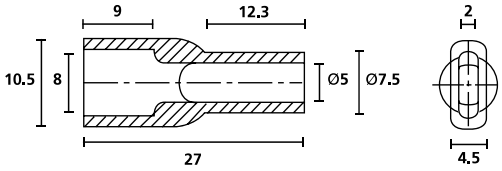
Push-on caps



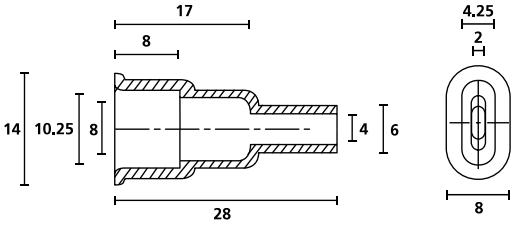
HV4819



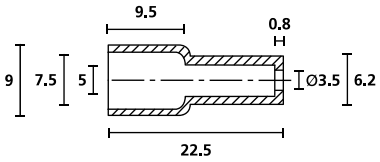
HV4820



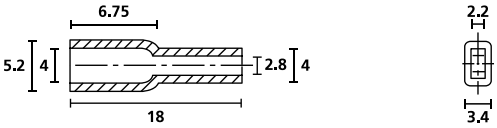
HV4823



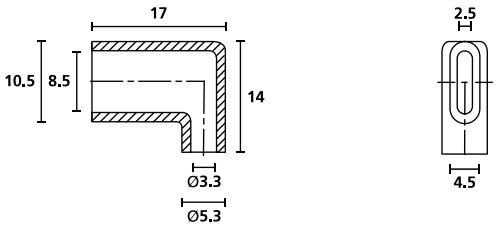
HV4825



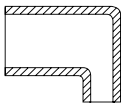
OP4827



OP4828



HV4821

TYPE	Drawing	Material	Colour	Pack Cont.	Article-No.
HV4821		PVC-FR	Black (BK)	2,000 pcs.	631-08210
		PVC-FR	Natural (NA)	2,000 pcs.	631-08219

Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-381

For bend protection at cable exits

Bend protection grommets

Bend protection grommets are typically used for protection of cables at apertures in casings.

Features and benefits

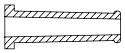
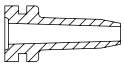
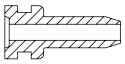
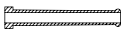
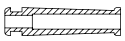
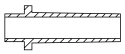
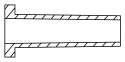
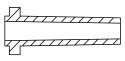
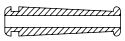
- Routes cables free of kinks and breakage
- Provides strain relief
- Flexible and easy to apply
- High resistance to chemicals und environmental influences



Protection of cables and routing free of kinks and breakage.

MATERIAL	Polyvinylchloride, flame retardant (PVC-FR)
Operating Temperature	-30 °C to +60 °C
Shore Hardness A	55±5
Flammability	UL 94 V0

RoHS

TYPE	Drawing	Colour	Pack Cont.	Article-No.
HV2101		Black (BK)	1,000 pcs.	632-01010
		Grey (GY)	1,000 pcs.	632-01017
		White (WH)	1,000 pcs.	632-01019
HV2101A		Black (BK)	1,000 pcs.	632-01020
HV2103		Black (BK)	1,000 pcs.	632-01030
HV2104		Black (BK)	1,000 pcs.	632-01040
HV2107		Black (BK)	200 pcs.	632-01070
HV2206		Black (BK)	500 pcs.	632-02060
HV2209		Black (BK)	1,000 pcs.	632-02090
HV2210		Black (BK)	1,000 pcs.	632-02100
HV2213		Black (BK)	2,000 pcs.	632-02130
HV2228		Black (BK)	500 pcs.	632-02280

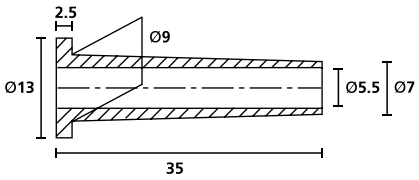
Subject to technical changes.

Date of issue: September 2022

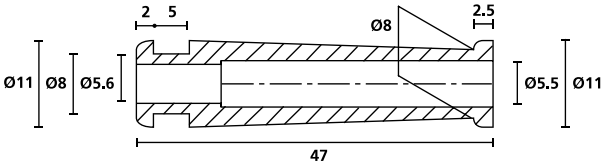
Add items to your watchlist!
www.HT.click/49-382

For bend protection at cable exits

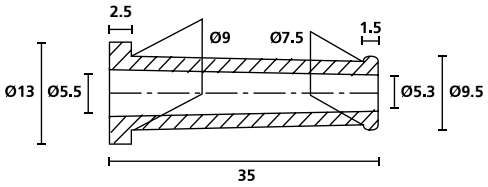
Bend protection grommets



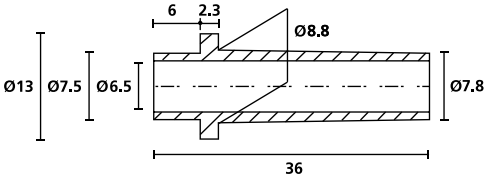
HV2101



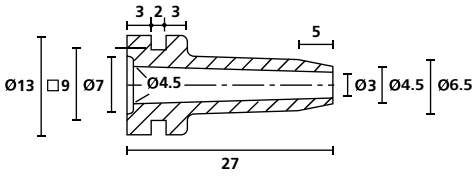
HV2206



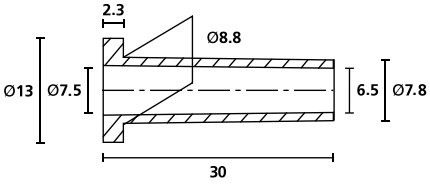
HV2101A



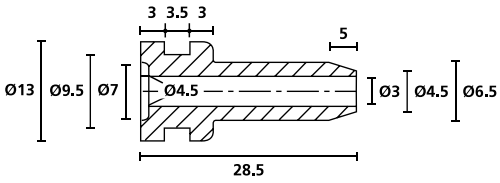
HV2209



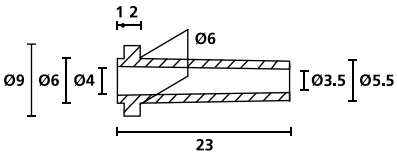
HV2103



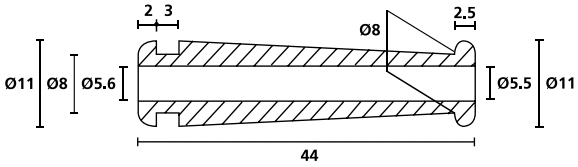
HV2210



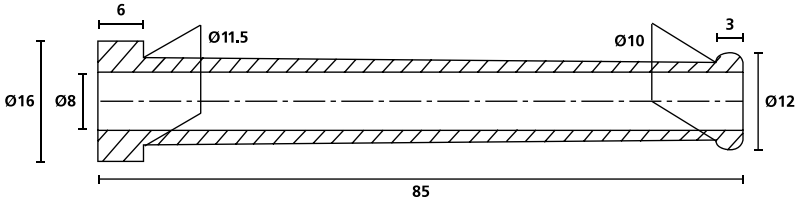
HV2104



HV2213



HV2228



HV2107

Date of issue: September 2022

For strain relief

Strain relief grommets

Strain protection grommets are used as protection for cables and wires from pulling. They are also used for bend protection in casing apertures. They are especially useful in electrical equipment, for instance in electrical drills.

The use of Hellerine is recommended when working with grommets.

Features and benefits

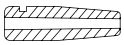
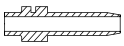
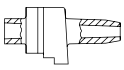
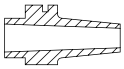
- Provides excellent strain relieve
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



Bend and strain protection on casings.

MATERIAL	Polyvinylchloride, flame retardant (PVC-FR)	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-30 °C to +60 °C	
Shore Hardness A	55±5	63±5
Flammability	UL 94 V0	UL 94 HB

RoHS ✓ RoHS ✓

TYPE	Drawing	Outside Ø (OD)	Outside Ø (OD2)	Outside Ø (OD3)	Ø (D)	Ø (D2)	Material	Colour	Pack Cont.	Article-No.
H125		9.0	6.0	-	4.0	3.5	PVC	Black (BK)	1,000 pcs.	634-31250
H126		9.0	6.0	-	5.0	4.5	PVC	Black (BK)	1,000 pcs.	634-31260
		9.0	6.0	-	5.0	4.5	PVC	Grey (GY)	1,000 pcs.	634-31268
H321		8.5	7.0	8.5	6.0	5.5	PVC-FR	Black (BK)	200 pcs.	634-03210
H120		8.0	6.0	8.0	4.5	3.0	PVC-FR	Black (BK)	500 pcs.	634-01200
H121		11.0	8.5	-	8.0	7.0	PVC-FR	Black (BK)	500 pcs.	634-01210

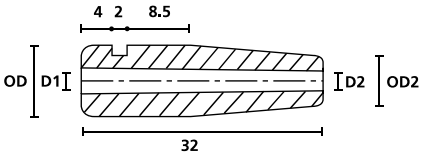
All dimensions in mm. Subject to technical changes.

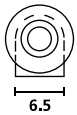
Date of issue: September 2022

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www.HT.click/49-384

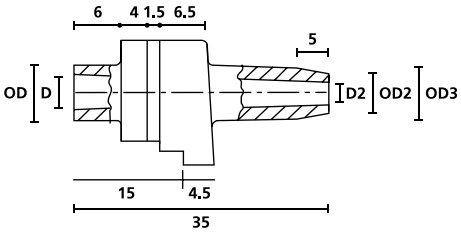
For strain relief

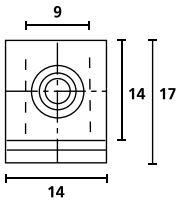
Strain relief grommets



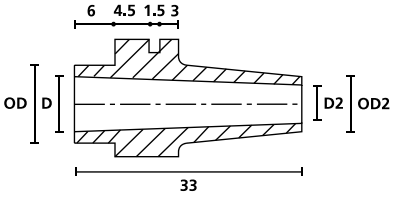


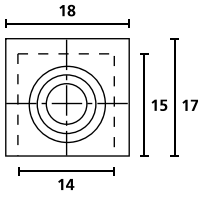
H125/H126



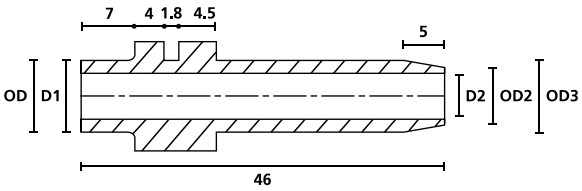


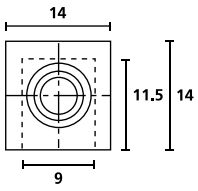
H120





H121





H321

Date of issue: September 2022

Egde protection grommets

Edge protection grommets

Edge protection grommets are used wherever cable and wires are routed through outlets and apertures. HellermannTyton grommets offer excellent mechanical protection.

Features and benefits

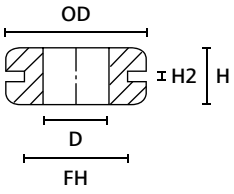
- Protects cables from sharp edges
- Provides additional strain relief
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



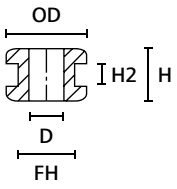
Edge protection grommets.

MATERIAL	Polyvinylchloride (PVC)	Polyvinylchloride, flame retardant (PVC-FR)
Operating Temperature	-30 °C to +60 °C	
Shore Hardness A	70±5	55±5
Flammability	UL 94 HB	UL 94 V0

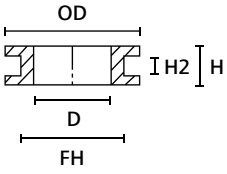
RoHS ✓ RoHS ✓



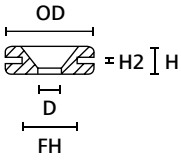
HV1101



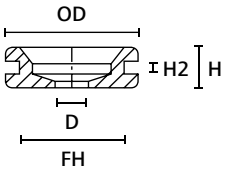
HV1201 to HV1218



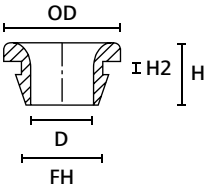
HV1301 to HV1305



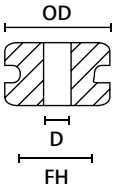
HV1401



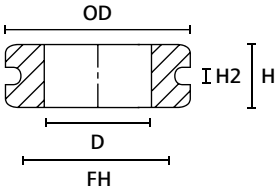
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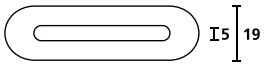
HV1502 to OP1503



HV1606 to HV1608



HV1606 to HV1608

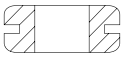
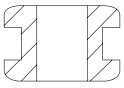
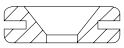
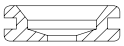
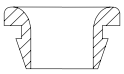
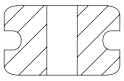
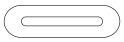


HV1606 to HV1608

Date of issue: September 2022

Egde protection grommets

Edge protection grommets

TYPE	Drawing	Outside Ø (OD)	Hole Ø (FH)	Ø (D)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
HV1101		25.5	19.0	12.0	10.0	1.6	PVC-FR	Black (BK)	500 pcs.	633-01010
HV1212		9.0	6.0	4.0	7.0	1.0	PVC-FR	Black (BK)	2,000 pcs.	633-02120
HV1201		9.5	6.4	4.0	5.6	1.6	PVC-FR	Black (BK)	2,000 pcs.	633-02010
HV1201B		9.5	6.4	4.0	6.5	2.5	PVC-FR	Black (BK)	2,000 pcs.	633-02020
HV1215		10.0	8.0	6.0	5.0	1.0	PVC-FR	Black (BK)	2,000 pcs.	633-02150
HV1209		11.0	9.0	4.0	5.5	1.5	PVC-FR	Black (BK)	1,000 pcs.	633-02090
HV1208		14.0	9.5	8.0	8.0	1.5	PVC-FR	Black (BK)	1,000 pcs.	633-02080
HV1207		14.0	10.0	6.0	6.4	1.5	PVC-FR	Black (BK)	1,000 pcs.	633-02070
HV1218		14.0	10.0	6.0	9.0	4.0	PVC-FR	Black (BK)	1,000 pcs.	633-02180
HV1216		14.5	8.0	5.0	6.5	1.5	PVC-FR	Black (BK)	2,000 pcs.	633-02160
HV1210		15.0	9.0	6.0	10.5	2.0	PVC-FR	Black (BK)	1,000 pcs.	633-02100
HV1203		17.5	12.0	10.0	6.8	2.0	PVC-FR	Black (BK)	1,000 pcs.	633-02030
HV1204		17.5	12.0	10.0	8.8	4.0	PVC-FR	Black (BK)	1,000 pcs.	633-02040
HV1206		17.5	12.0	10.0	10.8	6.0	PVC-FR	Black (BK)	1,000 pcs.	633-02060
HV1205		17.5	13.5	10.0	8.7	4.0	PVC-FR	Black (BK)	1,000 pcs.	633-02050
HV1303		15.9	11.0	8.0	6.4	1.6	PVC-FR	Black (BK)	1,000 pcs.	633-03030
HV1301		15.9	11.0	8.0	7.0	1.0	PVC-FR	Black (BK)	1,000 pcs.	633-03010
HV1302		15.9	11.0	8.0	9.0	3.0	PVC-FR	Black (BK)	1,000 pcs.	633-03020
HV1304		15.9	11.0	8.0	10.8	6.0	PVC-FR	Black (BK)	1,000 pcs.	633-03040
HV1305		24.0	18.0	14.0	7.0	3.0	PVC-FR	Black (BK)	500 pcs.	633-03050
		24.0	18.0	14.0	7.0	3.0	PVC-FR	White (WH)	500 pcs.	633-03059
HV1401		15.9	9.5	5.0	4.8	0.8	PVC-FR	Black (BK)	1,000 pcs.	633-04010
HV1402		23.0	18.5	6.0	7.0	2.0	PVC-FR	Black (BK)	1,000 pcs.	633-04020
HV1502		11.5	8.0	6.5	8.0	1.5	PVC	Black (BK)	2,000 pcs.	633-05020
HV1606		31.0	25.0	17.0	11.0	3.0	PVC-FR	Grey (GY)	500 pcs.	633-06068
HV1607		43.0	37.0	29.0	11.0	3.0	PVC-FR	Grey (GY)	250 pcs.	633-06078
HV1608		58.0	52.0	44.0	11.0	3.0	PVC-FR	Grey (GY)	250 pcs.	633-06088

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
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Set for Bend and Edge Protection

HOT Kit

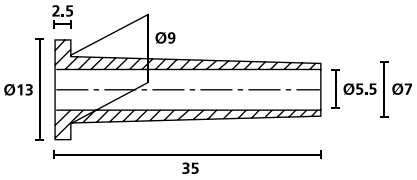
The practical mix of grommets for construction, repairs and home improvement.

Features and benefits

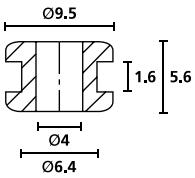
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



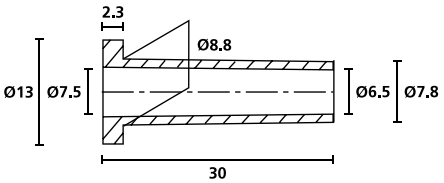
HOT Grommet assortment kit.



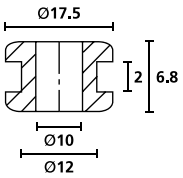
HV2101



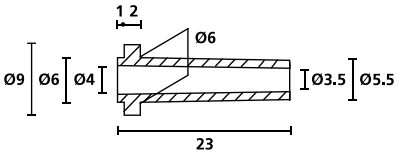
HV1201



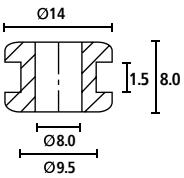
HV2210



HV1203



HV2213



HV1208

Description	Type	Content	Article-No.	Page
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Minimum Order Quantity (MOQ) may differ from package content.

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HellermannTyton

Even big things have small beginnings.

You have to work with what you've got – and that was exactly what our company founder Paul Hellermann did back in 1935. Inspired by the small rubber tube in bicycle valves, he developed a process for binding electric cables with rubber: the Hellermann grommet and three-pronged pliers. The first two of the hundreds of patents filed since then.

www.HellermannTyton.co.uk/made-for-real

MADE FOR REAL®



Date of issue: September 2022



Inspired by reliability

One of the best ways to keep your customers happy is to provide them with products that make their job easier. At construction sites everywhere, we kept seeing skilled electrical engineers losing time and having a tough job connecting cables. Simply because there wasn't a product on the market that allowed them to do their job safely, reliably and faster. That's where the story of RELICON cable joints begins. What they do is link maximum protection and reliability in just a fraction of the time. Our high-quality, efficient and safe RELICON cable joints and other installation products can be used in industrial buildings, outdoors, underground or submerged.
Join the ranks of satisfied electrical engineers and find the right connection for your needs in our separate RELICON catalogue at www.HellermannTyton.co.uk/RELICON

HellermannTyton



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4.1 Electrical and Technical Tapes

Vinyl Electrical Tapes		
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4.2 Wire Connectors

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4.3 Cable Rods

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Date of issue: September 2022

HelaTape

HellermannTyton offers a comprehensive range of vinyl, rubber and cloth tapes for bundling, insulating, fixing, sealing and marking applications around all kinds of electrical applications. Vinyl electrical tapes are designed for low voltage applications and available in different dimensions and colours. Rubber tapes are suitable for sealing and insulating cables and splices in low, medium and high voltage applications. HelaTape cloth tapes are extremely strong and ideal for identification, fixing, bundling and repair purposes. HelaTape Protect is used to build professional cable and wiring harnesses.

Vinyl Electrical Tapes – Commercial Grade Vinyl Electrical Tape

HelaTape Flex 15

Features and benefits

- Vinyl electrical tape in many different colours
- Used for insulation, protection, fixing, maintenance, colour coding and more
- Good resistance to abrasion, sunlight, moisture, chemicals and varying weather conditions
- Highly flexible with outstanding adhesion performance
- Harnessing of wires and cables
- Suitable for mechanical and electrical applications up to 1 kV
- VDE approved according to IEC 60454-3-1-6/F-PVCP/90
- Flame retardant according to IEC 60454-2



HelaTape Flex 15 is a commercial grade, weather resistant vinyl tape.

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	45 kV/mm
Adhesion to Steel	2.2 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break	200 %
Breaking Strength	28 N/10 mm
Operating Temperature	-10 °C to +90 °C

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX15-15x10	0.15	15.0	10.0 m	Black (BK)	710-00104
	0.15	15.0	10.0 m	Blue (BU)	710-00100
	0.15	15.0	10.0 m	Brown (BN)	710-00107
	0.15	15.0	10.0 m	Green (GN)	710-00103
	0.15	15.0	10.0 m	Green-Yellow (GNYE)	710-00106
	0.15	15.0	10.0 m	Grey (GY)	710-00108
	0.15	15.0	10.0 m	Orange (OG)	710-00110
	0.15	15.0	10.0 m	Red (RD)	710-00101
	0.15	15.0	10.0 m	Red (RD), Grey (GY), Yellow (YE), Green (GN), Blue (BU), Orange (OG), White (WH), Brown (BN), Black (BK), Green-Yellow (GNYE)	710-00146
	0.15	15.0	10.0 m	Transparent (CL)	710-00147
	0.15	15.0	10.0 m	Violet (VT)	710-00109
	0.15	15.0	10.0 m	White (WH)	710-00105
	0.15	15.0	10.0 m	Yellow (YE)	710-00102

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Vinyl Electrical Tapes – Commercial Grade Vinyl Electrical Tape

HelaTape Flex 15

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX15-15x25	0.15	15.0	25.0 m	Black (BK)	710-00115
HTAPE-FLEX15-19x20	0.15	19.0	20.0 m	Black (BK)	710-00155
	0.15	19.0	20.0 m	Blue (BU)	710-00151
	0.15	19.0	20.0 m	Brown (BN)	710-00158
	0.15	19.0	20.0 m	Green (GN)	710-00154
	0.15	19.0	20.0 m	Green-Yellow (GNYE)	710-00157
	0.15	19.0	20.0 m	Grey (GY)	710-00159
	0.15	19.0	20.0 m	Red (RD)	710-00152
	0.15	19.0	20.0 m	Violet (VT)	710-00160
	0.15	19.0	20.0 m	White (WH)	710-00156
	0.15	19.0	20.0 m	Yellow (YE)	710-00153
HTAPE-FLEX15-19x25	0.15	19.0	25.0 m	Black (BK)	710-00126
HTAPE-FLEX15-25x25	0.15	25.0	25.0 m	Black (BK)	710-00137
	0.15	25.0	25.0 m	Blue (BU)	710-00133
	0.15	25.0	25.0 m	Brown (BN)	710-00140
	0.15	25.0	25.0 m	Green (GN)	710-00136
	0.15	25.0	25.0 m	Green-Yellow (GNYE)	710-00139
	0.15	25.0	25.0 m	Grey (GY)	710-00141
	0.15	25.0	25.0 m	Red (RD)	710-00134
	0.15	25.0	25.0 m	White (WH)	710-00138
	0.15	25.0	25.0 m	Yellow (YE)	710-00135

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-395

Vinyl Electrical Tapes – Insulating Tape for Higher Mechanical Requirements

HelaTape Flex 20



HelaTape Flex 20 - Additional thickness allows for quicker layering.

Features and benefits

- Vinyl electrical tape with strong rubber adhesive
- Suitable for mechanical and electrical applications up to 1 kV
- Additional thickness for quicker layering and higher abrasion resistance
- Weather resistant
- Flame retardant according to UL 510 Standard

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	40 kV/mm
Adhesion to Steel	2.5 N/10 mm
Adhesion to Backing	2.5 N/10 mm
Elongation at break	240 %
Breaking Strength	40 N/10 mm
Operating Temperature	-10 °C to +105 °C

RoHS

Vinyl Electrical Tapes – Insulating Tape for Higher Mechanical Requirements

HelaTape Flex 25



HelaTape Flex 25 for higher abrasion resistance.

Features and benefits

- Vinyl film coated with high quality rubber adhesive
- Extra high material thickness
- Highly resistant to sun, water, oil, acids, alkalies, corrosive chemicals
- Used for insulation, protection, fixing, maintenance and more
- Superior vinyl tape with excellent all-weather performance
- Flame retardant according to UL 510 Standard

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	45 kV/mm
Adhesion to Steel	2.6 N/10 mm
Adhesion to Backing	2.6 N/10 mm
Elongation at break	240 %
Breaking Strength	46 N/10 mm
Operating Temperature	-10 °C to +90 °C

RoHS

HelaTape Flex 20

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX20-19x20	0.20	19.0	20.0 m	Black (BK)	710-10300

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

HelaTape Flex 25

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX25-19x33	0.25	19.0	33.0 m	Black (BK)	710-00450
HTAPE-FLEX25-38x33	0.25	38.0	33.0 m	Black (BK)	710-00451

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-396

Date of issue: September 2022

Vinyl Electrical Tapes – Premium Vinyl Electrical Tape

HelaTape Flex 1000+

Features and benefits

- All-weather, highly flexible, professional grade, self-adhesive vinyl electrical tape
- Excellent performance and durability over wide temperature range from -18°C to +105°C according to CSA C22.2
- VDE approved according to IEC 60454-3-1-7/F-PVCP/90
- Used for insulation, protection, fixing, maintenance, colour coding and more
- Pressure sensitive high quality rubber based adhesive
- Performs continuously at low temperature environment
- Excellent resistance to abrasion, moisture, chemicals, corrosion and UV exposure
- Primary electrical insulation for all wire and cable splices up to 1 kV
- Protective jacketing for low, medium and high voltage splices and repairs
- Flame retardant according to UL 510 Standard
- For indoor and outdoor applications
- Size 19 mm x 20 m is single packed in a plastic can, only 710-10601 comes in a pack of 10 pcs



HelaTape Flex 1000+ provides excellent low temperature performance.

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	45 kV/mm
Adhesion to Steel	3.0 N/10 mm
Adhesion to Backing	2.7 N/10 mm
Elongation at break	300 %
Breaking Strength	35 N/10 mm
Operating Temperature	-18 °C to +105 °C

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX1000+ 19x6	0.18	19.0	6.0 m	Black (BK)	710-10600
HTAPE-FLEX1000+ 19x20	0.18	19.0	20.0 m	Black (BK)	710-10602
HTAPE-FLEX1000+ 19x20 PACK	0.18	19.0	20.0 m	Black (BK)	710-10601
HTAPE-FLEX1000+ C 19x20	0.18	19.0	20.0 m	Blue (BU)	710-10603
	0.18	19.0	20.0 m	Brown (BN)	710-10608
	0.18	19.0	20.0 m	Green (GN)	710-10606
	0.18	19.0	20.0 m	Green-Yellow (GNYE)	710-10612
	0.18	19.0	20.0 m	Grey (GY)	710-10609
	0.18	19.0	20.0 m	Red (RD)	710-10604
	0.18	19.0	20.0 m	White (WH)	710-10607
	0.18	19.0	20.0 m	Yellow (YE)	710-10605
HTAPE-FLEX1000+ 19x33	0.18	19.0	33.0 m	Black (BK)	710-10610
HTAPE-FLEX1000+ 50x33	0.18	50.0	33.0 m	Black (BK)	710-10611

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-397

Vinyl Electrical Tapes – Premium Heavy Duty Vinyl Electrical Tape

HelaTape Flex 2000+

Features and benefits

- All-weather, highly flexible, professional grade, self-adhesive vinyl electrical tape with higher thickness for more mechanical and electrical protection
- Excellent performance and durability over wide temperature range from -18 °C to +105 °C according to CSA C22.2
- Pressure sensitive and aggressive high quality rubber based adhesive
- Performs continuously at low temperature environment
- Flame retardant according to UL 510 Standard
- Excellent resistance to abrasion, moisture, chemicals, corrosion and UV exposure
- Primary electrical insulation for all wire and cable splices up to 1 kV



HelaTape Flex 2000+ is the best choice for professional installation.

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	40 kV/mm
Adhesion to Steel	3.0 N/10 mm
Adhesion to Backing	2.4 N/10 mm
Elongation at break	300 %
Breaking Strength	40 N/10 mm
Operating Temperature	-18 °C to +105 °C

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-FLEX2000+19x20	0.21	19.0	20.0 m	Black (BK)	710-10701
HTAPE-FLEX2000+38x20	0.21	38.0	20.0 m	Black (BK)	710-10705

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-398

Date of issue: September 2022

Vinyl Electrical Tapes – Vinyl Tape for Corrosion Protection

HelaTape Wrap 25

Features and benefits

- Special adhesive with excellent protection against corrosion
- Complete environmental, mechanical and electrical protection
- Highly resistant to UV, water, oil, most chemicals, bacteria and fungus
- Used for pipes, tubes, and conduits in outside and underground applications



HelaTape Wrap 25 protects against all types of corrosion.

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	40 kV/mm
Adhesion to Steel	2.2 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break	200 %
Breaking Strength	44 N/10 mm
Operating Temperature	-10 °C to +90 °C

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-WRAP25-25x30	0.25	25.0	30.0 m	Black (BK)	710-10800
HTAPE-WRAP25-50x30	0.25	50.0	30.0 m	Black (BK)	710-10802
HTAPE-WRAP25-100x30	0.25	100.0	30.0 m	Black (BK)	710-10803

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-399

Conductive Tapes – Electrical Semi-Conducting Tape

HelaTape Shield 310

Features and benefits

- Self-amalgamating conducting tape made from ethylene propylene rubber
- Provides good conducting properties
- Prevents partial discharges
- Moisture and UV-resistant and easy to apply
- Guidance and/or finishing of the semiconductive layer in case of repairs and connections of medium to high voltage cables.



HelaTape Shield 310 self-amalgamating conducting tape for shielding high-voltage splices and terminations.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	-40 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.02 %
Tensile Strength	2.0 MPa
Elongation at break	600 %
Volume Resistance	870 Ω cm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-SHIELD310	0.76	19.0	4.6 m	Black (BK)	711-10000
	0.76	38.0	9.1 m	Black (BK)	711-10001

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-400

Self-amalgamating Tapes – Low Voltage Rubber Tape

HelaTape Power 600

Features and benefits

- Self-amalgamating low voltage rubber tape
- Primary insulation at not more than 1 kV
- Easily suitable to irregular shapes and surfaces
- Compatible with all extruded dielectric cable insulations
- Weather resistant and flame retardant according to UL 510
- Excellent for repairing e.g. damaged cable sheats against moisture ingress, where finishing with some layers of Helatape Flex will do the mechanical protection.



HelaTape Power 600 is a self-amalgamating low-voltage rubber tape.

MATERIAL	Natural Rubber (NR)
Operating Temperature	-40 °C to +80 °C
Intermittent Operating Temperature	+95 °C
Tensile Strength	2 N/mm²
Elongation at break	300 %
Dielectric Strength	14 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER600-19x6.7	0.76	19.0	6.7 m	Black (BK)	711-10200
HTAPE-POWER600-38x6.7	0.76	38.0	6.7 m	Black (BK)	711-10201

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-401

Self-amalgamating Tapes – Electrical Insulation Mastic

HelaTape Power 650

Features and benefits

- Self-amalgamating insulation compound for sealing and padding cable jackets up to 1 kV
- Easily moulded by hand to conform to irregular shapes even during low temperatures
- Permanently elastic and resistant to ageing
- Perfect adhesion to metal and all types of cable insulations and jackets
- Provides excellent moisture sealing
- Resistant to salt water, ozone, oil and corrosive chemicals
- Excellent for repairing e.g. damaged cable sheats against moisture ingress, where finishing with some layers of Helatape Flex will do the mechanical protection

www.HellermannTyton.co.uk/HelaTape-cat22



HelaTape Power self-amalgamating mastic is highly flexible.

MATERIAL	Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-10 °C to +105 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.1 %
Volume Resistance	10^{15} Ω cm
Dielectric Strength	19.7 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER650	3.20	38.0	1.5 m	Black (BK)	711-10300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-402

Self-amalgamating Tapes – Rubber Mastic Tape

HelaTape Power 660 RM

Features and benefits

- Self-amalgamating rubber mastic tape
- EPR backing coated with a tacky, temperature-stable mastic adhesive
- Designed for electrical insulating and moisture sealing applications
- Can be used as cable jacket replacement
- Perfect adhesion and sealing for copper and aluminium wires
- Easily suitable to irregular shapes and surfaces
- Compatible with all extruded cable insulations
- UV, moisture, corrosion and chemical resistant
- Primary electrical insulation for bus bar connections rated up to 35 kV
- Excellent for repairing e.g. damaged cable sheats against moisture ingress, where finishing with some layers of Helatape Flex will do the mechanical protection



HelaTape Power 660 is a very flexibel rubber mastic sealing and padding tape.

MATERIAL	Ethylene Propylene Rubber (EPR), Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-30 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.1 %
Tensile Strength	1.5 N/mm²
Dielectric Strength	19.7 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER 660-RM	1.65	50.8	3.0 m	Black (BK)	711-00307

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Self-amalgamating Tapes – Vinyl Mastic Tape

HelaTape Power 670 VM

Features and benefits

- Easy to apply vinyl mastic tape
- Self-adhesive application - without stretching
- Mastic layer is very sticky and provides excellent moisture sealing
- Vinyl top layer provides additional protection
- Performs continuously. Even at low temperatures
- Primary insulation up to 1 kV
- Applicable to all extruded cable insulations
- UV and weather resistant



HelaTape Power 670 provides additional vinyl film protection to the mastic compound.

MATERIAL	Polyvinylchloride (PVC), Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-30 °C to +80 °C
Intermittent Operating Temperature	+95 °C
Water Absorption	0.9 %
Tensile Strength	16 N/mm²
Elongation at break	200 %
Volume Resistance	10^{12} Ω cm
Dielectric Strength	19.7 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER 670-VM	1.20	100.0	3.0 m	Black (BK)	711-00304

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-404

Self-amalgamating Tapes – Medium Voltage Rubber Tape (Linerless)

HelaTape Power 715

The rubber-based self-amalgamating linerless tape is used for electrical insulation, protection, sealing, splicing and termination of cables up to 35 kV. The special material comes without a separating liner and reduces therefore the time required to apply the tape. It features with excellent UV, moisture, corrosion, ozone and chemical resistance. HelaTape Power 715 is compatible with all extruded dielectric cable insulations.

Features and benefits

- Rubber-based self-amalgamating linerless tape
- Used for waterproof sealing and corrosion protection of cables
- Excellent electrical insulation and weather protection
- Time saving application without liner
- The lack of liner causes less waste
- Easy to apply and very flexible



HelaTape Power 715 allows quicker layering due to the linerless composition.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	+90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.06 %
Tensile Strength	2.1 N/mm²
Elongation at break	700 %
Volume Resistance	10^{16} Ω cm
Dielectric Strength	30 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER715-19x10	0.50	19.0	10.0 m	Black (BK)	711-00311

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Self-amalgamating Tapes – Silicone Rubber Tape

HelaTape Power 800

Features and benefits

- Self-amalgamating and self-cleaning, chemically cross-linked silicone rubber tape
- Triangular cross-section with centre line for precise half-overlapping
- Resistant to creepage and surface erosion
- Fuses into solid mass after application
- Weather, UV and oil resistant
- Recommended use for high temperature silicone insulated cables and outdoor machinery and transformers



HelaTape Power 800 is a silicone rubber tape with triangular cross-section.

MATERIAL	Silicone (SI)
Operating Temperature	-54 °C to +180 °C
Intermittent Operating Temperature	+260 °C
Tensile Strength	7.0 N/mm²
Elongation at break	400 %
Volume Resistance	10^{14} Ω cm
Dielectric Strength	23.5 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER800	0.51	25.0	9.1 m	Grey (GY)	711-10400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-406

Self-amalgamating Tapes – High Voltage Rubber Tape

HelaTape Power 810

Features and benefits

- Self-amalgamating tape for insulating and jacketing splices up to 69 kV
- Halogen-free with outstanding corona, ozone and UV-resistance
- Ideal for sealing of terminations, electrical connections and cable jacket repair
- Void-free, electrically stable layering
- Protects e.g. bus bars against corrosion and contact
- Excellent moisture, corrosion and chemical resistance
- Compatible with all extruded cable insulations



HelaTape Power 810 for primary insulation up to 69 kV.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	+90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.06 %
Tensile Strength	2.4 N/mm²
Elongation at break	750 %
Volume Resistance	10^{16} Ω cm
Dielectric Strength	30 kV/mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER810	0.76	19.0	9.1 m	Black (BK)	711-10401

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-407

Self-amalgamating Tapes – High Voltage Rubber Tape (Linerless)

HelaTape Power 820

Features and benefits

- Self-amalgamating, linerless tape for insulating and jacketing splices up to 69 kV
- Excellent electrical, chemical and physical properties
- Building stress cones and jacketing of terminations, bus bars and joints
- Quicker application due to linerless design
- The lack of liner causes less waste
- Uniform and void-free layering
- Very flexible to conform to the most complex shapes
- Compatible with all extruded cable insulations



The high-voltage tape HelaTape Power 820 yields a uniform and void-free build-up.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	-30 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.06 %
Tensile Strength	2.8 N/mm²
Elongation at break	750 %
Volume Resistance	10^{16} Ω cm
Dielectric Strength	31.5 kV/mm

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-POWER820	0.76	19.0	9.1 m	Black (BK)	711-10402

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-408

Technical Tapes – Vinyl Bundling Tape

HelaTape Allround 1500

Allround 1500 – Electricians Duct Tape is designed for bundling, holding, fixing and maintenance applications. It can be also used as temporary surface protection of steel and aluminium parts.

Features and benefits

- Vinyl film coated with high quality rubber adhesive
- Excellent performance and durability
- Easy to tear
- No cloth – does not absorb water
- Used for bundling, holding, fixing and maintenance
- This product has no electrical insulating properties



HelaTape Allround 1500 – universal and very strong vinyl bundling tape.

MATERIAL	Polyvinylchloride (PVC)
Adhesion to Steel	1.5 N/10 mm
Adhesion to Backing	1.5 N/10 mm
Elongation at break	150 %
Operating Temperature	-10 °C to +90 °C

RoHS

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-ALLROUND1500	0.15	51.0	46.0 m	Grey (GY)	710-01000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

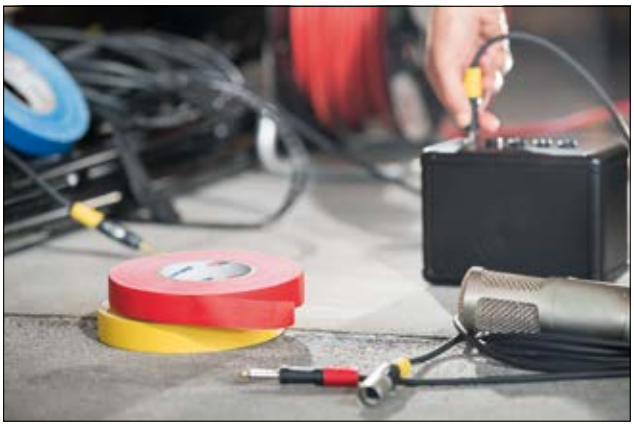
Add items to your watchlist!
www.HT.click/49-409

Technical Tapes – Cloth Tape

HelaTape Tex

Features and benefits

- High quality PE-coated cloth tape with good weather resistance
- Total thickness of 0.31 mm for high tensile strength
- Highly tear-resistant in longitudinal direction
- Easy to tear-off by hand in transverse direction
- Matt surface finish for use in stage constructions and for exhibitions to avoid light reflections
- Useful for various applications like bundling, fixing, identification, marking and protection
- HelaTape Tex can be removed without residues due to high quality rubber based adhesive



HelaTape Tex is available in various colours and sizes.

MATERIAL	Cotton (CO)
Operating Temperature	-30 °C to +80 °C
Adhesion to Backing	3.0 N/10 mm
Elongation at break	10 %
Breaking Strength	64 N/10 mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-TEX-19x10	0.31	19.0	10.0 m	Black (BK)	712-00204
	0.31	19.0	10.0 m	Blue (BU)	712-00200
	0.31	19.0	10.0 m	Green (GN)	712-00203
	0.31	19.0	10.0 m	Grey (GY)	712-00206
	0.31	19.0	10.0 m	Red (RD)	712-00201
	0.31	19.0	10.0 m	White (WH)	712-00205
	0.31	19.0	10.0 m	Yellow (YE)	712-00202
HTAPE-TEX-19x50	0.31	19.0	50.0 m	Black (BK)	712-00504
	0.31	19.0	50.0 m	Blue (BU)	712-00500
	0.31	19.0	50.0 m	Green (GN)	712-00503
	0.31	19.0	50.0 m	Grey (GY)	712-00506
	0.31	19.0	50.0 m	Red (RD)	712-00501
	0.31	19.0	50.0 m	White (WH)	712-00505
	0.31	19.0	50.0 m	Yellow (YE)	712-00502
HTAPE-TEX-50x50	0.31	50.0	50.0 m	Black (BK)	712-00904
	0.31	50.0	50.0 m	Blue (BU)	712-00900
	0.31	50.0	50.0 m	Green (GN)	712-00903
	0.31	50.0	50.0 m	Grey (GY)	712-00906
	0.31	50.0	50.0 m	Red (RD)	712-00901
	0.31	50.0	50.0 m	White (WH)	712-00905
	0.31	50.0	50.0 m	Yellow (YE)	712-00902

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-410

Wire Harness Tape – Hand-tearable Cloth Tape

HelaTape Protect 180

Features and benefits

- High quality polyester fabric harnessing tape
- Rubber-based adhesive offers very good heat and media resistance
- High temperature stability from -40 °C to +125 °C
- Temperature resistance tested according to LV312
- Very good resistance against abrasion
- Material is very flexible and tearable by hand
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 180 is very flexible and used for cable harnessing.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +125 °C
Adhesion to Steel	3.0 N/10 mm
Adhesion to Backing	3.0 N/10 mm
Elongation at break	15 %
Breaking Strength	65 N/10 mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-PROTECT180	0.18	19.0	25.0 m	Black (BK)	712-10002

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Wire Harness Tape – Strong, High Temperature Cloth Tape

HelaTape Protect 250

Features and benefits

- High temperature polyester fabric harnessing tape
- Special acrylate-based adhesive offers very good heat and media resistance
- Very high temperature stability from -40 °C to +150 °C
- Temperature and humidity resistance tested according to LV312
- Very good resistance against abrasion
- Material is very flexible and easy to handle
- Provides long term reliability under varying and extreme environmental conditions
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 250 is designed for cable harnessing and offers a very high temperature resistance.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +150 °C
Adhesion to Steel	2.5 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break	15 %
Breaking Strength	180 N/10 mm

HF ✓ RoHS ✓

TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-PROTECT250	0.25	19.0	25.0 m	Black (BK)	712-10003

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-412

Wire Harness Tape – Soft and Flexible Fleece Tape

HelaTape Protect 300

Features and benefits

- Soft polyester fleece harnessing tape
- High noise reduction and very high resistance against abrasion
- Synthetic rubber based adhesive offers good heat and media resistance
- High temperature stability from -40 °C to +105 °C
- Material is very flexible and tearable by hand
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 300 provides high noise reduction and media resistance.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Adhesion to Steel	2.0 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break	10 %
Breaking Strength	30 N/10 mm

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TYPE	Thickness (T)	Width (W)	Length (L)	Colour	Article-No.
HTAPE-PROTECT300	0.30	19.0	25.0 m	Black (BK)	712-10001

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Connectors - For all Types of Wire

HelaCon Plus Releasable

The HelaCon Plus Releasable connectors are used for all types of wire to connect cable and conductors in the field of electrical installation. The connectors can be used in all kinds of junction boxes either on-wall or flush-mounted. HelaCon offers the best possible solution when convenient processing and maximum safety is required.

Features and benefits

- Universal push-in wire connector for solid, stranded and fine-stranded wires
- Compact size connector
- Wire clamping range: 0.2 - 4.0 mm²
- Separate voltage test entry on the top
- For proper fixing that can be visually checked through transparent housing
- Safe application, installation and maintenance

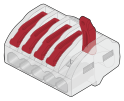


HelaCon Plus Releasable Box and Blister 2.

MATERIAL	Polycarbonate (PC)
Max Current	32 A
Max Voltage	450 V
Wire Range (VDE) in mm²	0.2 to 4.0 mm² all types of wire
Stripping Length	10 mm
Flammability	UL 94 V0
Operating Temperature	-30 °C to +85 °C

HF RoHS

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TYPE	Drawing	Number of Conductors	Colour	Width (W)	Height (H)	Length (L)	Pack Cont.	Article-No.
HCRN-2-Blister		2	Transparent (CL)	20.5	14.0	12.0	10 pcs.	148-90062
HCRN-2		2	Transparent (CL)	20.5	14.0	12.0	80 pcs.	148-90059
HCRN-3-Blister		3	Transparent (CL)	20.5	14.0	17.0	8 pcs.	148-90063
HCRN-3		3	Transparent (CL)	20.5	14.0	17.0	50 pcs.	148-90060
HCRN-5-Blister		5	Transparent (CL)	20.5	14.0	26.0	5 pcs.	148-90064
HCRN-5		5	Transparent (CL)	20.5	14.0	26.0	30 pcs.	148-90061

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

FI For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

Connectors - For Solid and Stranded Wires

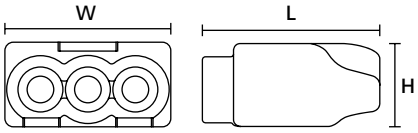
HelaCon Plus Mini

HelaCon connectors are used for fast, easy and reliable connection and distribution of cable and conductors in electrical installation applications. The new generation of HelaCon Plus Mini wire connectors can be applied tool-free using the push-in technology. HelaCon Plus Mini uses a double spring which is approved for solid and stranded wires.

Features and benefits

- 40 % smaller – Space saving design
- Low insertion force – Easy to use, saves time on installation
- Easy access to voltage test entry and innovative port shape design
- Correct installation can be visually checked through transparent housing
- Different colour codes for easy identification of size
- Allows different conductor diameters in each entry
- Safe application, installation and maintenance
- Practical Variobox with 350 pcs. of selected HCPM wire connectors available (148-90046)

www.HellermannTyton.co.uk/HelaConPlus-cat22



HelaCon Plus Mini front view

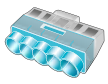
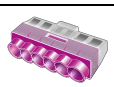
HelaCon Plus Mini side view



HelaCon Plus Mini fits perfect in every space limited situation.

MATERIAL	Polycarbonate (PC)	
Max Current	24 A	
Max Voltage	450 V	600 V
Wire Range (VDE) in mm²	0.5 to 2.5 mm² solid wires / 1.0 to 2.5 mm² stranded wires	
Stripping Length	11 mm	
Flammability	UL 94 V0	
Operating Temperature	-30 °C to +85 °C	

HF ✓ RoHS ✓

TYPE	Drawing	Number of Conductors	Colour	Width (W)	Height (H)	Length (L)	Pack Cont.	Article-No.
HCPM-2-Blister		2	Transparent (CL), Yellow (YE)	10.8	7.7	16.5	20 pcs.	148-90054
HCPM-2		2	Transparent (CL), Yellow (YE)	10.8	7.7	16.5	150 pcs.	148-90036
HCPM-3		3	Orange (OG), Transparent (CL)	15.1	7.7	16.5	100 pcs.	148-90037
HCPM-3-Blister		3	Transparent (CL), Orange (OG)	15.1	7.7	16.5	18 pcs.	148-90055
HCPM-4-Blister		4	Transparent (CL)	19.4	7.7	16.5	10 pcs.	148-90056
HCPM-4		4	Transparent (CL)	19.4	7.7	16.5	100 pcs.	148-90038
HCPM-5-Blister		5	Transparent (CL), Blue (BU)	23.7	7.7	16.5	10 pcs.	148-90057
HCPM-5		5	Transparent (CL), Blue (BU)	23.7	7.7	16.5	75 pcs.	148-90039
HCPM-6		6	Transparent (CL), Violet (VT)	28.0	7.7	16.5	50 pcs.	148-90040
HCPM-8		8	Transparent (CL), Black (BK)	36.6	7.7	16.5	50 pcs.	148-90041
HCPM Variobox 350		-	Transparent (CL)	-	7.7	16.5	350 pcs.	148-90046

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-415

Connectors - For Lighting Installation

HelaCon Lux

A typical application is lighting installation, where the solid conductor from concealed cabling has to be connected to a flexible conductor for lighting. The 2/1 variant allows the looping through of the supply lines for additional devices.

The conductor on the output/lighting side can easily be inserted by pressing the locking mechanism and can be released in the same way at any time. The lighting side can carry any kind of conductor and makes HelaCon Lux connectors also useful to connect devices that carry flexible connecting cables like control devices e.g. for blinds, fans and other drives.

Features and benefits

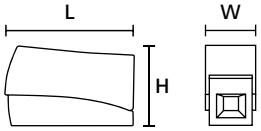
- Best suitable to connect solid with flexible wire
- Combines push-in connector with lock/unlock spring mechanism
- For fine-stranded conductors at lighting input
- Use with typical voltage current of 450 V / 24 A
- Either one or two inputs for solid conductor on installation side
- Very flexible application
- Tool-free application for easy, time-saving, safe connection
- Especially for overhead work and when wires are difficult to access



Quick installation and release of lighting devices with HelaCon Lux.

MATERIAL	Polyamide 6.6 (PA66)
Max Current	24 A
Max Voltage	450 V
Wire Range (VDE) in mm²	0.5 mm² - 2.5 mm²
Stripping Length	11 mm
Flammability	UL 94 V2
Operating Temperature	-5 °C to +100 °C

HF ✓ RoHS ✓



HelaCon Lux side view *HelaCon Lux front view*

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TYPE	Drawing	Number of Conductors	Colour	Width (W)	Height (H)	Length (L)	Pack Cont.	Article-No.
HECL-1/1		2	Grey (GY)	8.1	15.8	20.8	100 pcs.	148-90022
HECL-2/1-Blister		3	White (WH)	9.5	15.8	20.8	10 pcs.	148-90058
HECL-2/1		3	White (WH)	9.5	15.8	20.8	100 pcs.	148-90023

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-416

Date of issue: September 2022

HellermannTyton

The most effective way to do it, is to do it.

MADE FOR REAL®



Date of issue: September 2022

Cable Installation System - Cable Scout+

Cable Scout+ Rod Sets

Cable Scout+ is a professional cable routing tool which enables installers to easily route cables, saving time, even with the most challenging installations. The rods are manufactured from high quality Glass Reinforced Plastic (GRP), which enables a load carrying capacity of up to 200 kg. Cable Scout+ offers a range of features which allows the installer to illuminate, grip, inspect and retrieve by using the range of accessories. Cable Scout+ is supplied in a useful durable bag which contains the rods and accessories all in one place.

Features and benefits

- Professional cable installation tool
- Enables time savings to be achieved even with challenging installations
- Rods manufactured from high quality Glass Reinforced Plastic (GRP)
- Load carrying capacity of 200 kg
- Range of accessories enabling the installer to illuminate, grip inspect and retrieve.
- Rods & accessories contained in a useful durable storage bag



All components stored neat and tidy with the Cable Scout+ Deluxe set.


Basic Set.


Handy Set.

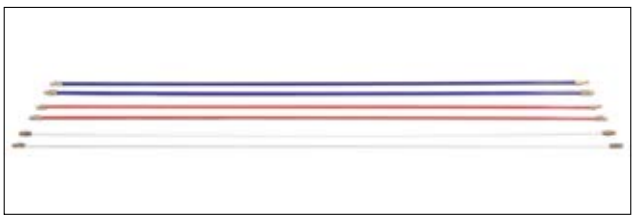
TYPE	Description	Content Rods	Rod Capacity (m)	Content Accessories	Article-No.
CS-SB	Basic Set: designed to perform basic cable installation	10 rods x 1 m (white)	10.0 m	15 cm white flexi lead, gender changer, tuff hook, mini eye	897-90000
CS-SD	Deluxe Set: the most comprehensive set aimed for carrying out larger installations	2 rods x 1 m (white) 6 rods x 1 m (red) 2 rods x 1 m (blue)	10.0 m	15 cm white flexi lead, split ring, gender changer, tuff hook, mini eye, domed bullet, flat bullet, beam, single magnet	897-90001
CS-SH	Handy Set: made up for fitting in a tool box	1 rod x 40 cm (white) 2 rods x 40 cm (red) 1 rod x 40 cm (blue)	1.6 m	40 cm white flexi lead, domed bullet, mini hook, mini eye	897-90003

Subject to technical changes.

Cable Installation System - Cable Scout+

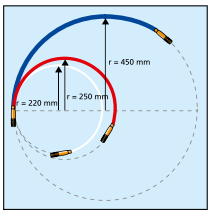
Cable Scout+ Rod Pairs

www.HellermannTyton.co.uk/CableScout-cat22


Overview of the rods selection.

TYPE	Content Rods	Flexibility	Ø (D)	Article-No.
CS-P6	One pair of 1 m blue rods	strong	6.0	897-90007
CS-PN	One pair of 1 m nylon rods	fully flexible	5.0	897-90008
CS-P5	One pair of 1 m red rods	medium	5.0	897-90006
CS-P4	One pair of 1 m white rods	flexible	4.0	897-90005

All dimensions in mm. Subject to technical changes.



Overview on Cable Scout+ marginal bending radii.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-418

Cable Installation System - Cable Scout+

Cable Scout+ Accessories

Cable Scout+ is supplied with a range of useful standard accessories. Additional accessories can be purchased separately. Cable Grips are designed to grip objects and provide reliable and time saving method of securing cables & pipes to the rods. Just open the grip by compressing the braid, push the grip over the cable or pipe and release the grip, which will contract and establish a tight grip on the cable or pipe to the rod set.

Features and benefits

- Accessory kit includes a lot of useful tools
- User can inspect and retrieve
- Cable grips allows a very fast way to pull cables
- Whisk glides smoothly over obstacles
- Strong magnet lifts metallic tools up to 2.5 kg weight



Cable Grips are available in five different sizes to attach a wide range of cable diameters.



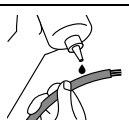
Cable Scout+ and Grip.



The whisk allows the rod to glide over obstructions easily.



Cable Pulling Lubricant reduces friction during the installation of cables.

TYPE	Drawing	Description	Article-No.
CS-SA		Accessory Kit: Includes a 15 cm long flexi lead, gender changer, mini hook, tuff hook, mini eye, split ring, round bullet, flat bullet, single magnet, chain	897-90004
CS-ACG1630		Cable Grip: Suitable for diameter 1.6 - 3.0 cm	897-90027
CS-ACG0415		Cable Grip: Suitable for diameters 0.4 - 1.5 cm	897-90026
CS-AWL		Large whisk: designed to glide over more uneven surfaces such as roof tiles.	897-90019
CS-AW		Whisk: Enables cables to glide over rough and uneven surfaces.	897-90018
CS - CPL		Cable pulling lubricant: provides reliable protection against cable jacket damage by reducing the frictional resistance up to 80 %.	897-90031

Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-419

Downlight Covers - For Residential Buildings

SpotClip-I

SpotClip-I is a unique product that has been developed for mounting down lights in dry mortarless construction and acoustic construction applications.

The innovative, 4-leg ceiling brace has a number of outstanding features and is suitable for use in both panelling and plasterboard.

SpotClip-I consists of non-flammable, fibreglass reinforced polyamide and offers a number of thermal and mechanical benefits and can even be installed retrospectively.

As a result, it opens up a variety of possibilities for applications in both old and new buildings.

SpotClip-I can be used in ceiling cavities with diameters of 62 to 90 mm.

SpotClip-I ensures that a safe distance is kept between the down light, insulation foil and roof insulation.

It reduces the risk of damage being caused to any insulation material as a result of overheating and heat accumulation and may also have a positive effect on the life time of the lamp.

www.HellermannTyton.co.uk/SpotClip-I-cat22



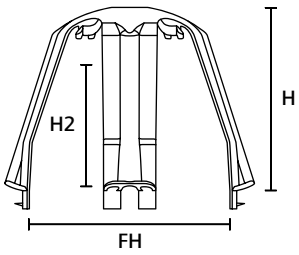
SpotClip-II ensures reliability and safety of lighting installations.



Optimization of 4 fastening feet.

MATERIAL	Polyamide 6.6, glass-fibre reinforced (PA66GF15%)
Operating Temperature	-20 °C to +120 °C
Flammability	UL94 V0 at 1.5mm thickness, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓



SpotClip-I

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)	Height (H2)	Colour	Pack Cont.	Article-No.
SpotClip-I	62.0	90.0	82.0	70.0	Black (BK)	10 pcs.	148-00076

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-420

Downlight Covers - For Residential Buildings

SpotClip-I

Features and benefits

- Mount down lights in dry, mortarless construction and acoustic construction
- Innovative, 4-leg ceiling spacer
- Suitable for both panelling and plasterboard
- Non-flammable, fibreglass reinforced polyamide
- Thermal and mechanical benefits
- Can be installed after construction, useful for both old and new buildings
- Use in ceiling cavities 62-90 mm in diameter
- Keeps safe distance between down light, insulation foil and roof insulation
- Reduces risk of damage to insulation from overheating, heat accumulation
- Improves life span and reliability of lamps
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



Cable retainers on the heat protection top hold the supply cable in place.



Additional retaining spikes prevent movement during mounting.



Bearing wings ensure that the spacer locates securely on the plasterboard.



1. Use the delivered tool to install SpotClip in the fixing hole as easy as possible.



2. Push the spikes into the plasterboard to prevent shifting and disconnect the tool.

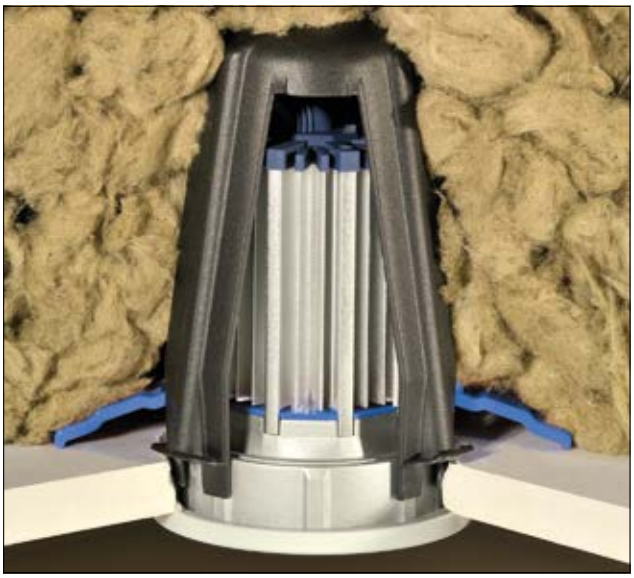


3. Start the installation of the downlight in a safe way.

Downlight Covers - For Residential Buildings

SpotClip-II

SpotClip-II has been developed for use with large LED spotlights. Additional, flexible legs allow use with blown-in insulation material. The legs can be easily removed to facilitate cable installation. The downlight cover can be inserted easily into the ceiling cavity and offers valuable savings on installation time. SpotClip creates a reliable gap between the light bulb and the insulation material, reducing the risk of overheating and heat accumulation.



The additional 4 legs on SpotClip-II allow use with blown-in cavity insulation.

www.HellermannTyton.co.uk/SpotClip2-cat22



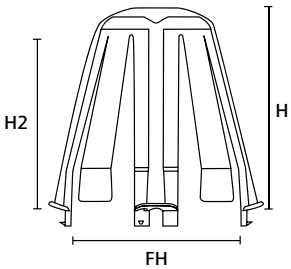
SpotClip-II downlight cover with 4 additional flexible legs.



SpotClip-II shown using standard insulation wool.

MATERIAL	Polyamide 6.6, glass-fibre reinforced (PA66GF15%)
Operating Temperature	-20 °C to +120 °C
Flammability	UL94 V0 at 1.5mm thickness, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓



SpotClip-II

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)	Height (H2)	Colour	Pack Cont.	Article-No.
SpotClip-II	62.0	90.0	107.0	95.0	Black (BK)	10 pcs.	148-00098

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-422

Downlight Covers - For Residential Buildings

SpotClip-II

Features and benefits

- SpotClip-II has been developed for bulbs up to 95 mm height
- Ensures safety distance between downlight, damp-proof foil and insulation material
- Flexible installation during or after construction
- Additional spikes at the end of the legs prevent SpotClip shifting
- Suitable for fixing into holes from 62 - 90 mm diameter
- Remains rigid even at higher temperatures
- Flame retardant material according to UL94-V0
- Improves life span and reliability of lamps
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



SpotClip-I and SpotClip-II for maximum downlight heights of 70 mm and 95 mm respectively.



Retaining spikes and support wings hold SpotClip-II in the required position.



1. Use the delivered tool to install SpotClip-II in the fixing hole as easy as possible.



2. Push the spikes into the plasterboard to prevent shifting and disconnect the tool.



3. Start the installation of the downlight in a safe way.

Date of issue: September 2022

Downlight Covers - For Residential Buildings

SpotClip-III

This further development of SpotClip-II allows the use of an existing power supply. In the case of a spot without power supply, this added straight leg can be cut easily and removed manually. It helps to avoid contact between the insulation and the external power supply of the spot. SpotClip-III will fit to all standard applications with solid insulation material. It is delivered flat with flexible legs. They can be locked within seconds. The height of the this mounting device is depending on the fixing hole diameter. SpotClip-III is suitable for LED and Halogen downlights with a fixing hole diameter from 62 mm to 120 mm. The maximum product height is 130 mm depending on the fixing hole diameter.

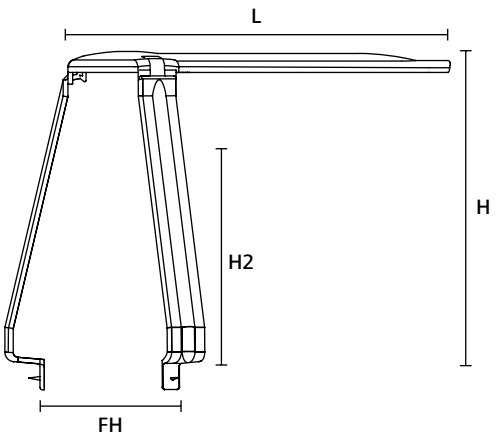


SpotClip-III for downlight application with external power supply.

www.HellermannTyton.co.uk/SpotClip3-cat22



SpotClip-III downlight cover- Easy-to-mount legs with one click folding function.



SpotClip-III

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	UL 94 V2, self-extinguishing, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)*	Height (H2)*	Length (L)	Colour	Pack Cont.	Article-No.
SpotClip-III	62.0	120.0	130.0	115.0	160.0	Black (BK)	5 pcs.	148-00121

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. * For fixing hole diameter 65 mm.

Date of issue: September 2022

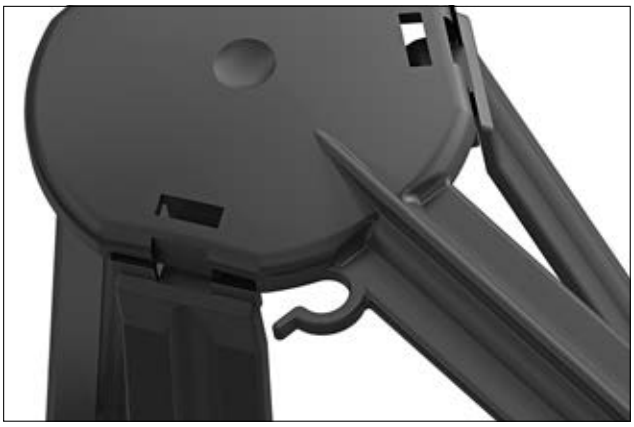
Add items to your watchlist!
www.HT.click/49-424

Downlight Covers - For Residential Buildings

SpotClip-III

Features and benefits

- A mounting support for the external power supply unit provides more space for the downlight installation
- Ensures safety distance between the downlight, damp-proof foil and insulation material
- Flexible installation during or after construction
- Additional spikes at the end of the legs prevent SpotClip shifting
- Prevents damage to insulation material caused by overheating
- Flame retardant material according to UL94-V2
- Improves life span and reliability of lamps
- Faster and easier installation and replacement of lamps
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



One cable retainer to fix the power supply cable at the top.



Click and fix mounting mechanism for the 3 flexible legs.



New leg design combined with retaining spikes for high stability throughout installation.



1. Insert the mounting support through the fixing hole.



2. Press the spikes into the plasterboard to ensure stability of SpotClip-III.



3. Install the downlight.



4. Connect the power supply unit and fix the cable in the cable retainer.

Downlight covers - For residential buildings

SpotClip-IV-Slim

The SpotClip-IV-Slim ensuresa safety distance between downlight, damp-proof foil and insulation material and can thereby prevent the risk of overheating and premature deterioration of the lighting. It is developed for safe use and installation of ultra-flat LED lights and suitable for ceiling cut-outs with a recessed diameter of 73 to 83 mm. Four additional and flexible tabs prevent contact between loose insulation material and the luminaire, making it ideal for use with bulk and blown insulation materials. Removable tabs allow to accommodate a transformer or to facilitate cable installation. The SpotClip-IV-Slim can be installed during or after construction. It is tested according to EN 60598-1, EN 60598-2-2, and NF C 15100.

Features and benefits

- Adaptation and dimensioning to the booming LED lighting market
- Reduction of size of more than 50%
- Simplify installation in tight spaces
- Suitable only for extra flat LED recessed luminaires



SpotClip-IV-Slim - Application with injected wool.



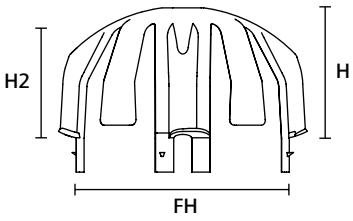
Application on the ceiling.



SpotClip-IV-Slim shown using standard insulation wool/ glass wool.

MATERIAL	Polyamide 6.6, glass-fibre reinforced (PA66GF15%)
Operating Temperature	-20 °C to +120 °C
Flammability	UL94 V0 at 1.5mm thickness, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓



SpotClip-IV-Slim

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)	Height (H2)	Colour	Pack Cont.	Article-No.
SpotClip-IV-Slim	73.0	83.0	50.0	43.0	Black (BK)	10 pcs.	148-00146

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

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www.HT.click/49-426

HellermannTyton

The ideal insulating tape for 1001 very cold nights.

So cool. On icy construction sites that really put the endurance of people and materials to the test – that's where HelaTape Flex 1000+ premium insulating tape really shows its strengths. Developed and produced by us, it adheres despite condensation and stays pliable down to -18 °C. A low temperature record.

www.HellermannTyton.co.uk/tape

MADE FOR REAL®



Date of issue: September 2022

Downlight Covers - For Residential Buildings

SpotClip-Box

SpotClip-Box has been designed especially for passive houses. This innovative downlight cover prevents contact between insulation material and the bulb. The insulation remains continuous, thus avoiding any breach in the integrity of insulation in the passive house. SpotClip-Box is suitable for LED and compact fluorescent-lamp downlights with a diameter of up to 75 mm and a maximum height of 130 mm.

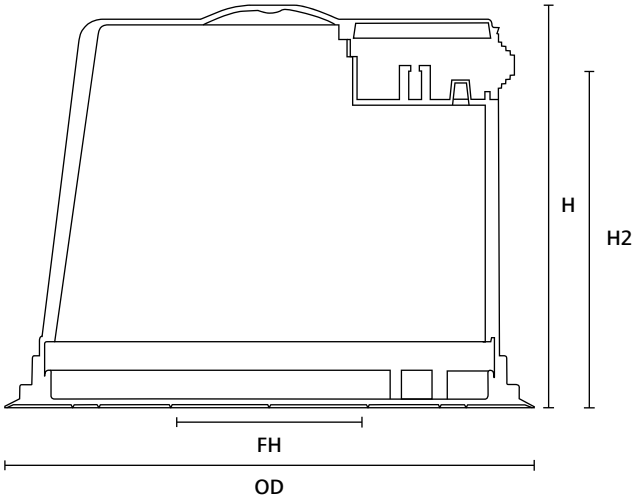
It is available as a complete kit, including HelaCon Lux wire connectors and all necessary mounting components.



SpotClip-Box - Especially designed for passive house applications.



View inside the SpotClip-Box.



SpotClip-Box

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	UL 94 V2, self-extinguishing, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)	Height (H2)	Outside Ø (OD)	Colour	Pack Cont.	Article-No.
SpotClip-Box FR	75.0	75.0	140.0	130.0	184	Black (BK)	1 pc.	148-00123

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-428

Downlight Covers - For Residential Buildings

SpotClip-Box

Features and benefits

- Suitable for all types of suspended ceilings and a variety of insulation materials
- Ensures safety distance between the downlight, damp-proof foil and insulation material
- Additional spikes at the bottom of the product prevent shifting during installation
- Connection without the need for screws, with HelaCon Lux connectors included
- Prevents damage to insulation material caused by overheating
- Improves life span and reliability of lamps
- Quick and easy one-click installation with bayonet mechanism
- Can also be used to install downlights and speakers in concrete ceilings constructed on-site
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



SpotClip-Box is a downlight cover supplied as a complete kit.



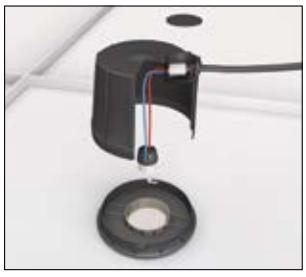
HelaCon Lux connected to the power supply.



Seal the complete SpotClip-box using the end cap and grommet.



1. Mount the bottom plate over the drilled fixing hole and install the downlight housing.



2. Connect the power supply to the lamp socket with the HelaCon Lux wire connectors included and lock it with the bayonet coupling.



3. Connect the bulb to the socket and lock into the correct position.



4. Insulation material can now be applied.

Downlight Covers - For Industrial Buildings

SpotClip-Kit

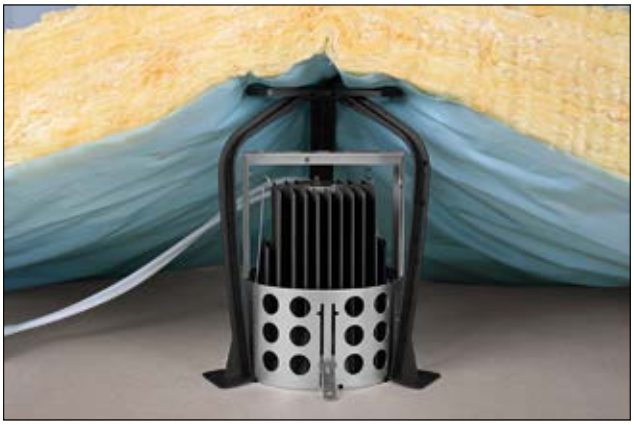
SpotClip-Kit has been designed for use primarily in industrial and office buildings for downlights with larger dimensions. The packaging kit consists of three legs and a mounting plate. The legs are available in two different lengths (150 mm and 240 mm). SpotClip-Kit has six selectable fixing positions in the mounting plate, making it suitable for downlights of differing dimensions. SpotClip-Kit 150 is suitable for downlights with a diameter from 100 mm up to 270 mm and with a maximum height of 140 mm. SpotClip-Kit 240 is suitable for downlights with a diameter from 170 mm up to 310 mm and with a maximum height of 230 mm. SpotClip-Kit can be combined with SpotClip-Plate.



SpotClip-Kit 150 used in a suspended ceiling.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	UL 94 V2, self-extinguishing, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓

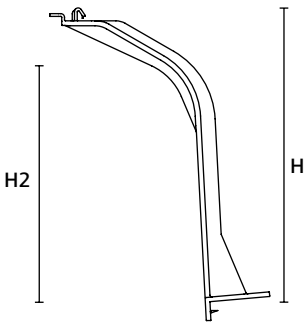


SpotClip-Kit 240 applied with a fixed sheet of insulating material.

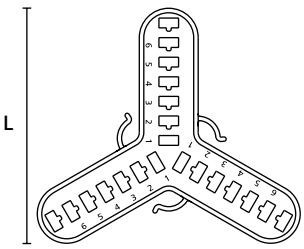
www.HellermannTyton.co.uk/SpotClip-Kit-cat22



SpotClip-Kit downlight cover is available in two sizes.



SpotClip-Kit 150 leg



SpotClip-Kit mounting plate

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Height (H)	Height (H2)	Length (L)	Colour	Pack Cont.	Article-No.
SpotClip-Kit 150	100.0	270.0	157.0	140.0	120.0	Black (BK)	1 pc.	148-00119
SpotClip-Kit 240	170.0	310.0	247.0	230.0	120.0	Black (BK)	1 pc.	148-00120

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Add items to your watchlist!
www.HT.click/49-430

Date of issue: September 2022

Downlight Covers - For Industrial Buildings

SpotClip-Kit

Features and benefits

- Installation from the top or bottom in all types of suspended ceilings
- Ensures safety distance between downlight, damp-proof foil and insulation material
- Flexible installation during or after construction, suitable for use in existing and new buildings
- Additional spikes at the end of the legs prevents shifting during installation
- Intelligent cable routing with eyelet at the top
- Prevents damage to insulation material caused by overheating
- Heavy-duty leg design prevents long-term deformation
- Improves life span and reliability of the lamp
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



SpotClip-Kit 150 is used for fixing hole diameters from 100 mm to 270 mm.



SpotClip-Kit 240 is used for fixing hole diameters from 170 mm to 310 mm.

SpotClip-Kit 150

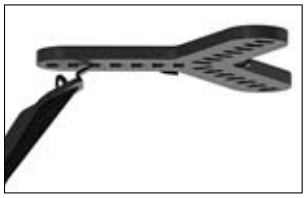
Slot	Fixing hole diameter Ø min. – Ø max.
1	100–170
2	120–190
3	140–210
4	160–230
5	180–250
6	200–270

All dimensions in mm. Subject to technical changes.

SpotClip-Kit 240

Slot	Fixing hole diameter Ø min. – Ø max.
1	170–210
2	190–230
3	210–250
4	230–270
5	250–290
6	270–310

All dimensions in mm. Subject to technical changes.



The feet position can be very easily adjusted using the click and release system.



A robust design combined with retaining spikes ensures high stability.



SpotClip-Kit 150 is delivered as a self-assembly set.



SpotClip-Kit 240 is delivered as a self-assembly set.



1. Squeeze the legs and insert the SpotClip-Kit through the fixing hole.



2. Press the retaining spikes into the plasterboard to secure the legs.



3. Install the downlight according to the manufacturer's user manual.



4. Connect the downlight to the power supply and fix the cable into the routing eyelet.

Downlight Covers - For Industrial Buildings

SpotClip-Plate

SpotClip-Plate has been developed especially for installation in suspended grid ceilings in order to avoid damage and cracks in the ceiling plates caused by the weight of heavy downlights. The product dimensions of 592 mm x 592 mm mean that it fits perfectly into standard grid ceilings with a width of 600 mm. The pre-cut design makes it suitable for installation of the most commonly used downlights with a diameter from 75 mm to 314 mm.

Please check if your grid ceiling size corresponds to the side length of 600 mm. Depending on the manufacturer and country this can vary between 600 mm and 625 mm.

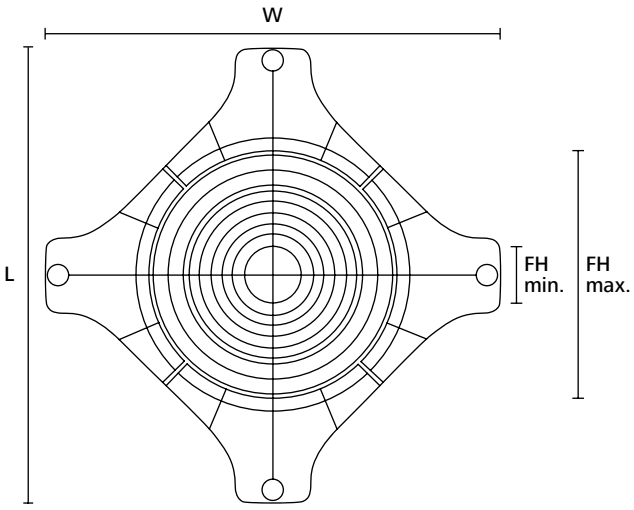


SpotClip-Plate has been developed for applications with heavy downlights in suspended grid ceilings.

www.HellermannTyton.co.uk/SpotClip-Plate-cat22



SpotClip-Plate fits perfect into standard grid ceilings with a width of 600 mm.



SpotClip-Plate

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	UL 94 V2, self-extinguishing, Glow Wire Test (GWT) 960 °C

HF ✓ RoHS ✓

TYPE	Hole Ø (FH) min.	Hole Ø (FH) max.	Length (L)	Width (W)	Colour	Pack Cont.	Article-No.
SpotClip-Plate 600	75.0	314.0	592.0	592.0	Black (BK)	10 pcs.	148-00117

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-432

Downlight Covers - For Industrial Buildings

SpotClip-Plate

Features and benefits

- SpotClip-Plate distributes the load of the downlight equally across the suspended ceiling construction
- Flexible installation during or after construction, useful for both existing and new buildings
- Remains rigid even at higher temperature
- Flame retardant material according to UL94-V2
- Improves life span and reliability of lamps
- Faster and easier installation and replacement of the lamp
- Tested according to EN 60598-1, EN 60598-2-2, and NF C 15100



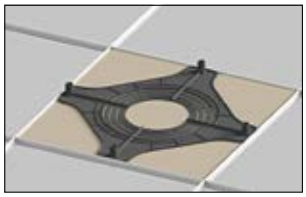
SpotClip-Plate comes in 16 pre-cut fixing hole diameter sizes.



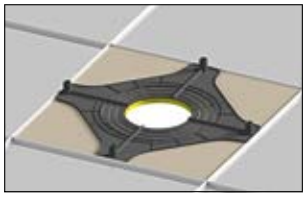
Choose the required diameter and cut with a handsaw.



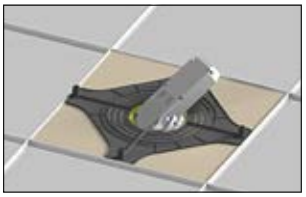
Use the SpotClip-Plate as a stencil to cut the fixing hole into the ceiling plate.



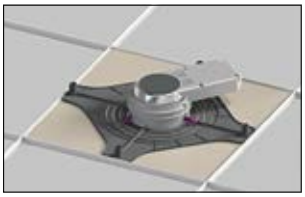
1. Place the SpotClip-Plate in position.



2. Cut the ceiling plate.



3. Insert the downlight through the cutted hole.



4. Mount the downlight.

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SpotClip-Plate - Further Accessories

SpotClip-Caps

SpotClip-Plate can be used to ensure the safety distance between the downlight and insulation material. We offer three different solutions to prevent damage to insulation material caused by overheating of the bulb.

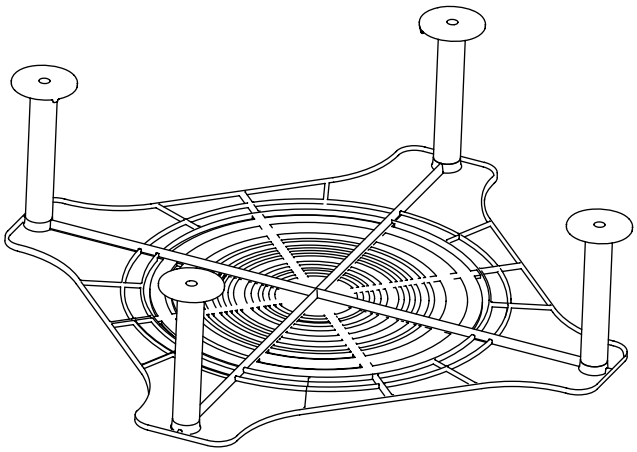
1. Place two plates on top of each other and use IRL standard tubes between these to achieve the required distance
2. Use SpotClip-Caps and IRL standard tubes to achieve the required distance between the plate and insulation material
3. Combine SpotClip-Kit with SpotClip-Plate for a fast solution



SpotClip-Plate with insulation material - Plate-to-Plate solution.



SpotClip-Plate combined with SpotClip-Caps.



SpotClip-Plate in combination with IRL standard tubes and SpotClip-Caps



SpotClip-Plate combined with SpotClip-Kit, shown with insulation material.

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SpotClip-Plate - Further Accessories

SpotClip-Caps

Features and benefits

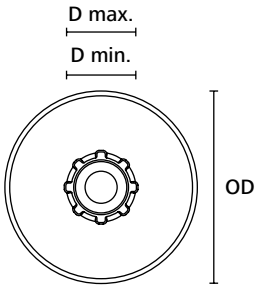
- Different solutions to ensure safety distance between downlight, damp-proof foil and insulation material
- SpotClip-Plate can be combined with SpotClip-Kit, SpotClip-Caps or placed on top of each other with standard SpotClip-Tubes to ensure the required distance
- Prevents damage to insulation material caused by overheating
- Improves life span and reliability of lamps
- Faster and easier installation and replacement of lamps



SpotClip-Caps offered in a pack of 40 pieces.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	UL 94 V2, self-extinguishing, Glow Wire Test (GWT) 960 °C

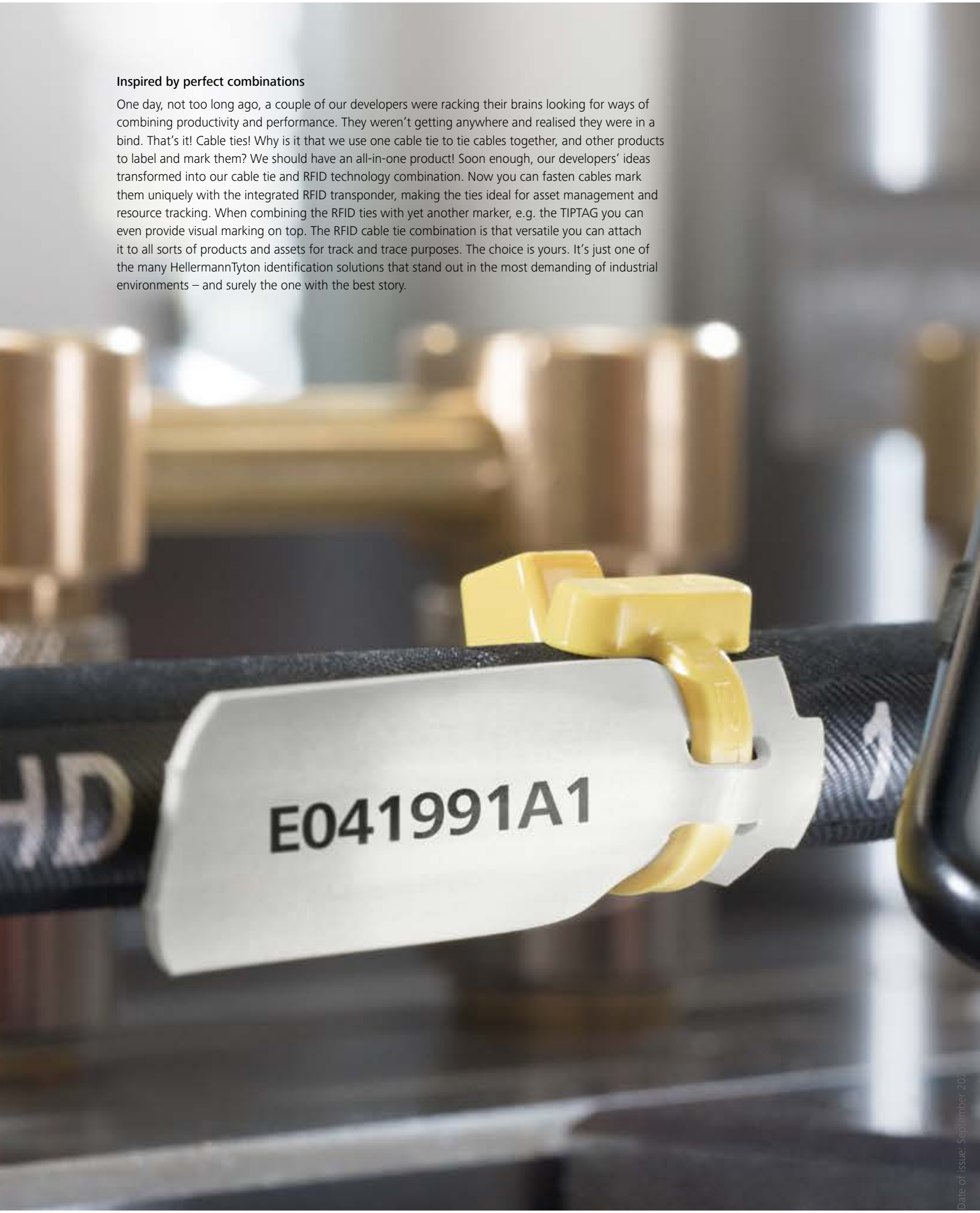
HF ✓ RoHS ✓



SpotClip-Cap

TYPE	Outside Ø (OD)	Ø D min.	Ø D max.	Colour	Pack Cont.	Article-No.
SpotClip-Caps 16/25	60.0	16.0	22.0	Black (BK)	40 pcs.	148-00102

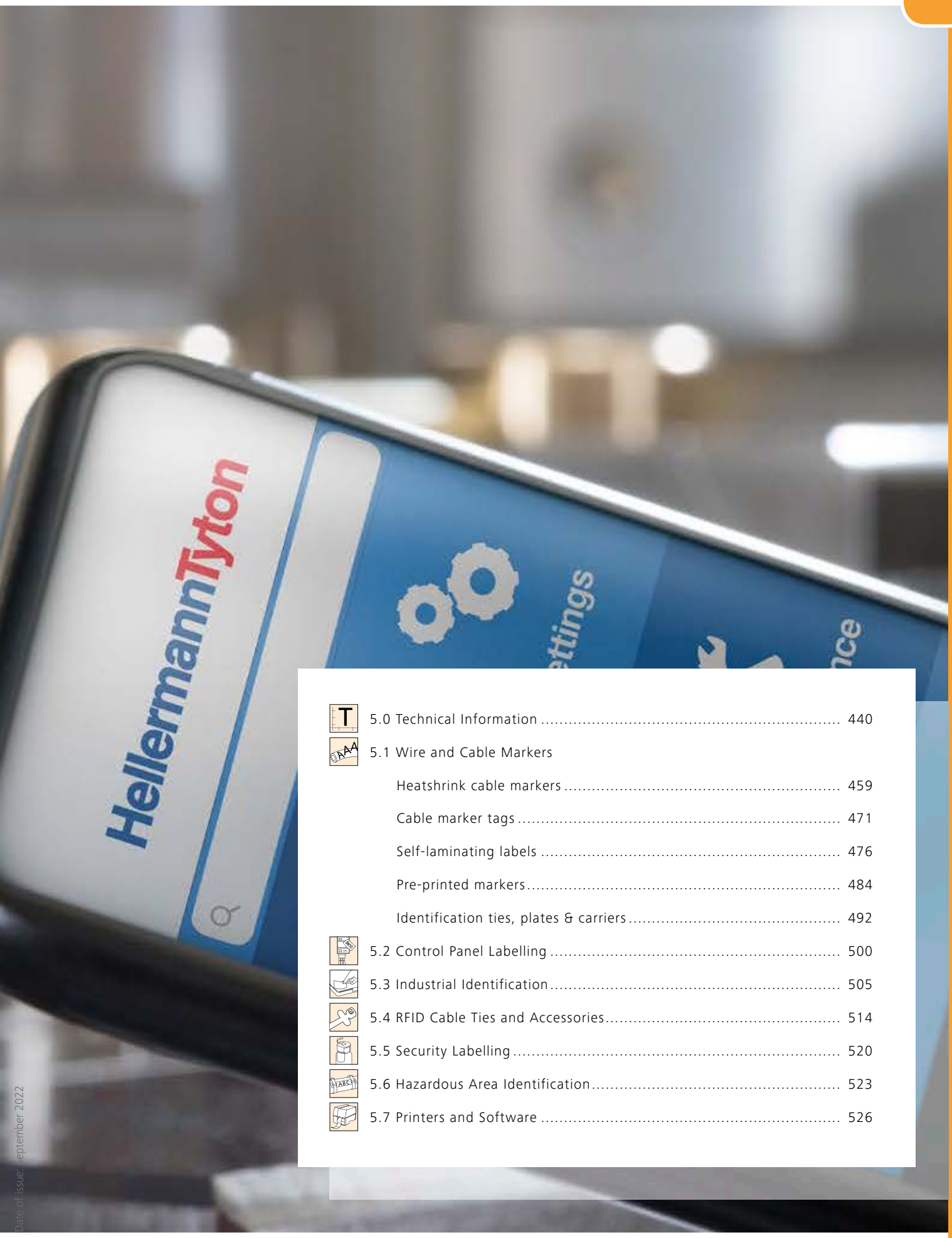
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Inspired by perfect combinations

One day, not too long ago, a couple of our developers were racking their brains looking for ways of combining productivity and performance. They weren't getting anywhere and realised they were in a bind. That's it! Cable ties! Why is it that we use one cable tie to tie cables together, and other products to label and mark them? We should have an all-in-one product! Soon enough, our developers' ideas transformed into our cable tie and RFID technology combination. Now you can fasten cables mark them uniquely with the integrated RFID transponder, making the ties ideal for asset management and resource tracking. When combining the RFID ties with yet another marker, e.g. the TIPTAG you can even provide visual marking on top. The RFID cable tie combination is that versatile you can attach it to all sorts of products and assets for track and trace purposes. The choice is yours. It's just one of the many HellermannTyton identification solutions that stand out in the most demanding of industrial environments – and surely the one with the best story.

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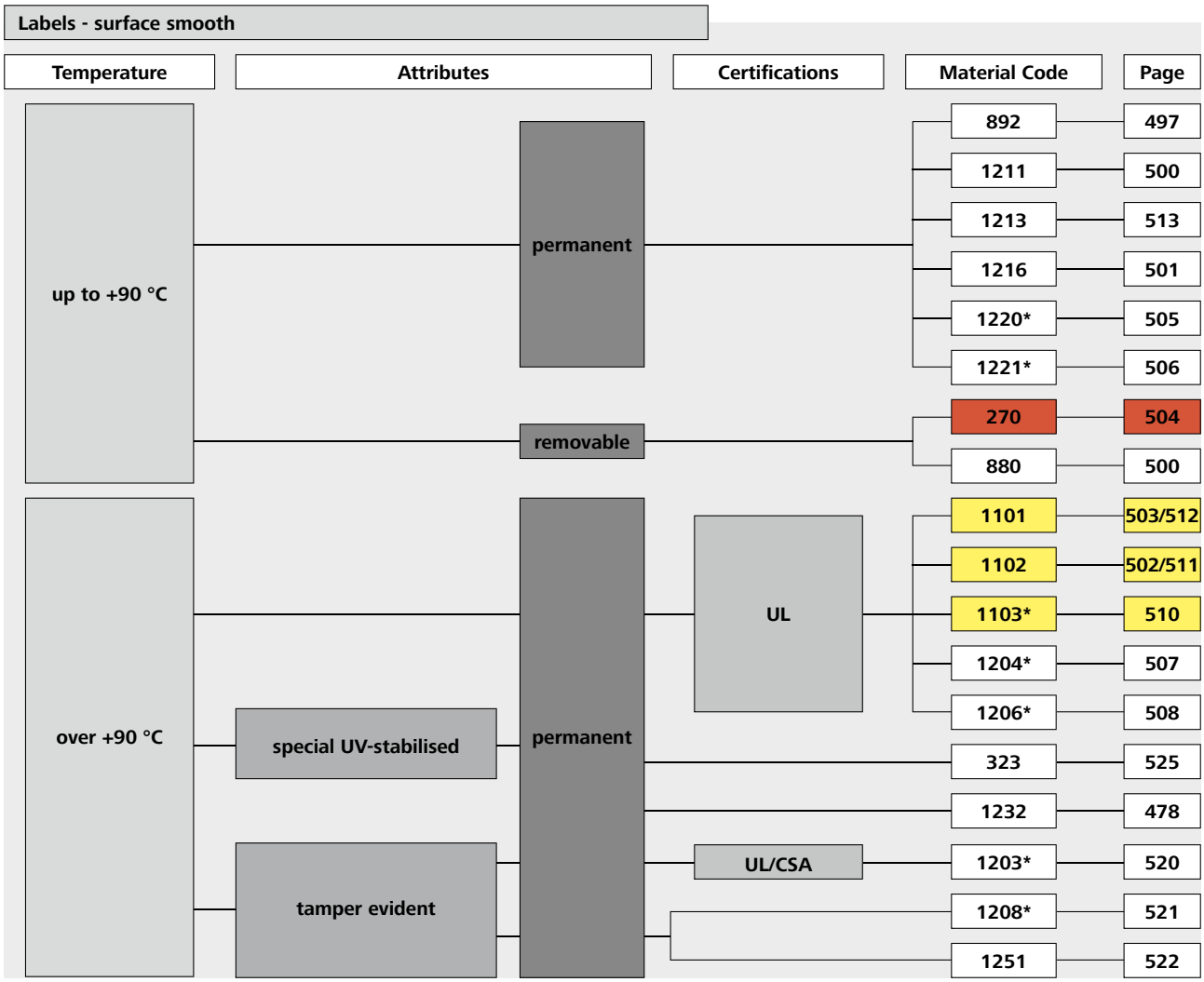
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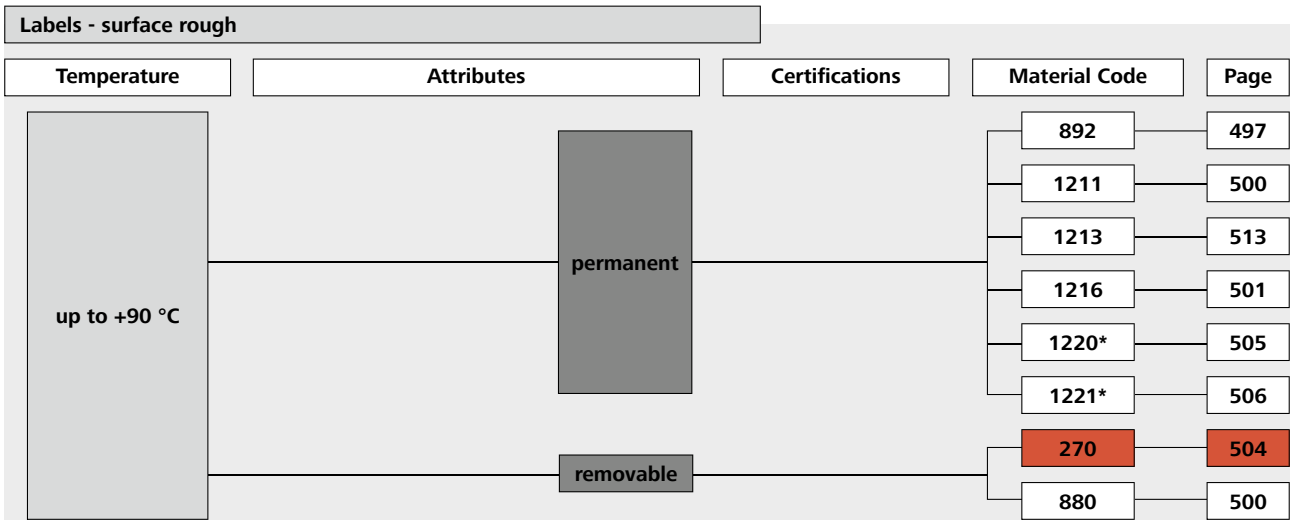
Label and marker selection guide

Use our flowchart to find the right label or identification material.

Select the object to be identified (flat or curved surface) and its surface quality (smooth or rough). Depending on what you require from our identification systems, you will be guided through the flowchart to the end. Please note that we have highlighted the respective printer technology (thermal transfer, matrix or laser printer, etc.) in colour.

When selecting the material, the general rule is that a higher quality material can of course be used for lower requirements (e.g. a material for operating temperatures of over +90 °C can also be used for temperatures below +90 °C). And you can, of course, always ring us on our usual telephone numbers.





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Labelling material for:

TT printer

Laser printer

Handwritten identification

* For this labelling material you can also use laser beam.

Labels - cables/tubes smooth

Temperature	Attributes	Certifications	Material Code	Page
up to +90 °C	permanent		1209*	476
			1401	482
			1402	483
	removable		270	504
over +90 °C	permanent		323*	479
			1104	480
			1105	481

Heat shrink marker

Temperature	Attributes/Application	Certifications	Material Code	Page
over +90 °C			TCGT*	459
	for electronics	UL/CSA//MIL STD	TULT*	461
			TULT DS*	463
	for rail	EN45545-2	TLFX*	465
			TLFX DS*	467
		EN50343	TLFD DS*	469

TIPTAG

Temperature	Attributes/Application	Certifications	Material Code	Page
over +90 °C	special UV-stabilised		TIPTAG PU*	472
	for rail	EN45545-2	TAGLF*	475
up to +90 °C	for rail	EN45545-2	TIPTAG HF*	471
	for food and pharma		TIPTAG MC	473
	special UV-stabilised		TAGPU*	474

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Bonding properties of labels

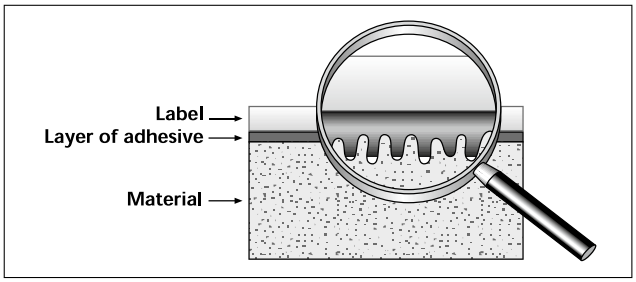
The great variety of places where adhesive labels can be used require a broad range of different materials and adhesives. The information given below will explain all the important aspects of this adhesion.

To enable you to make the right choice for your particular application quickly and efficiently, we have set out the most important selection criteria diagrammatically in our flowchart.

Initial and final bonding

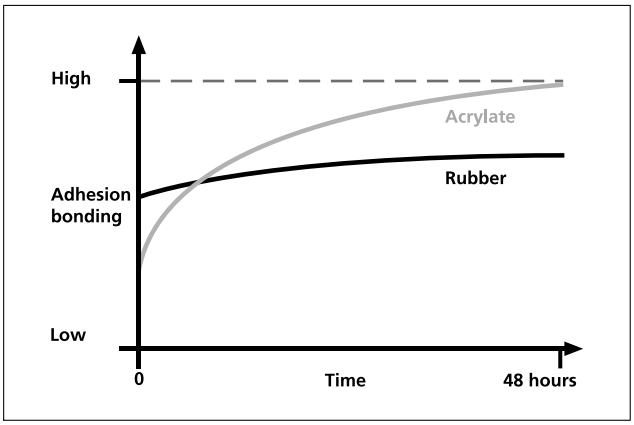
In principle there are two different bonding conditions for labels: The initial bonding which occurs immediately after the label and surface are brought together and the final bonding which represents the permanent bonding status between label and surface following the application, pressing on and curing of the adhesive. The bonding of labels is measured in a defined test process (FINAT FTM) and stated in N/mm.

The initial bonding (or tack) describes the bonding ability of the label after it has been applied to the surface, without being pressed down. The final bonding of labels is ultimately affected by the combined factors of material quality, adhesive basis, curing time, pressure applied and surface tension.



Adhesion: powers of attraction between two materials

Adhesion can be described, in principle, as the ability of the adhesive to form a bond with the substrate; the substrate is the surface of the material you need the label applied to. The influencing factors for optimum bonding are the quality of the material's surface and the creep ability of the adhesive. The crucial factor is the proportion of the surface which is actually to be 'wetted' by the adhesive. Most surfaces appear – from a microscopic point of view – like a mountain range with peaks and valleys; i.e. the effective surface is much bigger than that seen by the naked eye. No matter how smooth and flat a substrate may appear to be, there is always some roughness. The better the adhesive flows into the valleys, the more bonding points it can form and the better the adhesive will bond to the surface. A thicker layer of adhesive does allow these uneven areas to be filled in better, but a thicker coat of adhesive has negative effects when labels are processed by machine (e.g. leakage of the adhesive or limited storage life).



Adhesive basis

HellermannTyton currently uses acrylate and synthetic rubber as adhesive bases. Acrylate adhesives belong to the family of thermoplastic resins and at normal temperatures they provide high and lasting adhesion. When considering the final bonding of acrylate adhesives, however, it must be noted that the relatively high final bonding is only attained after a certain curing period. This is especially true of labelling materials which may be used for rating plates. Normally you must wait for at least 48 hours in a dry office environment.

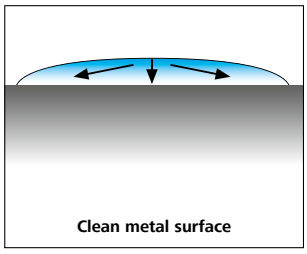
Synthetic rubber-based adhesives, unlike acrylate-based adhesives, are distinguished by their high initial bonding. But this adhesive technology does not achieve a final bonding comparable to acrylate adhesives (see graph). Special mixtures of synthetic rubber are used in labelling technology, for example for removable labels, e.g. HellermannTyton material type 270.

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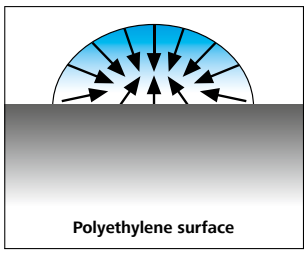
Effect of surface energy on bonding properties

The surface energy (also known as surface tension) is an important factor in the selection of the right adhesive. Because of their chemical formulation, all surfaces have their own polarity and surface tension. The cause of surface tensions is the tendency of liquids to reduce their surface as far as possible, thus to form drops. When a surface which is to be marked (substrate) is wetted with an adhesive, in addition to the adhesive formulation and the surface quality (material, roughness, dampness etc.) the surface energy is also a decisive factor in the maximum attainable bonding force of the adhesive.

As a basic rule, it can be noted that the surface energy of the adhesive must be less than the surface energy of the material to be bonded (substrate). The adhesive should completely wet the substrate and not form any drops.



Flat drops
- High surface energy
- Good wetting
- Good bonding properties



Rounded drops
- Low surface energy
- Poor wetting
- Weak bonding properties

The material combination is the decisive factor

An acrylate-based adhesive is polar and therefore has a relatively high surface energy. Acrylate-based adhesives achieve optimum final bonding on polar substrates (e.g. glass or metals) with a high surface energy. More critical is the application of labels using acrylate-based adhesives on materials with low surface energy (apolar substrates) such as, for example, silicone, polyethylene and polypropylene. The surface tensions of an acrylate-based adhesive can be reduced for particular applications by the addition of specific additives. However, this step brings with it some drawbacks, for example, a free-flowing adhesive and thus a limited life and storage ability of the labels. The lower bonding force of low-energy surfaces must therefore be taken into account of when considering the end use.

For optimum marking using acrylate-based adhesive labels, HellermannTyton uses an improved adhesive formulation, which is co-ordinated to the most common materials in industry. In most cases it is possible to guarantee very good application of these labels. In borderline cases, a modified adhesive formulation may be necessary.

Talk to us, we'll be delighted to advise you.

Surface energies of different materials

MATERIAL	Surface energy [mN÷m]*
Polytetrafluorethylene (PTFE)	18
Silicon (Si)	24
Polyvinyl fluoride (PVF)	25
Natural rubber (CR)	25
Polypropylene (PP)	29
Polyethylene (PE)	35
Polymethyl methacrylate, Acryl (PMMA)	36
Epoxy (EP)	36
Polyoxymethylene, Acetal (POM)	36
Polystyrene (PS)	38
Polyvinyl chloride (PVC)	39
Vinylidene chloride (VC)	40
Polyester (PET)	41
Polyimide (PI)	41
Polyarylsulfone (PAS)	41
Phenolic resin	42
Polyurethane (PUR)	43
Polyamide 6 (PA 6)	43
Polycarbonate (PC)	46
Lead (Pb)	450
Aluminium (Al)	840
Copper (Cu)	1,100
Chromium (Cr)	2,400
Iron (Fe)	2,550

*The values stated are non-binding reference values and for guidance purposes only.

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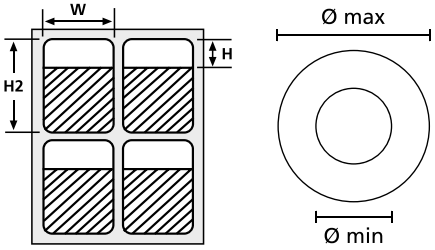
Instructions for using labels with protective laminate

Labels with protective laminate (also known as cable laminators) have a white or coloured label field which can be written on either manually using a marker pen (see RiteOn and HELASIGN) or using a matrix, laser or thermal transfer printer (see Helatag). Depending on the design for the respective type of printing, the title block has a special surface finish to achieve the optimum print anchorage to the label substrate. This results in long-lasting, clear, sharp writing with text, graphics or barcode. A special feature is that most of the HellermannTyton protective laminate labels come with rounded corners. This achieves greater final adhesion of the protective laminate and counteracts any undesirable removal of the label, especially with cables of small diameter and in heavy-duty applications.

When calculating the minimum and maximum diameters, the following formula has been used:

$$\text{Diameter} = \frac{\text{Length of laminate}}{\pi}$$

Pi (π) is the constant 3.14.



Helatag self-laminating labels.

Minimum diameter:

To save time, when wrapping the cable with the cable laminator, a limit of max. 2 windings has been set. The protective laminate length is calculated from: Height H2 – height H

By applying the "diameter" formula this produces the approx. minimum diameter:

$$\text{Diameter}_{\text{min}} = \frac{H2 - H}{2 \times \pi}$$

Example: TAG136LA4 (H = 19.05 mm; H2 = 67.7 mm)

$$\text{Diameter}_{\text{min}} = \frac{67.7 - 19.05}{2 \times 3.14}$$

Maximum diameter:

In this case the minimum requirement is complete coverage of the label field with the protective laminate with a single winding. The length of the protective laminate is again obtained from the formula: H2 – H.

By applying the "diameter" formula this produces the approx. maximum diameter, which also corresponds to double the minimum diameter:

$$\text{Diameter}_{\text{max}} = \frac{H2 - H}{\pi} = 2 \times \text{Diameter}_{\text{min}}$$

Example: TAG136LA4 (H = 19.05 mm; H2 = 67.7 mm)

$$\text{Diameter}_{\text{max}} = \frac{67.7 - 19.05}{3.14} = 2 \times \text{Diameter}_{\text{min}}$$

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Interesting facts about thermal transfer films (colour ribbons)

The thermal transfer ribbon is perhaps the most important consumable that is used in this printing system - using the right ribbon for a particular application is extremely important.

Not every transfer ribbon is equally suited to any purpose. Depending on the printing requirements (e.g. smudge or scratchproof) to be met, what type of labels will be used, an appropriate thermal transfer ribbon must be used.

Another important consideration for the thermal transfer ribbon is the electrostatic charging which can arise during the printing process. Some transfer ribbons become statically charged during the printing process, which can damage an ESD-sensitive printer head in the long run.

To clarify: The thermal transfer printer head is in physical contact with the back of the thermal transfer ribbon and consists solely of electronic, voltage-sensitive elements, which are known as dots.

These can become damaged when the thermal transfer ribbon causes discharges, which usually results in dot drop-outs. At points where the print head is damaged, no more colour is transferred. This leaves gaps on the label.

Thermal transfer films usually consist of three layers:

- A polyester strip as supporting material
- A protective, gliding backing layer on one side
- A colour layer on the other side.

The colour remains solid at room temperature, but liquefies under the effect of heat. To manufacture the colour ribbons, the polyester ribbon is coated with a special backing and then the respective coloured ink is applied. Print characteristics and bonding ability on various materials depend mainly on the chemical composition of this colour ink.

The main distinguishing feature of thermal transfer ribbons is the so-called quality of the coating. There are two basic types of thermal transfer ribbons:

Wax-resin-based films – good synthesis

With this quality of a wax-resin mixture, the good print characteristics of the wax are essentially retained, but the resin content increases mechanical strength. The print image produced has high resistance to heat, solvents, abrasion and scratching and high print quality, e.g. for barcodes. These colour ribbons are suitable for use on synthetic materials. They can be used for most applications at standard print temperatures.

- TT932DOUT
- TT822OUT8

Resin-based films – for very heavy-duty purposes

The colour layer at this quality level is based entirely on synthetic resins, developed for industrial applications and extreme conditions. Resin-based colour ribbons guarantee maximum readability, even on the most difficult materials (e.g. barcodes). Depending on the backing material, medium to high print temperatures and slow print speeds are necessary when using these thermal transfer films. In return, a print image is obtained which stands out for its high resistance to abrasion and scratching and great solvent and heat resistance.

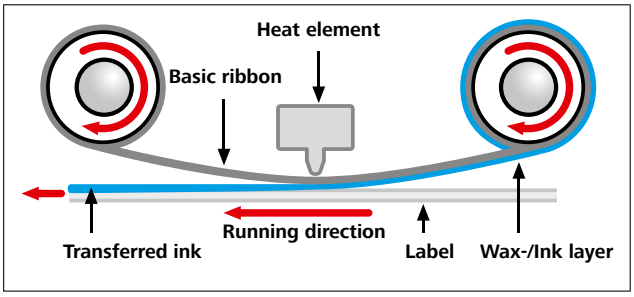
- TT822OUT
- TTRW
- TTDTHOUT
- TTRHT
- TTRR
- TT122OUT
- TTRC+

Interesting facts about thermal transfer printing

Thermal transfer printing plays a central role, especially in the field of printing variable data, single-proofs and even for small series. This is largely due to the fact that thermal transfer printing is a non-impact printing (NIP) process. Unlike traditional printing processes, such as offset-printing, a NIP printing process does not require a fixed printing block and can therefore print out different data with consistent quality from print to print.

Due to the increasing spread and importance of one and two-dimensional barcodes in goods inventory systems, logistics and in the field of component identification, the market potential of thermal transfer printing is growing all the time. The same is also true of incremental serial numbers, inventory designations, entrance tickets, rating plates, wine labels and many more.

Good print quality, high print speeds and the option of printing almost all backing materials permanently – these are the critical advantages of thermal transfer printing. It's good readability, resistance and abrasion resistance allow thermal transfer printing to be put to use in applications where the print results from laser, inkjet or dot matrix printers are not satisfactory.



Heated dots strike a special colour ribbon, the thermal transfer film, which transfers liquefied colour ink at exactly that point onto the backing material (labels, tubes, rating plates). Our modern printers use what is known as "thin film technology", in which the very brief liquid phase of the ink produces faster print speeds and better and more precise images than with the "thick film technology" formerly used.

Moreover, the linear orientation of the labels or of the heatshrink tubing makes it possible to print on demand. The printing is then carried out as required. This is especially useful in the production of rating plates in series production.

In thermal transfer printing, the print image is defined by the three components: printer, label material and thermal transfer film (colour ribbon).

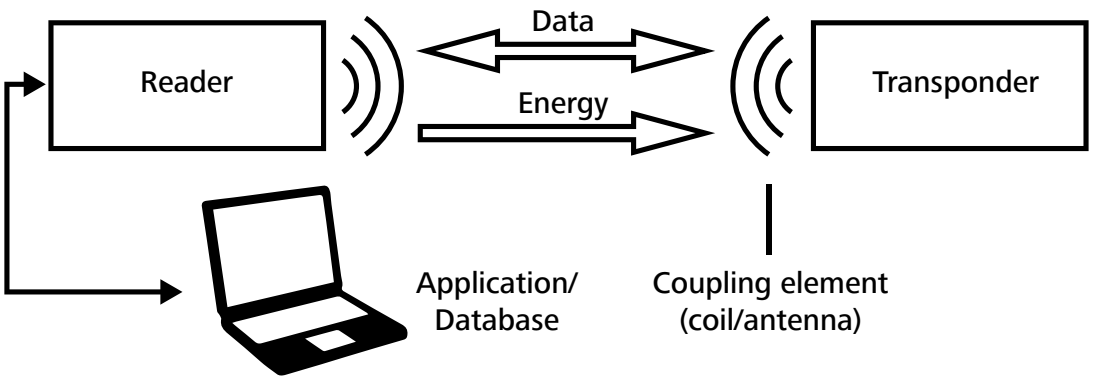
The advantages at a glance:

- High print quality with a resolution of 8-12 dots/mm (12 dots/mm corresponds to approx. 300 dpi)
- Barcode printing in excellent quality, hence good optical readability
- High print speeds of between 30 mm/sec and 150 mm/sec
- Individual graphics capability
- Problem free and rapid realisation of self designed drafts
- Quiet and service friendly printers
- Prints are UV fast and permanent with high definition and contrast and good resistance to mechanical and chemical influences.

Date of issue: September 2022

RFID - Radio Frequency Identification

What is RFID?



Radio Frequency Identification, for short RFID simply means the use of radio frequency waves to uniquely identify objects. RFID tags attached to items allow users to automatically and uniquely identify and track inventory and assets.

With the help of special RFID readers the data can be transferred into databases and linked to additional information.

You can either use the programmed UID number from the chip or write your own serial data for tracking onto the transponder/tag.

There are three primary frequency ranges used for RFID transmissions – Low Frequency, High Frequency, and Ultra-High Frequency.

Reading distances can vary from short distances of a few centimeters to very long ranges of a few meters.

Depending on what you would like to achieve with RFID choosing the right frequency and transponders is key to a successful implementation.

RFID

LF: 125 kHz

HF: 13.56 MHz

UHF: 860 - 960 MHz

Fixed memory:
Transponder Identification (UID)

Editable Memory:
Attributes
Object Information

Use HellermannTyton RFID transponders for solving asset tracking, maintenance management and intra-logistic issues.

- **RFID** ensures that each tagged items and assets are detected and identified automatically and matched up with the correct information in your database - using its unique ID or your own serial numbers
- **RFID** technology is particularly suited for asset management, asset tracking and keeping maintenance information because it allows operators to identify tools, machine and spare parts accurately, easily and rapidly
- With **RFID** you can streamline and automate asset scanning and inventorising while eliminating the possibility of human error – providing better control over your assets
- With **RFID** you can automate processes such as maintenance and service routines through improvement of information flow - during maintenance, tags information can be retrieved and providing all the information required for the job in real time
- **RFID** technologies help to lower costs by providing better control of stocks or assets. They can help keep track of and locate business assets such as portable devices from point to point

www.HellermannTyton.co.uk/RFID-tracking-cat22

Date of issue: September 2022

Our Portfolio

HellermannTyton offers a range of transponders, each suitable for one or several specific applications. Among the most versatile types of transponders are HellermannTyton cable ties with integrated RFID chip. These transponders can be easily applied to many objects in a robust and lasting way. HellermannTyton also offers different types of readers for data transfer.

T50RFID	Cable tie with integrated RFID chip. Physical structure is based on standard T50 cable tie series. RFID chip has been positioned close to cable tie head by utilizing a dedicated cavity. Different types of RFID chips, with different charactaristics are available.
T50RFIDCLA	T50RFID cable tie with LF (125 kHz) UNIQUE 64 bits ROM chip (ISO/IEC 15693 and 18000-2)
T50RFIDCHA	T50RFID cable tie with HF (13.56 MHz) Vigo 1.6 kbits chip (ISO/IEC 10536 and 18000-3)

T50RFID	Cable tie with overmoulded RFID transponder. Physical structure is based on standard T50 cable tie series. The RFID element is integrated as a „flag" on the cable tie head making it possible to use an RFID inlay of high performance properties. This RFID cable ties comes in UHF frequency and is ideal if you need a long read distance or bulk reading.
T50RFIDUHF	T50RFID cable tie with UHF (865-868Mhz) Higgs-3 - UHF Chipset, 512 bit, ISO/IEC 18000-6C EPC Class1 Gen2

MCTRFID	Cable tie with integrated RFID chip. Physical structure is based on standard T50 cable tie series. RFID chip has been postioned close to cable tie head by utilizing a dedicated cavity. Different types of RFID chips, with different charactaristics are available. Material has been interspersed with metall particles to make cable tie or desintegrated parts of cable tie detecabele by scanning devices.
MCTRFIDCLA	MCTRFID cable tie with LF (125 kHz) UNIQUE 64 bits ROM chip (ISO/IEC 15693 and 18000-2)
MCTRFIDCHA	MCTRFID cable tie with HF (13.56 MHz) Vigo 1.6 kbits chip (ISO/IEC 10536 and 18000-3)

MBTRFID	Stainless cable tie (metal band tie) with integrated RFID chip. Physical structure is based on standard MBT series. RFID chip has been positioned in a dedicated moveable slide-on element on the metal band. Different types of RFID chips, with different charactaristics are available.
MBTHFCRFID	Metal band tie with HF (13.56 Mhz) Vigo 1 kbits chip (ISO/IEC 10536 and 18000-3)
MBTHHCRFID	Metal band tie with UHF (868 MHz) 512 bits chip (ISO/IEC 18000-6C:2004)

CRADLE	Attachable identification element with integrated RFID chip. Suitable for cables, pipes and curved shapes. To be fixed with metal bands or cable tie. Creates distance between between object it is attached on and RFID chip to enhance radiographic charataristics.
RFID CRADLE	Attachable identification element with HF (13.56 MHz) Vigo 1.6 kbits chip (ISO/IEC 15693 and 18000-2)

HEXTAG	Very robust and attachable idenditifcation element with integrated RFID chip. To be bolted on or strapped to any object by utilising hole in center of element.
RFID HEXTAG	Attachable identification element with HF (13.56 MHz) Vigo 1.6 kbits chip (ISO/IEC 15693 and 18000-2)

www.HellermannTyton.co.uk/Auto-ID-cat22

Other products are available in our Auto-ID brochure.



Date of issue: September 2022

Product Selection Guide RFID

Operation Temperature		Frequency					
min.	max.	LF (125 kHz)		HF (13.56 MHz)		UHF (868 MHz)	
		Name	Page	Name	Page	Name	Page
-25 °C	+70 °C			MBTHFCRFID	517		
-25 °C	+85 °C			RFID CRADLE	519		
				MCTRFIDCHA	515		
-40 °C	+70 °C					T50RFIDUHF	516
-40 °C	+85 °C	T50RFIDCLA	514	T50RFIDCHA	514	MBTHHCRFID	517
		MCTRFIDCLA	515	HEXTAG	518		

Material	Frequency					
	LF (125 kHz)		HF (13.56 MHz)		UHF (868 MHz)	
	Name	Page	Name	Page	Name	Page
Polyamide 6.6 (PA66)	T50RFIDCLA	514	T50RFIDCHA	514		
			RFID HEXTAG	518		
Polyamide 6.6 (PA66) and Thermoplastic Polyurethane (TPU)					T50RFIDUHF	516
Polyamide 6.6 with metal particle			MCTRFIDCHA	515		
Stainless Steel (SS316) Polyester (SP)			MBTHFCRFID	517	MBTHHCRFID	517
Thermoplastic Polyurethan (TPU)			RFID CRADLE	519		
Polyamid 6.6, UV resistant (PA66 W)			T50RFIDCHA	514		

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Product Selection Guide RFID

Mounting Method	Frequency					
	LF (125 kHz)		HF (13.56 MHz)		UHF (868 MHz)	
	Name	Page	Name	Page	Name	Page
Tie On	T50RFIDCLA	514	T50RFIDCHA	514	MBTHHCRFID	517
	MCTRFIDCLA	515	MCTRFIDCHA	515	T50RFIDUHF	516
			MBTHFCRFID	517		
			RFID CRADLE	519		
Bolt On			RFID HEXTAG	518		

Flammability	Frequency					
	LF (125 kHz)		HF (13.56 MHz)		UHF (868 MHz)	
	Name	Page	Name	Page	Name	Page
UL 94 V2	T50RFIDCLA	514	T50RFIDCHA	514	MBTHHCRFID	517
			MCTRFIDCHA	515		
			MBTHFCRFID	517		
			RFID HEXTAG	518		
			RFID CRADLE	519		
non-burning (except coating)			MBTHFCRFID	517	MBTHHCRFID	517

ATEX certified	Frequency					
	LF (125 kHz)		HF (13.56 MHz)		UHF (868 MHz)	
	Name	Page	Name	Page	Name	Page
Yes	T50RFIDCLA	514	T50RFIDCHA	514		
			MCTRFIDCHA	515		
			RFID HEXTAG	518		
			RFID CRADLE	519		
No			MBTHFCRFID	517	MBTHHCRFID	517

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Size Selection Guide

Heat Shrink - Cable Diameters

Ideal Outside Diameter

TULT, TULT DS, TCGT (3:1)

mm od	2.4-0.8	3-1	4.8-1.6	6-2	9-3	12-4	18-6	24-8	39-13	mm od
1.0										1.0
2.0										2.0
3.0										3.0
4.0										4.0
5.0										5.0
6.0										6.0
7.0										7.0
8.0										8.0
9.0										9.0
10.0										10.0
11.0										11.0
12.0										12.0
13.0										13.0
14.0										14.0
15.0										15.0
16.0										16.0
17.0										17.0
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31.0										31.0
32.0										32.0
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34.0										34.0
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36.0										36.0
37.0										37.0
38.0										38.0
39.0										39.0
40.0										40.0
41.0										41.0
42.0										42.0
43.0										43.0
44.0										44.0
45.0										45.0
46.0										46.0

Heat Shrink - Cable Diameters

Ideal Outside Diameter

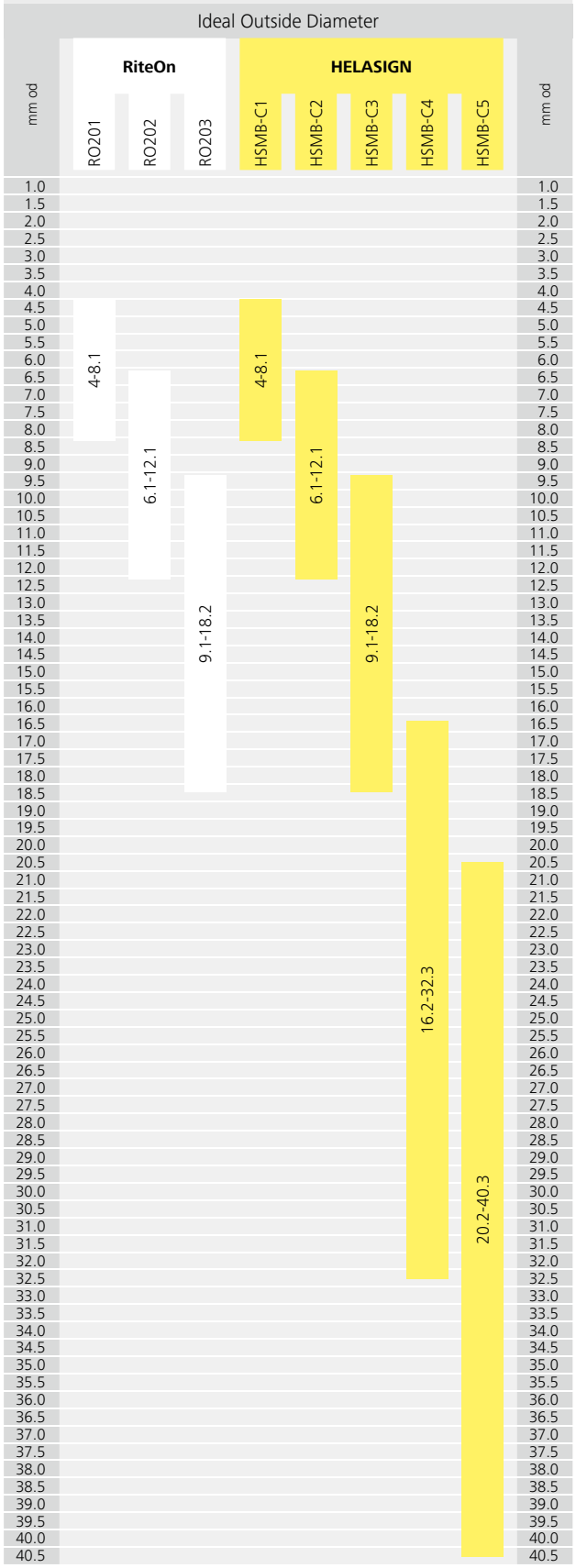
TLFX, TLFX DS, TLFD DS (2:1)

mm od	24/2.4	32/3.2	48/4.8	64/6.4	95/9.5	127/12	190/18	254/25	381/38	508/51	mm od
1.0											1.0
2.0											2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0
7.0											7.0
8.0											8.0
9.0											9.0
10.0											10.0
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39.0											39.0
40.0											40.0
41.0											41.0
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45.0											45.0
46.0											46.0

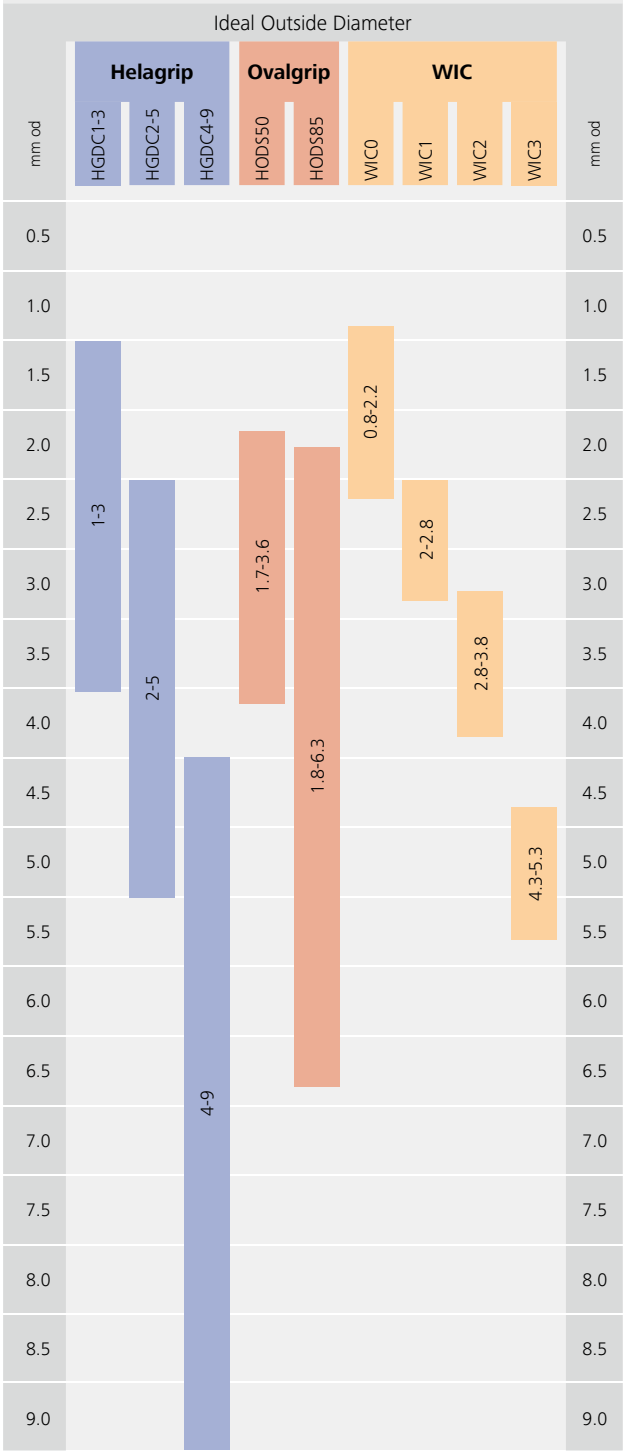
Date of issue: September 2022

Size Selection Guide

Self-laminating Labels - Cable Diameters

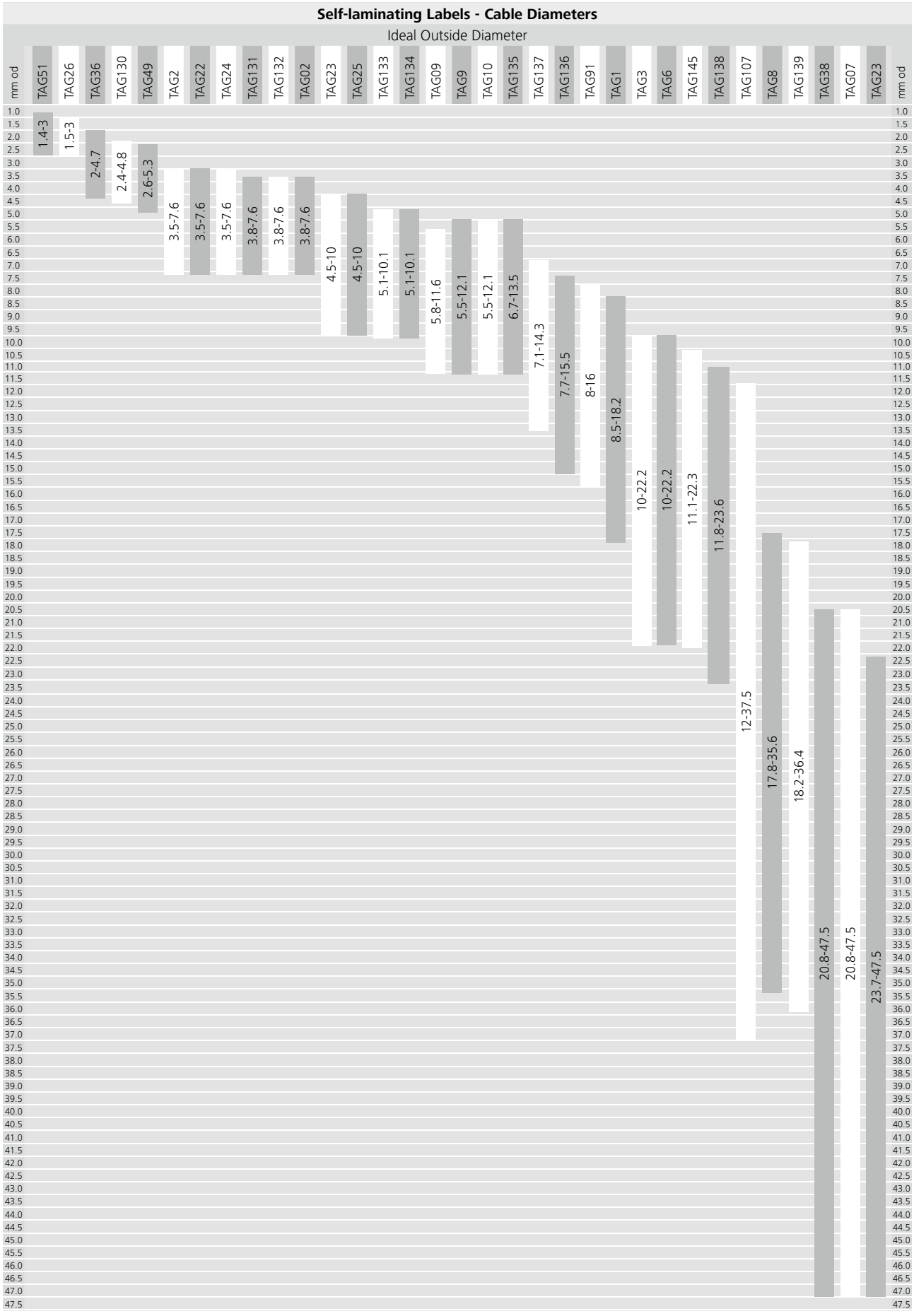


Pre-printed Markers - Cable Diameters



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Size Selection Guide



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Printers, ribbons and label types/materials

This table will help you select the correct printer and ribbon for specific material/label types. Please refer to the page indicated in the last column of the table for additional information.

www.HellermannTyton.co.uk/TTprinter-cat22







Material	Label type	Printing method	TrakMark DS (Double sided printing)	TT4030	TT431	Ribbon	Page
			TagPrint Pro				
TCGT			•	•	•	TTDTHOUT TTRW TT822OUT8	459
TULT			•	•	•	TTDTHOUT TTRW TT822OUT8	461
TULT DS			•	•	•	TTDTHOUT	463
TLFX			•	•	•	TTDTHOUT	465
TLFX DS			•	•	•	TTDTHOUT	467
TLFD DS			•	•	•	TTDTHOUT	469
TIPTAG HF			–	•	•	TTDTHOUT	471
TIPTAG PU			–	•	•	TTRC+	472
TIPTAG MC			–	•	•	TTDTHOUT TTRW	473
TAGPU			–	•	•	TTRHT	474
TAGLF			–	•	•	TTDTHOUT	475
Helatag 1209			–	•	•	TT932DOUT	476
Helatag 1232			–	•	•	TT822OUT	478
Helatag 323			–	•	•	TT822OUT	479, 525
Helatag 892			–	•	•	TT822OUT	497
Helatag 1211			–	•	•	TT822OUT	500

Date of issue: September 2022

Material	Label type	Printing method	 TrakMark DS (Double sided printing)	 TT4030	 TT431	Ribbon	Page
			TagPrint Pro				
Helatag 880			–	•	•	TT822OUT	500
Helatag 1216			–	•	•	TT822OUT	501
Helatag 1220			–	•	•	TT822OUT TT122OUT	505
Helatag 1221			–	•	•	TT822OUT TT122OUT	506
Helatag 1204			–	•	•	TT822OUT	507
Helatag 1206			–	•	•	TT822OUT	508
Helatag 1213			–	•	•	TT822OUT TTRW	513
Helatag 1203			–	•	•	TT822OUT	520
Helatag 1208			–	•	•	TT822OUT	521
Helatag 1251			–	•	•	TT822OUT	522

Material	Label type	Printing method	Page
Helatag 1104			480
Helatag 1105			481
Helafix HFX			499
Helatag 1102			502, 511
Helatag 1101			503, 512

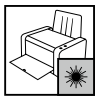
Material	Label type	Printing method	Page
Helatag 1103			510
RiteOn Material 1401			482
HELASIGN Material 1402			483
HELASIGN Material 270			504

Thermal transfer printing
Laser printing
Laser beam
Manual writing/marking
Self-lamination label
Plain label
Continuous roll
Shrinkable marker
Identification tag

Date of issue: September 2022

Label Material Specifications

Laser printing



Material	1101	1102	1103	1104	1105
Material Description	Polyester, white	Polyester, yellow	Polyester, silver (SR)	Polyester self-laminating, super transparent with white write on area.	
Material Application	Permanent identification of assets and components, particularly suitable for identification of switch panels.		Permanent identification of assets and components. Particularly suitable for type- and nameplates.	Self-laminating wire and cable marking, also suitable for flat cables.	
Thickness of foil (TF)	55 µm		53 µm	25 µm	50 µm
Operating Temperature	-40 °C to +150 °C				
Curing Temperature	from 0 °C			from +10 °C	from +2 °C
Adhesive	Acrylic				
Material Durability	2 years external weathering (central European climate)				
Label Type					
Certification / Specification	c UL us			UL	
Page	503, 512	502, 511	510	480	481

Manual marking/writing



Material	270	1401	1402
Material Description	Type 270, yellow cotton cloth material	Self-laminating super transparent vinyl with write on area	
Material Application	Temporary/permanent identification of assets and components, particularly suitable for switch panels	Self-laminating cable and wire marking (also suitable for flat ribbon cables).	
Thickness of foil (TF)	150 µm	80 µm	
Operating Temperature	-29 °C to +80 °C	-40 °C to +80 °C	
Curing Temperature	from +10 °C		from +8 °C
Adhesive	Synthetic rubber	Acrylic	
Material Durability	1 year external weathering (central European climate)	2 years external weathering (central European climate)	3 years external weathering (central European climate)
Label Type			
Page	504	482	483

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Label Material Specifications

Thermal transfer printing



Material	323		880
Material Description	Transparent polyvinylidene fluoride foil. The foil is excellent resistance against a big variety of chemicals and solvents. The material is flame retardent.	Polyvinylidene Fluoride, transparent with white or yellow write on area (WHCL/YECL), chemical resistant	Vinyl, matt yellow (YE)
Material Application	Protective laminate for labels in extreme dirty environments. Especially designed for military and aeronautic applications.	Self-laminating wire and cable identification for extremely dirty environments.	General Identification. Suitable for temporary and permanent identification.
Mech. Material Properties	use as protective over-laminate or clear printable label	permanent adhesive, extremely scratch resistant	Adhesive removable without traces
Thickness of foil (TF)	25 µm		80 µm
Operating Temperature	-40 °C to +140 °C		-40 °C to +80 °C
Curing Temperature	from +10 °C		
Adhesive	Acrylic		
Material Durability	5 years external weathering (central European climate). Excellent indoor use.		2 years external weathering (central European climate)
Label Type			
Certification / Specification			
Page	525	479	500

Date of issue: September 2022

Label Material Specifications

Thermal transfer printing



Material	1203	1251	892
Material Description	Polyester, silver (SR), tamper proof, adhesive suitable for critical surfaces	Polyester, silver (SR), tamper-proof (1251A) and polyester, transparent (CL) as overlaminate (1251B). Set out of 2 materials.	A smooth, white (WH) vinyl foil. Adhesive suitable for critical surfaces.
Material Application	Electrical and electronic identification. Security and warranty identification of components, housings and nameplates.	For automotive and electric industries for tamper-proof applications. Particularly suitable as type label according to norms of German Kraftfahrtbundesamt (KBA).	Use with IT identification ties, Q-tags and AT/IMP plates.
Mech. Material Properties	Tamper-proof identification, leaves small checkboard traces.		Permanent adhesive, suitable for critical surfaces like low energy surfaces.
Thickness of foil (TF)	53 µm	63 µm, 35 µm	83 µm
Operating Temperature	-40 °C to +120 °C	-40 °C to +150 °C	-40 °C to +80 °C
Curing Temperature	from +7 °C	from 0 °C (label), from +4 °C (laminate)	from 0 °C
Adhesive	Acrylic		
Material Durability	2 years external weathering (central European climate)		3 years external weathering (central European climate)
Label Type			
Certification / Specification			
Page	520	522	497



Material	1204	1206	1208	1209
Material Description	A silver-matt, highly heat resistant, reverse side aluminised Polyester. Adhesive suitable for critical surfaces.	Polyester, temperature resistant with high adhesiveness	Acetate foil, white (WH), tamper proof	Vinyl, transparent with white write on area (WHCL)
Material Application	Electro and electronical identification. Permanent identification of components and housings with type labels.	Electro and electronical identification. Permanent identification of components with type labels.	General identification with need of manipulation detection	Self laminating cable and wire identification, also suitable for flat ribbon cables.
Mech. Material Properties	permanent adhesive, suitable for critical surfaces		Tamper-proof, material will easily fragment if removed.	Due to its flexibility particularly suitable for identification of cables
Thickness of foil (TF)	53 µm	50 µm	56 µm	90 µm
Operating Temperature	-40 °C to +150 °C			-20 °C to +80 °C
Curing Temperature	from 0 °C		from +4 °C	from 0 °C
Adhesive	Acrylic			
Material Durability	2 years external weathering (central European climate)			
Label Type				
Certification / Specification				
Page	507	508	521	476

Date of issue: September 2022

Label Material Specifications

Thermal transfer printing



Material	1211	1213	1216
Material Description	A smooth, gloss yellow (GSYE) painted vinyl foil. Adhesive suitable for critical surfaces.	Type 1213 is a coloured and very smooth vinyl material with excellent outdoor properties. It has nearly endless shelf life when used indoors.	Polyethylene, matt white (WH)
Material Application	Identification of control panels.	Warehouse labeling, warning notices. Also General marking purposes.	Permanent identification of components and preassembled units within electrical industry as well as asset identification.
Mech. Material Properties	permanent adhesive, suitable for critical surfaces	permanent adhesive, suitable for rough surfaces	permanent adhesive, suitable for critical surfaces
Thickness of foil (TF)	84 µm	95 µm	105 µm
Operating Temperature	-20 °C to +80 °C	-40 °C to +90 °C	-30 °C to +80 °C
Curing Temperature	from +5 °C	from +8 °C	from 0 °C
Adhesive	Acrylic		
Material Durability	2 years external weathering (central European climate)	7 years external weathering (central European climate)	2 years external weathering (central European climate)
Label Type			
Page	500	513	501



Material	1220	1221	1232
Material Description	A white (WH), glossy polyester label mounted with a compressible foam carrier	A silver (SR), polyester label mounted with a compressible foam carrier	Polyester, transparent with white write on area (WHCL)
Material Application	Suitable for indoor and outdoor applications on smooth and slightly rough surfaces. Especially used for the identification of electrical cabinets and electrical components.		Self-laminating cable and wire identification, also suitable for hydraulic wires.
Mech. Material Properties	Permanent adhesive with an elastic foam carrier		Due to its flexibility particularly suitable for identification of cables.
Thickness of foil (TF)	50 µm		
Operating Temperature	-40 °C to +90 °C		-40 °C to +150 °C
Curing Temperature	from +10 °C		from +2 °C
Adhesive	Acrylic		
Material Durability	2 years external weathering (central European climate)		
Label Type			
Page	505	506	478

Date of issue: September 2022

Shrinkable markers, "Continuous Tube", thermal transfer

TCGT – 3:1 Commercial Grade

TCGT is a commercial grade 3:1 heat shrink marker material supplied as a continuous tube and printable on both sides. TCGT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.



TCGT – five colours of printable tube to cover a wide range of diameters.

Features and benefits

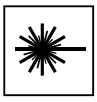
- Shrink ratio 3:1
- Available in Black, Blue, Red, White, and Yellow
- Cable range from 39mm to 1mm
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Fulfils CSA requirements
- Delivery in convenient storage boxes
- Easy label design with TagPrint Pro



TCGT continuous tube – printable on both sides.

For size matrix please refer to page 450.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Shrink Ratio	3:1
Recommended Ribbon Type	TTDTHOUT, TTRW, TT822OUT8
Thermal Transfer Printer	TT431, TT4030, TrakMark DS


RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TCGT3-1BK	3.0	1.0	0.56	176 m	Black (BK)	553-30352
TCGT3-1BU	3.0	1.0	0.56	176 m	Blue (BU)	553-30353
TCGT3-1RD	3.0	1.0	0.56	176 m	Red (RD)	553-30354
TCGT3-1WH	3.0	1.0	0.56	176 m	White (WH)	553-30351
TCGT3-1YE	3.0	1.0	0.56	176 m	Yellow (YE)	553-30350

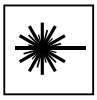
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.
More colours on request.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-459

Shrinkable markers, "Continuous Tube", thermal transfer

TCGT – 3:1 Commercial Grade


TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TCGT4.8-1.6BK	4.8	1.6	0.56	110 m	Black (BK)	553-30452
TCGT4.8-1.6BU	4.8	1.6	0.56	110 m	Blue (BU)	553-30453
TCGT4.8-1.6RD	4.8	1.6	0.56	110 m	Red (RD)	553-30454
TCGT4.8-1.6WH	4.8	1.6	0.56	110 m	White (WH)	553-30451
TCGT4.8-1.6YE	4.8	1.6	0.56	110 m	Yellow (YE)	553-30450
TCGT6-2BK	6.0	2.0	0.64	110 m	Black (BK)	553-30652
TCGT6-2BU	6.0	2.0	0.64	110 m	Blue (BU)	553-30653
TCGT6-2RD	6.0	2.0	0.64	110 m	Red (RD)	553-30654
TCGT6-2WH	6.0	2.0	0.64	110 m	White (WH)	553-30651
TCGT6-2YE	6.0	2.0	0.64	110 m	Yellow (YE)	553-30650
TCGT9-3BK	9.0	3.0	0.64	72 m	Black (BK)	553-30952
TCGT9-3BU	9.0	3.0	0.64	72 m	Blue (BU)	553-30953
TCGT9-3RD	9.0	3.0	0.64	72 m	Red (RD)	553-30954
TCGT9-3WH	9.0	3.0	0.64	72 m	White (WH)	553-30951
TCGT9-3YE	9.0	3.0	0.64	72 m	Yellow (YE)	553-30950
TCGT12-4BK	12.0	4.0	0.68	54 m	Black (BK)	553-31252
TCGT12-4BU	12.0	4.0	0.68	54 m	Blue (BU)	553-31253
TCGT12-4RD	12.0	4.0	0.68	54 m	Red (RD)	553-31254
TCGT12-4WH	12.0	4.0	0.68	54 m	White (WH)	553-31251
TCGT12-4YE	12.0	4.0	0.68	54 m	Yellow (YE)	553-31250
TCGT18-6BK	18.0	6.0	0.90	26 m	Black (BK)	553-31852
TCGT18-6BU	18.0	6.0	0.90	26 m	Blue (BU)	553-31853
TCGT18-6RD	18.0	6.0	0.90	26 m	Red (RD)	553-31854
TCGT18-6WH	18.0	6.0	0.90	26 m	White (WH)	553-31851
TCGT18-6YE	18.0	6.0	0.90	26 m	Yellow (YE)	553-31850
TCGT24-8BK	24.0	8.0	0.98	26 m	Black (BK)	553-32452
TCGT24-8BU	24.0	8.0	0.98	26 m	Blue (BU)	553-32453
TCGT24-8RD	24.0	8.0	0.98	26 m	Red (RD)	553-32454
TCGT24-8WH	24.0	8.0	0.98	26 m	White (WH)	553-32451
TCGT24-8YE	24.0	8.0	0.98	26 m	Yellow (YE)	553-32450
TCGT39-13BK	39.0	13.0	1.08	10 m	Black (BK)	553-33952
TCGT39-13BU	39.0	13.0	1.08	10 m	Blue (BU)	553-33953
TCGT39-13RD	39.0	13.0	1.08	10 m	Red (RD)	553-33954
TCGT39-13WH	39.0	13.0	1.08	10 m	White (WH)	553-33951
TCGT39-13YE	39.0	13.0	1.08	10 m	Yellow (YE)	553-33950

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.
More colours on request.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

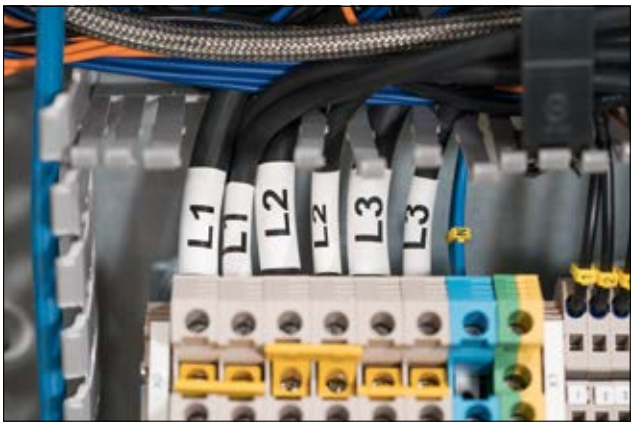
Shrinkable markers "Continuous Tube", thermal transfer

TULT – 3:1 Military and Electronics

TULT is a UL recognized 3:1 heat shrink marker material supplied as a continuous tube and printable on both sides. TULT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

Features and benefits

- Shrink ratio 3:1
- Available in black, blue, red, white and yellow
- Cable range from 39 mm to 1 mm
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Delivery in convenient storage boxes



TULT – good mechanical strength and resistance to organic solvents and chemicals.

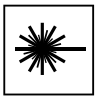


TULT – five colours of UL recognised printable tube to cover a wide range of diameters.

For size matrix please refer to page 450.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Shrink Ratio	3:1
Recommended Ribbon Type	TTDTHOUT, TTRW, TT822OUT8
Thermal Transfer Printer	TT431, TT4030, TrakMark DS







RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT3-1BK	3.0	1.0	0.56	176 m	Black (BK)	553-40352
TULT3-1BU	3.0	1.0	0.56	176 m	Blue (BU)	553-40353
TULT3-1RD	3.0	1.0	0.56	176 m	Red (RD)	553-40354
TULT3-1WH	3.0	1.0	0.56	176 m	White (WH)	553-40351
TULT3-1YE	3.0	1.0	0.56	176 m	Yellow (YE)	553-40350

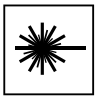
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. More colours on request.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-461

Shrinkable markers "Continuous Tube", thermal transfer

TULT – 3:1 Military and Electronics


TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT4.8-1.6BK	4.8	1.6	0.56	110 m	Black (BK)	553-40452
TULT4.8-1.6BU	4.8	1.6	0.56	110 m	Blue (BU)	553-40453
TULT4.8-1.6RD	4.8	1.6	0.56	110 m	Red (RD)	553-40454
TULT4.8-1.6WH	4.8	1.6	0.56	110 m	White (WH)	553-40451
TULT4.8-1.6YE	4.8	1.6	0.56	110 m	Yellow (YE)	553-40450
TULT6-2BK	6.0	2.0	0.64	110 m	Black (BK)	553-40652
TULT6-2BU	6.0	2.0	0.64	110 m	Blue (BU)	553-40653
TULT6-2RD	6.0	2.0	0.64	110 m	Red (RD)	553-40654
TULT6-2WH	6.0	2.0	0.64	110 m	White (WH)	553-40651
TULT6-2YE	6.0	2.0	0.64	110 m	Yellow (YE)	553-40650
TULT9-3BK	9.0	3.0	0.64	72 m	Black (BK)	553-40952
TULT9-3BU	9.0	3.0	0.64	72 m	Blue (BU)	553-40953
TULT9-3RD	9.0	3.0	0.64	72 m	Red (RD)	553-40954
TULT9-3WH	9.0	3.0	0.64	72 m	White (WH)	553-40951
TULT9-3YE	9.0	3.0	0.64	72 m	Yellow (YE)	553-40950
TULT12-4BK	12.0	4.0	0.68	54 m	Black (BK)	553-41252
TULT12-4BU	12.0	4.0	0.68	54 m	Blue (BU)	553-41253
TULT12-4RD	12.0	4.0	0.68	54 m	Red (RD)	553-41254
TULT12-4WH	12.0	4.0	0.68	54 m	White (WH)	553-41251
TULT12-4YE	12.0	4.0	0.68	54 m	Yellow (YE)	553-41250
TULT18-6BK	18.0	6.0	0.90	26 m	Black (BK)	553-41852
TULT18-6BU	18.0	6.0	0.90	26 m	Blue (BU)	553-41853
TULT18-6RD	18.0	6.0	0.90	26 m	Red (RD)	553-41854
TULT18-6WH	18.0	6.0	0.90	26 m	White (WH)	553-41851
TULT18-6YE	18.0	6.0	0.90	26 m	Yellow (YE)	553-41850
TULT24-8BK	24.0	8.0	0.98	26 m	Black (BK)	553-42452
TULT24-8BU	24.0	8.0	0.98	26 m	Blue (BU)	553-42453
TULT24-8RD	24.0	8.0	0.98	26 m	Red (RD)	553-42454
TULT24-8WH	24.0	8.0	0.98	26 m	White (WH)	553-42451
TULT24-8YE	24.0	8.0	0.98	26 m	Yellow (YE)	553-42450
TULT39-13BK	39.0	13.0	1.08	10 m	Black (BK)	553-43952
TULT39-13BU	39.0	13.0	1.08	10 m	Blue (BU)	553-43953
TULT39-13RD	39.0	13.0	1.08	10 m	Red (RD)	553-43954
TULT39-13WH	39.0	13.0	1.08	10 m	White (WH)	553-43951
TULT39-13YE	39.0	13.0	1.08	10 m	Yellow (YE)	553-43950

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. More colours on request.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
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Date of issue: September 2022

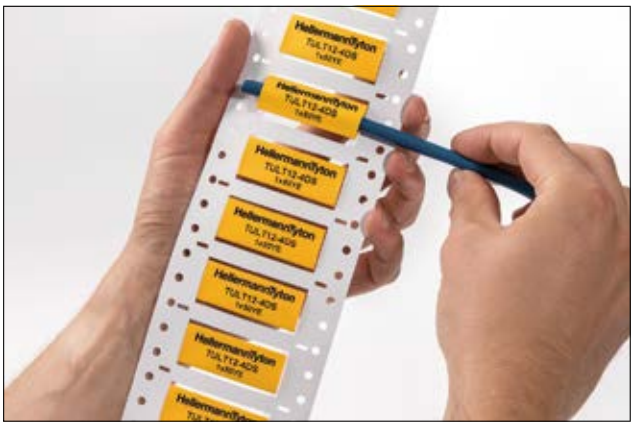
Shrinkable markers "Ladder Style", thermal transfer

TULT DS – 3:1 Military and Electronics "Ladder Style"

TULT DS is a UL recognised 3:1 heat shrink marker material pre-cut and formatted into a convenient "ladder" system. This pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. TULT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times using HellermannTyton's printer range.

Features and benefits

- Shrink ratio 3:1
- 50 mm, 25 mm and 16 mm pre-cut marker options as standard, other lengths available on request
- Available in white or yellow
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Delivery in convenient storage boxes



Shrinkable markers TULT DS for military and electronics industry.

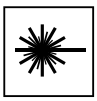


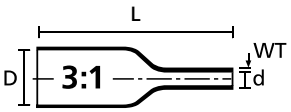
TULT DS – shrinkable markers with good mechanical strength for a wide range of applications.

For size matrix please refer to page 450.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Shrink Ratio	3:1
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030, TrakMark DS







RoHS

TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT2.4-0.8DS-2x25WH	2.4	0.8	25.0	0.53	2,000 pcs.	White (WH)	553-71002
TULT2.4-0.8DS-2x25YE	2.4	0.8	25.0	0.53	2,000 pcs.	Yellow (YE)	553-71003
TULT2.4-0.8DS-1x50WH	2.4	0.8	50.0	0.53	1,000 pcs.	White (WH)	553-71000
TULT2.4-0.8DS-1x50YE	2.4	0.8	50.0	0.53	1,000 pcs.	Yellow (YE)	553-71001

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

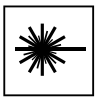
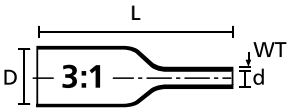
c UL us MIL

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-463

Shrinkable markers "Ladder Style", thermal transfer

TULT DS – 3:1 Military and Electronics "Ladder Style"

TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT3-1DS-2x25WH	3.0	1.0	25.0	0.56	2,000 pcs.	White (WH)	553-71008
TULT3-1DS-2x25YE	3.0	1.0	25.0	0.56	2,000 pcs.	Yellow (YE)	553-71009
TULT3-1DS-1x50WH	3.0	1.0	50.0	0.56	1,000 pcs.	White (WH)	553-71006
TULT3-1DS-1x50YE	3.0	1.0	50.0	0.56	1,000 pcs.	Yellow (YE)	553-71007
TULT4.8-1.6DS-2x25WH	4.8	1.6	25.0	0.56	2,000 pcs.	White (WH)	553-71014
TULT4.8-1.6DS-2x25YE	4.8	1.6	25.0	0.56	2,000 pcs.	Yellow (YE)	553-71015
TULT4.8-1.6DS-1x50WH	4.8	1.6	50.0	0.56	1,000 pcs.	White (WH)	553-71012
TULT4.8-1.6DS-1x50YE	4.8	1.6	50.0	0.56	1,000 pcs.	Yellow (YE)	553-71013
TULT6-2DS-2x25WH	6.0	2.0	25.0	0.64	2,000 pcs.	White (WH)	553-71020
TULT6-2DS-2x25YE	6.0	2.0	25.0	0.64	2,000 pcs.	Yellow (YE)	553-71021
TULT6-2DS-1x50WH	6.0	2.0	50.0	0.64	1,000 pcs.	White (WH)	553-71018
TULT6-2DS-1x50YE	6.0	2.0	50.0	0.64	1,000 pcs.	Yellow (YE)	553-71019
TULT9-3DS-2x25WH	9.0	3.0	25.0	0.64	1,000 pcs.	White (WH)	553-71026
TULT9-3DS-2x25YE	9.0	3.0	25.0	0.64	1,000 pcs.	Yellow (YE)	553-71027
TULT9-3DS-1x50WH	9.0	3.0	50.0	0.64	500 pcs.	White (WH)	553-71024
TULT9-3DS-1x50YE	9.0	3.0	50.0	0.64	500 pcs.	Yellow (YE)	553-71025
TULT12-4DS-2x25WH	12.0	4.0	25.0	0.68	1,000 pcs.	White (WH)	553-71032
TULT12-4DS-2x25YE	12.0	4.0	25.0	0.68	1,000 pcs.	Yellow (YE)	553-71033
TULT12-4DS-1x50WH	12.0	4.0	50.0	0.68	500 pcs.	White (WH)	553-71030
TULT12-4DS-1x50YE	12.0	4.0	50.0	0.68	500 pcs.	Yellow (YE)	553-71031
TULT18-6DS-2x25WH	18.0	6.0	25.0	0.90	1,000 pcs.	White (WH)	553-71038
TULT18-6DS-2x25YE	18.0	6.0	25.0	0.90	1,000 pcs.	Yellow (YE)	553-71039
TULT18-6DS-1x50WH	18.0	6.0	50.0	0.90	500 pcs.	White (WH)	553-71036
TULT18-6DS-1x50YE	18.0	6.0	50.0	0.90	500 pcs.	Yellow (YE)	553-71037
TULT24-8DS-2x25WH	24.0	8.0	25.0	1.08	500 pcs.	White (WH)	553-71044
TULT24-8DS-2x25YE	24.0	8.0	25.0	1.08	500 pcs.	Yellow (YE)	553-71045
TULT24-8DS-1x50WH	24.0	8.0	50.0	1.08	250 pcs.	White (WH)	553-71042
TULT24-8DS-1x50YE	24.0	8.0	50.0	1.08	250 pcs.	Yellow (YE)	553-71043
TULT39-13DS-2x25WH	39.0	13.0	25.0	1.08	500 pcs.	White (WH)	553-71050
TULT39-13DS-2x25YE	39.0	13.0	25.0	1.08	500 pcs.	Yellow (YE)	553-71051
TULT39-13DS-1x50WH	39.0	13.0	50.0	1.08	250 pcs.	White (WH)	553-71048
TULT39-13DS-1x50YE	39.0	13.0	50.0	1.08	250 pcs.	Yellow (YE)	553-71049

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-464

Date of issue: September 2022

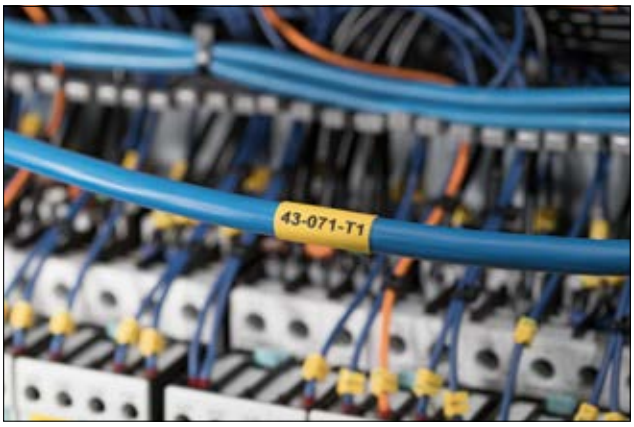
Shrinkable markers "Continuous Tube", thermal transfer

TLFX – 2:1 Rail Limited Fire Hazard

TLFX is a halogen free European rail approved 2:1 heat shrink marker material supplied as a continuous tube and printable on both sides. Special material properties show low smoke propagation, density and toxicity. The tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

Features and benefits

- Shrink ratio 2:1
- Halogen Free
- Low smoke propagation, density and toxicity
- Available in yellow or white
- Cable range 50.8 mm to 1.2 mm
- Delivery in convenient storage boxes



TLFX- high performance halogen free heat shrink tube.



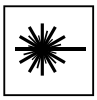
TLFX – European rail approved heat shrink marker material.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+70 °C
Shrink Ratio	2:1
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030, TrakMark DS
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ LFH ✓

RoHS ✓







TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX24WH	2.4	1.2	0.57	144 m	White (WH)	554-51000
TLFX24YE	2.4	1.2	0.57	144 m	Yellow (YE)	554-51001

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

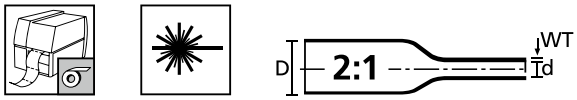
EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-465

Shrinkable markers "Continuous Tube", thermal transfer

TLFX – 2:1 Rail Limited Fire Hazard



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX32WH	3.2	1.6	0.58	126 m	White (WH)	554-51100
TLFX32YE	3.2	1.6	0.58	126 m	Yellow (YE)	554-51101
TLFX48WH	4.8	2.4	0.61	108 m	White (WH)	554-51200
TLFX48YE	4.8	2.4	0.61	108 m	Yellow (YE)	554-51201
TLFX64WH	6.4	3.2	0.61	90 m	White (WH)	554-51300
TLFX64YE	6.4	3.2	0.61	90 m	Yellow (YE)	554-51301
TLFX95WH	9.5	4.8	0.66	72 m	White (WH)	554-51400
TLFX95YE	9.5	4.8	0.66	72 m	Yellow (YE)	554-51401
TLFX127WH	12.7	6.4	0.68	54 m	White (WH)	554-51500
TLFX127YE	12.7	6.4	0.68	54 m	Yellow (YE)	554-51501
TLFX190WH	19.0	9.5	0.69	30 m	White (WH)	554-51600
TLFX190YE	19.0	9.5	0.69	30 m	Yellow (YE)	554-51601
TLFX254WH	25.4	12.7	0.69	30 m	White (WH)	554-51700
TLFX254YE	25.4	12.7	0.69	30 m	Yellow (YE)	554-51701
TLFX381WH	38.1	19.0	0.70	13 m	White (WH)	554-51800
TLFX381YE	38.1	19.0	0.70	13 m	Yellow (YE)	554-51801
TLFX508WH	50.8	25.4	0.73	10 m	White (WH)	554-50900
TLFX508YE	50.8	25.4	0.73	10 m	Yellow (YE)	554-50901

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-466

Shrinkable markers "Ladder Style", thermal transfer

TLFX DS – 2:1 Rail Limited Fire Hazard "Ladder Style"

TLFX DS is a halogen free European rail approved 2:1 heat shrink marker material supplied pre-cut and formatted into a convenient "ladder" system. Special material properties show low smoke propagation, density and toxicity. This pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. Special material properties show low smoke propagation, density and toxicity. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.



Shrinkable rail approved markers TLFX DS.

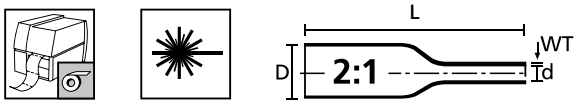
Features and benefits

- Shrink ratio 2:1
- Halogen Free
- Low smoke propagation, density and toxicity
- 50 mm, 25 mm and 16 mm pre-cut marker options as standard
- Available in yellow or white
- Other lengths and colours available on request
- Cable range 38.1 mm to 1.2 mm
- Delivery in convenient storage boxes

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +105 °C
Min. Shrink Temperature	+100 °C
Shrink Ratio	2:1
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030, TrakMark DS
EN 45545-2 Classification	R22 HL3, R23 HL3

For size matrix please refer to page 450.

HF ✓ LFH ✓
RoHS ✓



TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX24DS-2x25WH	2.4	1.2	25.0	0.52	10,000 pcs.	White (WH)	553-60020
TLFX24DS-2x25YE	2.4	1.2	25.0	0.52	10,000 pcs.	Yellow (YE)	553-60029
TLFX24DS-1x50WH	2.4	1.2	50.0	0.52	5,000 pcs.	White (WH)	553-60000
TLFX24DS-1x50YE	2.4	1.2	50.0	0.52	5,000 pcs.	Yellow (YE)	553-60010
TLFX32DS-2x25WH	3.2	1.6	25.0	0.64	10,000 pcs.	White (WH)	553-60021
TLFX32DS-2x25YE	3.2	1.6	25.0	0.64	10,000 pcs.	Yellow (YE)	553-60030
TLFX32DS-1x50WH	3.2	1.6	50.0	0.64	5,000 pcs.	White (WH)	553-60001
TLFX32DS-1x50YE	3.2	1.6	50.0	0.64	5,000 pcs.	Yellow (YE)	553-60011
TLFX48DS-2x25WH	4.8	2.4	25.0	0.64	10,000 pcs.	White (WH)	553-60022
TLFX48DS-2x25YE	4.8	2.4	25.0	0.64	10,000 pcs.	Yellow (YE)	553-60031
TLFX48DS-1x50WH	4.8	2.4	50.0	0.64	5,000 pcs.	White (WH)	553-60002
TLFX48DS-1x50YE	4.8	2.4	50.0	0.64	5,000 pcs.	Yellow (YE)	553-60012
TLFX64DS-2x25WH	6.4	3.2	25.0	0.73	6,000 pcs.	White (WH)	553-60023
TLFX64DS-2x25YE	6.4	3.2	25.0	0.73	6,000 pcs.	Yellow (YE)	553-60032
TLFX64DS-1x50WH	6.4	3.2	50.0	0.73	3,000 pcs.	White (WH)	553-60003
TLFX64DS-1x50YE	6.4	3.2	50.0	0.73	3,000 pcs.	Yellow (YE)	553-60013

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

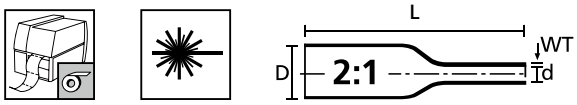
EN 45545-2 ASTM

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-467

Shrinkable markers "Ladder Style", thermal transfer

TLFX DS – 2:1 Rail Limited Fire Hazard "Ladder Style"



TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX95DS-2x25WH	9.5	4.8	25.0	0.70	5,000 pcs.	White (WH)	553-60024
TLFX95DS-2x25YE	9.5	4.8	25.0	0.70	5,000 pcs.	Yellow (YE)	553-60033
TLFX95DS-1x50WH	9.5	4.8	50.0	0.70	2,500 pcs.	White (WH)	553-60004
TLFX95DS-1x50YE	9.5	4.8	50.0	0.70	2,500 pcs.	Yellow (YE)	553-60014
TLFX127DS-2x25WH	12.7	6.4	25.0	0.70	3,000 pcs.	White (WH)	553-60025
TLFX127DS-2x25YE	12.7	6.4	25.0	0.70	3,000 pcs.	Yellow (YE)	553-60034
TLFX127DS-1x50WH	12.7	6.4	50.0	0.70	1,500 pcs.	White (WH)	553-60005
TLFX127DS-1x50YE	12.7	6.4	50.0	0.70	1,500 pcs.	Yellow (YE)	553-60015
TLFX190DS-2x25WH	19.0	9.5	25.0	0.78	3,000 pcs.	White (WH)	553-60026
TLFX190DS-2x25YE	19.0	9.5	25.0	0.78	3,000 pcs.	Yellow (YE)	553-60035
TLFX190DS-1x50WH	19.0	9.5	50.0	0.78	1,500 pcs.	White (WH)	553-60006
TLFX190DS-1x50YE	19.0	9.5	50.0	0.78	1,500 pcs.	Yellow (YE)	553-60016
TLFX254DS-2x25WH	25.4	12.7	25.0	0.93	2,000 pcs.	White (WH)	553-60027
TLFX254DS-2x25YE	25.4	12.7	25.0	0.93	2,000 pcs.	Yellow (YE)	553-60036
TLFX254DS-1x50WH	25.4	12.7	50.0	0.93	1,000 pcs.	White (WH)	553-60007
TLFX254DS-1x50YE	25.4	12.7	50.0	0.93	1,000 pcs.	Yellow (YE)	553-60017
TLFX381DS-2x25WH	38.1	19.1	25.0	0.98	1,000 pcs.	White (WH)	553-60028
TLFX381DS-2x25YE	38.1	19.1	25.0	0.98	1,000 pcs.	Yellow (YE)	553-60037
TLFX381DS-1x50WH	38.1	19.1	50.0	0.98	500 pcs.	White (WH)	553-60008
TLFX381DS-1x50YE	38.1	19.1	50.0	0.98	500 pcs.	Yellow (YE)	553-60018

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 ASTM

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-468

Shrinkable markers "Ladder Style", thermal transfer

TLFD DS – 2:1 Rail Limited Fire Hazard, fluid resistant "Ladder Style"

TLFD DS is an innovative 2:1 heat shrink marker which is halogen free, low fire hazard and fluid resistant. This rail and EN approved material is supplied pre-cut and formatted into a convenient "ladder" system.

The TLFD DS marker's material properties are ideal for applications where fire protection is of great importance. TLFD DS shows low smoke propagation, density and toxicity and is also ideal for applications where resistance to organic fluids, common fuels, lubricants and solvents properties are required.

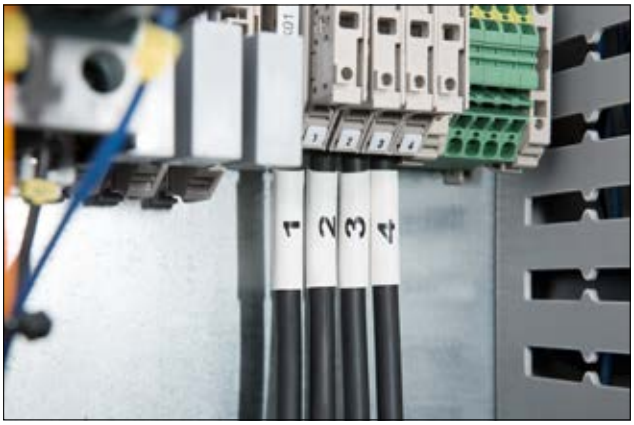
The pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.

Features and benefits

- Shrink ratio 2:1
- Halogen free and fluid resistant
- Low smoke propagation and toxicity
- Fluid resistant
- "Ladder Style" format for ease of use
- Available in yellow and white
- 50 mm and 25 mm pre-cut markers as standard



TLFD DS shrinkable markers – halogen-free and fluid resistant.

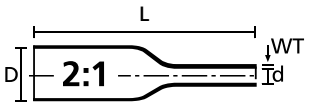


TLFD DS shrinkable markers for more safety and clarity in the switchboard.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+120 °C
Shrink Ratio	2:1
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030, TrakMark DS
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ LFH ✓
RoHS ✓





TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFD24DS-2X25WH	2.59	1.2	25.0	0.49	10,000 pcs.	White (WH)	533-65001
TLFD24DS-2X25YE	2.59	1.2	25.0	0.49	10,000 pcs.	Yellow (YE)	533-65019
TLFD24DS-1X50WH	2.59	1.2	50.0	0.49	5,000 pcs.	White (WH)	533-65000
TLFD24DS-1X50YE	2.59	1.2	50.0	0.49	5,000 pcs.	Yellow (YE)	533-65018

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 EN 50343

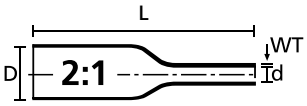
For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-469

Shrinkable markers "Ladder Style", thermal transfer

TLFD DS – 2:1 Rail Limited Fire Hazard, fluid resistant "Ladder Style"





TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFD32DS-2X25WH	3.41	1.6	25.0	0.51	10,000 pcs.	White (WH)	533-65003
TLFD32DS-2X25YE	3.41	1.6	25.0	0.51	10,000 pcs.	Yellow (YE)	533-65021
TLFD32DS-1X50WH	3.41	1.6	50.0	0.51	5,000 pcs.	White (WH)	533-65002
TLFD32DS-1X50YE	3.41	1.6	50.0	0.51	5,000 pcs.	Yellow (YE)	533-65020
TLFD48DS-2X25WH	5.01	2.4	25.0	0.54	10,000 pcs.	White (WH)	533-65005
TLFD48DS-2X25YE	5.01	2.4	25.0	0.54	10,000 pcs.	Yellow (YE)	533-65023
TLFD48DS-1X50WH	5.01	2.4	50.0	0.54	5,000 pcs.	White (WH)	533-65004
TLFD48DS-1X50YE	5.01	2.4	50.0	0.54	5,000 pcs.	Yellow (YE)	533-65022
TLFD64DS-2X25WH	6.64	3.2	25.0	0.56	6,000 pcs.	White (WH)	533-65007
TLFD64DS-2X25YE	6.64	3.2	25.0	0.56	6,000 pcs.	Yellow (YE)	533-65025
TLFD64DS-1X50WH	6.64	3.2	50.0	0.56	3,000 pcs.	White (WH)	533-65006
TLFD64DS-1X50YE	6.64	3.2	50.0	0.56	3,000 pcs.	Yellow (YE)	533-65024
TLFD95DS-2X25WH	9.88	4.8	25.0	0.59	5,000 pcs.	White (WH)	533-65009
TLFD95DS-2X25YE	9.88	4.8	25.0	0.59	5,000 pcs.	Yellow (YE)	533-65027
TLFD95DS-1X50WH	9.88	4.8	50.0	0.59	2,500 pcs.	White (WH)	533-65008
TLFD95DS-1X50YE	9.88	4.8	50.0	0.59	2,500 pcs.	Yellow (YE)	533-65026
TLFD127DS-2X25WH	13.14	6.4	25.0	0.60	3,000 pcs.	White (WH)	533-65011
TLFD127DS-2X25YE	13.14	6.4	25.0	0.60	3,000 pcs.	Yellow (YE)	533-65029
TLFD127DS-1X50WH	13.14	6.4	50.0	0.60	1,500 pcs.	White (WH)	533-65010
TLFD127DS-1X50YE	13.14	6.4	50.0	0.60	1,500 pcs.	Yellow (YE)	533-65028
TLFD190DS-2X25WH	19.70	9.6	25.0	0.62	3,000 pcs.	White (WH)	533-65013
TLFD190DS-2X25YE	19.70	9.6	25.0	0.62	3,000 pcs.	Yellow (YE)	533-65031
TLFD190DS-1X50WH	19.70	9.6	50.0	0.62	1,500 pcs.	White (WH)	533-65012
TLFD190DS-1X50YE	19.70	9.6	50.0	0.62	1,500 pcs.	Yellow (YE)	533-65030
TLFD254DS-2X25WH	26.25	12.7	25.0	0.63	2,000 pcs.	White (WH)	533-65015
TLFD254DS-2X25YE	26.25	12.7	25.0	0.63	2,000 pcs.	Yellow (YE)	533-65033
TLFD254DS-1X50WH	26.25	12.7	50.0	0.63	1,000 pcs.	White (WH)	533-65014
TLFD254DS-1X50YE	26.25	12.7	50.0	0.63	1,000 pcs.	Yellow (YE)	533-65032
TLFD381DS-2X25WH	39.29	19.1	25.0	0.64	1,000 pcs.	White (WH)	533-65017
TLFD381DS-2X25YE	39.29	19.1	25.0	0.64	1,000 pcs.	Yellow (YE)	533-65035
TLFD381DS-1X50WH	39.29	19.1	50.0	0.64	500 pcs.	White (WH)	533-65016
TLFD381DS-1X50YE	39.29	19.1	50.0	0.64	500 pcs.	Yellow (YE)	533-65034

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 EN 50343

For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-470

Identification tags for cable bundle, thermal transfer

TIPTAG HF - Limited Fire Hazard Tiptags, Halogen free

The Tiptag HF cable markers have been designed to identify larger wires and cable bundles not only in the electronics and general cabling environments but also in the railway industry. Tiptag HF is halogen free and its material properties show low smoke propagation, density and toxicity. Tiptags are presented in a special perforated format which include fastening slots for easy fitting with cable ties. They are also suitable for retrofit purposes.

Print from the reel with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print quality and longevity.

Features and benefits

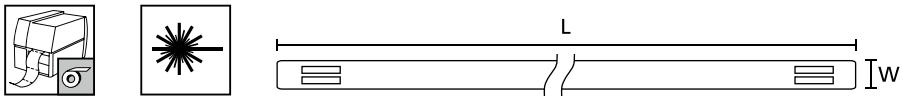
- Ideal for marking larger wire and cable bundles
- Halogen free
- Low smoke propagation and toxicity
- Perforated format that includes fastening slots for cable ties
- Available in various colours



TIPTAG - high performance cable bundle marking.

MATERIAL	Polyolefin (PO)
Operating Temperature	-40 °C to +90 °C, (+160 °C, for 200 h)
Flammability	Limited Fire Hazard, Low generation of toxic gases and corrosive acid, Low smoke generation, Halogen free
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ LFH ✓
RoHS ✓



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TIPTAG11X65BU	65.0	11.0	190 pcs.	Blue (BU)	556-20066
TIPTAG11X65RD	65.0	11.0	190 pcs.	Red (RD)	556-20062
TIPTAG11X65WH	65.0	11.0	190 pcs.	White (WH)	556-20069
TIPTAG11X65YE	65.0	11.0	190 pcs.	Yellow (YE)	556-20064
TIPTAG15X65WH	65.0	15.0	190 pcs.	White (WH)	556-21069
TIPTAG15X65YE	65.0	15.0	190 pcs.	Yellow (YE)	556-21064
TIPTAG11X100BU	100.0	11.0	120 pcs.	Blue (BU)	556-20080
TIPTAG11X100RD	100.0	11.0	120 pcs.	Red (RD)	556-20091
TIPTAG11X100WH	100.0	11.0	120 pcs.	White (WH)	556-20079
TIPTAG11X100YE	100.0	11.0	120 pcs.	Yellow (YE)	556-20074
TIPTAG15X100RD	100.0	15.0	120 pcs.	Red (RD)	556-21096
TIPTAG15X100WH	100.0	15.0	120 pcs.	White (WH)	556-21079
TIPTAG15X100YE	100.0	15.0	120 pcs.	Yellow (YE)	556-21074

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

EN 45545-2

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-471

Identification tags for cable bundle, thermal transfer

The Tiptag PU cable markers consist of a robust and flexible polyurethane material. It is especially suited for harsh environments where the material is exposed to chemical, fluids or abrasion. Tiptag PU's are presented in a special perforated format which include fastening slots for easy fitting with cable ties. They are also suitable for retrofit purposes.

Print from the reel with HellermannTyton's premium range of thermal transfer printers.

A special ribbon has been developed for Tiptag PU to create a "tattoo" effect so that the marking cannot be rubbed off and is particularly durable and resistant to harsh abrasion.



TIPTAG PU – printed mark has a tattoo-like permanency.

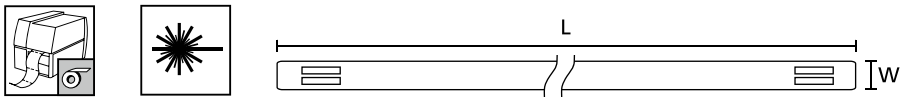
Features and benefits

- Durable and robust polyurethane material
- For large cable bundles and wires
- Flame retardant
- Weather resistant
- Abrasion resistant
- Good resistance to chemicals
- Available in white and yellow as standard
- Perforated format with fastening slots for cable ties

MATERIAL	Polyurethane (PUR)
Operating Temperature	-65 °C to +120 °C, intermittent 150 °C
Flammability	self-extinguishing, UL 94 V0 (3 mm)
Recommended Ribbon Type	TTRC+
Thermal Transfer Printer	TT431, TT4030

RoHS

TIPTAG PU - UV-stabilised Tiptags, Polyurethane



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TTAGPU11X65WH	65.0	11.0	190 pcs.	White (WH)	556-25012
TTAGPU11X65YE	65.0	11.0	190 pcs.	Yellow (YE)	556-25019
TTAGPU15X65WH	65.0	15.0	190 pcs.	White (WH)	556-25007
TTAGPU15X65YE	65.0	15.0	190 pcs.	Yellow (YE)	556-25011
TTAGPU11X100WH	100.0	11.0	125 pcs.	White (WH)	556-25021
TTAGPU11X100YE	100.0	11.0	125 pcs.	Yellow (YE)	556-25020
TTAGPU15X100WH	100.0	15.0	125 pcs.	White (WH)	556-25006
TTAGPU15X100YE	100.0	15.0	125 pcs.	Yellow (YE)	556-25010

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-472

Identification tags for cable bundles, thermal transfer

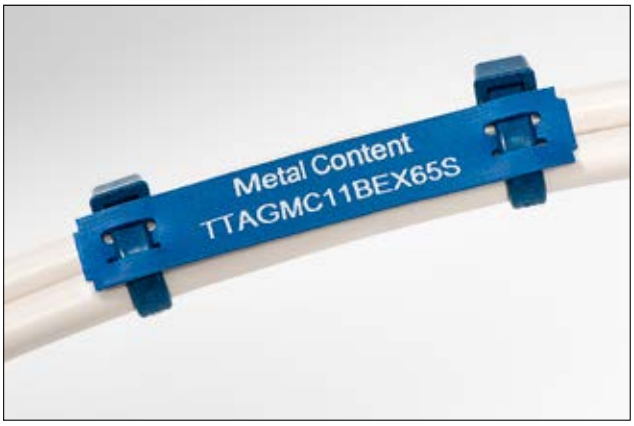
TTAG MC - Metal Content TipTags

The TIPTAG MC cable markers have been especially designed for applications where materials need to be metal detectable. Small metal particles have been included into the entire length of the marker making it ideal for marking larger cables, wires and bundles in the food and pharmaceutical industries. TIPTAG MCs come in a special perforated format that includes holes for fastening with cables ties (MCT).

Print from the reel with HellermannTyton's premium range of thermal transfer printers.

Features and benefits

- Metal dectectable
- For marking larger cables in food and pharma industries
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

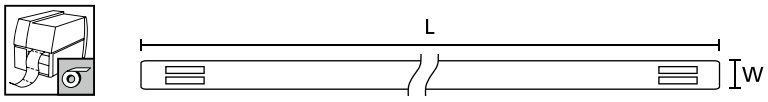


Metal content identification tags TIPTAG MC for a safe and clean production process.

MATERIAL	Polyolefin (PO), Metal (MET)
Operating Temperature	-40 °C to +85 °C
Recommended Ribbon Type	TTDTHOUT, TTRW
Thermal Transfer Printer	TT431, TT4030

RoHS

Can support quality assurance in the production of food stuffs, for example HACCP.



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TTAGMC11BEX65S	65.0	11.0	190 pcs.	Blue (BU)	556-26500
TTAGMC15BEX65S	65.0	15.0	190 pcs.	Blue (BU)	556-26502
TTAGMC11BEX100S	100.0	11.0	120 pcs.	Blue (BU)	556-26501
TTAGMC15BEX100S	100.0	15.0	120 pcs.	Blue (BU)	556-26503

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TTAGMX - X-ray detectable Tiptags

TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TTAGMX11BUX65S	65.0	11.0	190	Blue (BU)	556-26800
TTAGMX11GNX65S	65.0	11.0	190	Green (GN)	556-26802
TTAGMX11YWX65S	65.0	11.0	190	Yellow (YE)	556-26801

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Identification tags for cable bundle, "Ladder Style", thermal transfer

TAGPU – UV-stabilised Tiptags

TAGPU is a specially designed cable marker for identifying larger wire and cable bundles, where a permanently legible and UV resistant marking is required. The cable markers consist of a robust and flexible polyurethane material and are especially suited for harsh environments. They are supplied pre-cut and have been formatted into a convenient "ladder" system. The markers are applied to cable and harness assemblies with cable ties, and are also suitable for retrofit purposes. The material has been conditioned for printing on both thermal transfer and laser beam printers. Simply print and press out the required TAGPU and apply with cable ties.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.



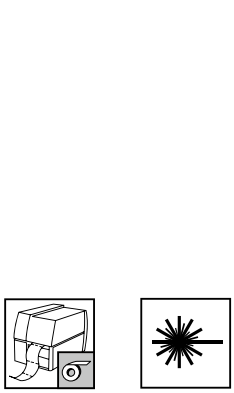
Cable marker for easy marking in tough environments.

Features and benefits

- UV-stabilised
- For larger cables and wires, bundles
- Robust and flexible material
- Thermal transfer or laser beam printable
- Available in white or yellow
- Halogen Free
- Good mechanical strength and highly flexible
- Delivery in convenient storage boxes



TAGPU diamond shaped form for easy application with only one cable tie.



Identification tag with four fixing holes.

MATERIAL	Polyurethane (PUR)
Operating Temperature	-25 °C to +105 °C
Flammability	UL 94 V0 (3 mm)
Recommended Ribbon Type	TTRHT, TTRC+
Thermal Transfer Printer	TT431, TT4030

HF ✓ RoHS ✓

TYPE	Drawing	Length (L)	Width (W)	Width (W2)	Pack Cont.	Colour	Article-No.
TAGPU20X51-6		51.5	20.4	-	1,000 pcs.	White (WH)	556-82056
		51.5	20.4	-	1,000 pcs.	Yellow (YE)	556-80543
TAGPU10X51-4		51.5	10.4	-	2,000 pcs.	White (WH)	556-80529
		51.5	10.4	-	2,000 pcs.	Yellow (YE)	556-80542
TAGPU20X51-4		51.5	20.4	-	1,000 pcs.	White (WH)	556-80530
		51.5	20.4	-	1,000 pcs.	Yellow (YE)	556-80531
TAGPU20X30-2		30.0	20.0	11.0	1,000 pcs.	Blue (BU)	556-80556
		30.0	20.0	11.0	1,000 pcs.	Red (RD)	556-80557
		30.0	20.0	11.0	1,000 pcs.	White (WH)	556-80527
		30.0	20.0	11.0	1,000 pcs.	Yellow (YE)	556-80528

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

MIL SAE® For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-474

Date of issue: September 2022

Identification tags for cable bundle "Ladder Style", thermal transfer

TAGLF – Rail - Limited Fire Hazard Tiptags

TAGLF is a halogen free cable marker for mass transit applications specifically in the railway industry or for all areas where limited fire hazard material is needed. TAGLF's material properties show low smoke propagation, density and toxicity. They are supplied pre-cut and have been formatted into a convenient "ladder" system. Simply print and press out the required TAGLF and apply with cable ties, they are also suitable for retrofit purposes.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.



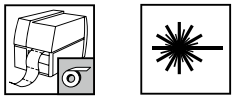
Limited fire hazard cable marker TAGLF.

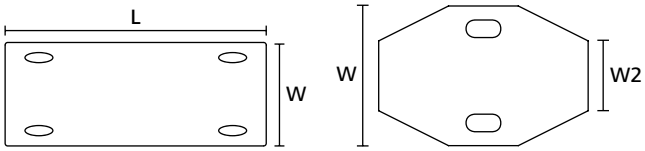
Features and benefits

- Limited fire hazard cable marker
- Halogen free
- For larger cables and wires, bundles
- Thermal transfer or laser beam printable
- Good mechanical strength and highly flexible
- Delivered on reel in convenient storage boxes

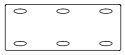
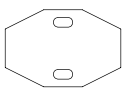
MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-40 °C to +105 °C, (+105 °C for 500 h)
Flammability	self-extinguishing
Recommended Ribbon Type	TTDTHOUT
Thermal Transfer Printer	TT431, TT4030
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓ RoHS ✓





Identification tag with four fixing holes.

TYPE	Drawing	Length (L)	Width (W)	Width (W2)	Pack Cont.	Colour	Article-No.
TAGLF20X51-6		51.5	20.4	-	1,000 pcs.	White (WH)	556-83023
		51.5	20.4	-	1,000 pcs.	Yellow (YE)	556-83024
TAGLF10X51-4		51.5	10.4	-	2,000 pcs.	White (WH)	556-83013
		51.5	10.4	-	2,000 pcs.	Yellow (YE)	556-83014
TAGLF20X51-4		51.5	20.4	-	1,000 pcs.	White (WH)	556-83018
		51.5	20.4	-	1,000 pcs.	Yellow (YE)	556-83019
TAGLF20X30-2		30.0	20.0	11.0	1,000 pcs.	Blue (BU)	556-83054
		30.0	20.0	11.0	1,000 pcs.	Red (RD)	556-83055
TAGLF20x30-2		30.0	20.0	11.0	1,000 pcs.	White (WH)	556-83038
		30.0	20.0	11.0	1,000 pcs.	Yellow (YE)	556-83012

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 ASTM MIL SAE®

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-475

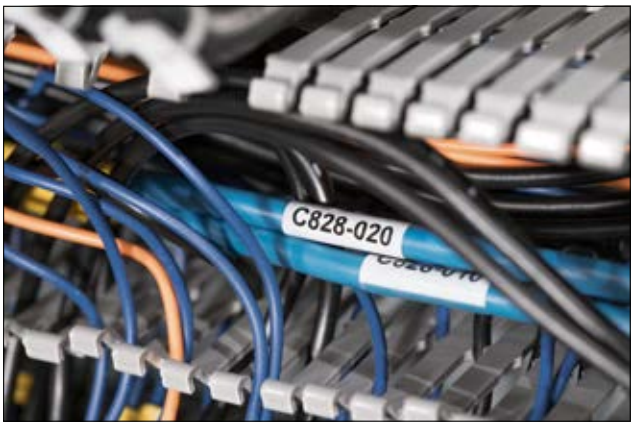
Self-laminating labels, thermal transfer

Helatag 1209

These labels are ideal identifying cables and wire. They consist of a printable area plus a lamination function for protection of print text against humidity, dirt, debris and mechanical abrasion. Due to its flexibility these labels are also suitable for flat ribbon cables.

Features and benefits

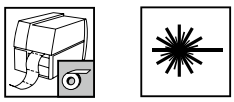
- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength

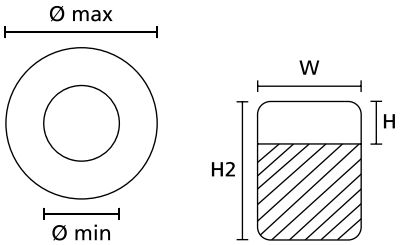


Helatag 1209 offers an excellent protection against abrasion and environmental impact.

MATERIAL	Type 1209, Vinyl (1209)
Operating Temperature	-20 °C to +80 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	90 µm
Chem. Material Properties	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT932DOUT
Thermal Transfer Printer	TT431, TT4030

RoHS





TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG51TD3-1209-WHCL	1.4	3.0	25.4	8.8	19.1	85.0	3 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-12091
TAG26TD6-1209-WHCL	1.5	3.0	12.7	9.5	19.1	85.0	6 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-12096
TAG36TD7-1209-WHCL	2.0	4.7	12.7	9.0	23.8	95.0	7 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-12097
TAG2TD6-1209-WHCL	3.5	7.6	12.7	12.7	36.5	82.0	6 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-61209
TAG22TD3-1209-WHCL	3.5	7.6	25.4	12.7	36.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-32091
TAG24TD1-1209-WHCL	3.5	7.6	50.8	12.7	36.5	55.0	1 pc.	1,000 pcs.	White (WH), Transparent (CL)	596-12094
TAG23TD5-1209-WHCL	4.5	10.0	19.1	12.7	44.5	101.6	5 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-12095

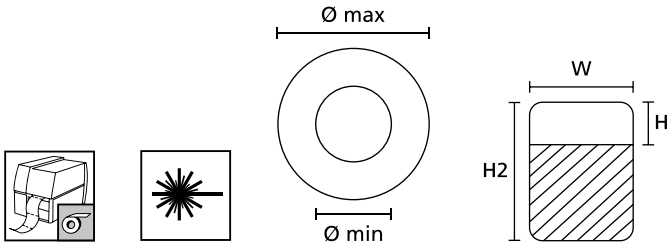
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-476

Self-laminating labels, thermal transfer

Helatag 1209



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG25TD3-1209-WHCL	4.5	10.0	25.4	12.7	44.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-51209
TAG9TD3-1209-WHCL	5.5	12.1	25.4	19.1	57.1	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-91209
TAG10TD2-1209-WHCL	5.5	12.1	49.5	19.1	57.1	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-12090
TAG91TD1-1209-WHCL	8.0	16.0	70.0	35.0	85.0	74.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-41209
TAG1TD2-1209-WHCL	8.5	18.2	48.2	19.1	79.2	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-21209
TAG3TD3-1209-WHCL	10.0	22.2	25.4	25.4	95.3	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-31209
TAG6TD1-1209-WHCL	10.0	22.2	50.8	25.4	95.3	55.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-11209
TAG107TD3-1209-WHCL	12.0	37.5	25.4	31.8	149.9	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-01209
TAG38TD3-1209-WHCL	20.8	47.5	25.4	38.1	187.2	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-12098
TAG07TD1-1209-WHCL	20.8	47.5	50.8	25.4	187.2	55.0	1 pc.	250 pcs.	White (WH), Transparent (CL)	596-71209

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Add items to your watchlist!
www.HT.click/49-477

Self-laminating labels, thermal transfer

Helatag 1232

These self-laminating labels are ideal for marking hoses and pipes in harsh environments, e.g. as they can be found in the hydraulics industry. Helatag 1232 consists of a white printable area with a protective laminate ensure the printed text is shielded from negative environmental influences - such as humidity, dirt, debris and mechanical abrasion.

Features and benefits

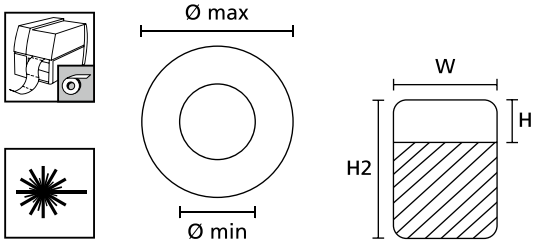
- High-quality self-laminating labels made of polyester
- Suitable for marking of wires and cables in harsh environments
- Flexible but also tear and impact resistant material
- Excellent resistance to alcohol, gasoline, cleaning agents and hydraulic oils
- Very temperature and UV-resistant
- Perforation allows demand-based shortening of the protective laminate for smaller outer diameters
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength



Helatag 1232 – self-laminating labels with good resistance to alcohol and hydraulic oils.

MATERIAL	Type 1232, Polyester, white transparent, self-laminating (1232)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from +2 °C
Adhesive	Acrylic
Thickness of Foil	50 µm
Chem. Material Properties	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG32-135TD1	14.0	30.2	32.0	40.0	135.0	38.0	1 pc.	650 pcs.	White (WH), Transparent (CL)	596-01904
TAG32-230TD1	30.2	56.0	32.0	60.0	230.0	36.0	1 pc.	400 pcs.	White (WH), Transparent (CL)	596-01903

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-478

Self-laminating labels, thermal transfer

Helatag 323 (White-Transparent), high temperature

This self-laminating label consists of a printable area with a protective laminate ensure the printed text is shielded from negative environmental influences - such as humidity, dirt, debris and mechanical abrasion. It is ideally suited for wire and cable marking in both high temperature and outside environments, particular used in industry as well as military technology.

Features and benefits

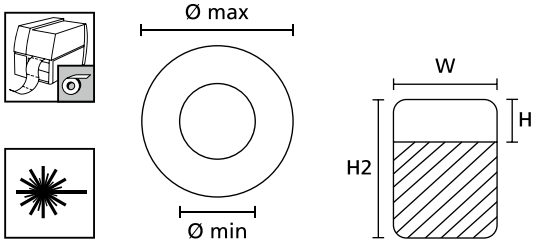
- High temperature self-laminating labels with an inscription field
- Extremely scratch and chemical resistant
- Protective laminating foil ensures optimal protection against humidity, dirt, debris, and mechanical abrasion
- Survives 5 years external weathering in central European climate



Easy marking of flexible, semi-rigid and rigid cables and wires.

MATERIAL	Type 323, Polyvinylidene Fluoride (323)
Operating Temperature	-40 °C to +140 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	25 µm
Chem. Material Properties	Excellent resistance against water, UV radiation, weather influence and solvents based on petroleum.
Recommended Ribbon Type	TT932DOUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG51TD3-323-WHCL	1.4	3.0	25.4	8.8	19.1	85.0	3 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-51320
TAG26TD6-323-WHCL	1.5	3.0	12.7	9.5	19.1	85.0	6 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-26320
TAG36TD7-323-WHCL	2.0	4.7	12.7	9.0	23.8	95.0	7 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-36320
TAG2TD6-323-WHCL	3.5	7.6	12.7	12.7	36.5	82.0	6 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-02320
TAG22TD3-323-WHCL	3.5	7.6	25.4	12.7	36.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-22320
TAG24TD1-323-WHCL	3.5	7.6	50.8	12.7	36.5	55.0	1 pc.	1,000 pcs.	White (WH), Transparent (CL)	596-24320
TAG23TD5-323-WHCL	4.5	10.0	19.1	12.7	44.5	101.6	5 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-23320
TAG25TD3-323-WHCL	4.5	10.0	25.4	12.7	44.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-25320
TAG9TD3-323-WHCL	5.5	12.1	25.4	19.1	57.1	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-09320
TAG10TD2-323-WHCL	5.5	12.1	49.5	19.1	57.1	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-10320
TAG1TD2-323-WHCL	8.5	18.2	48.2	19.1	79.2	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-01320
TAG3TD3-323-WHCL	10.0	22.2	25.4	25.4	95.3	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-03320
TAG6TD1-323-WHCL	10.0	22.2	50.8	25.4	95.3	55.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-06320
TAG107TD3-323-WHCL	12.0	37.5	25.4	31.8	149.9	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-10732
TAG38TD3-323-WHCL	20.8	47.5	25.4	38.1	187.2	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-38320
TAG07TD1-323-WHCL	20.8	47.5	50.8	25.4	187.2	55.0	1 pc.	250 pcs.	White (WH), Transparent (CL)	596-07320

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Add items to your watchlist!
www.HT.click/49-479

Self-laminating labels, laser printer

Helatag 1104 (White-Transparent)

A specially developed material for use in labels required to wrap around cables and wires. The structure of the label ensures that once the label is applied to the wire it remains in place without lifting. The rounded edge construction gives additional bonding features not found in straight edge label designs. The information is printed onto the white inscription area. The printed information area is placed onto the wire and the transparent tail is wrapped around the wire and covers the text; this gives excellent protection from abrasion, dust and debris. TagPrint Pro labelling program comes pre-loaded with all our labels. Designing labels is simply done; just choose inbuilt graphics or download your own and add data from ERP system or standard office programs such as Excel. Barcodes are created in a couple of clicks.



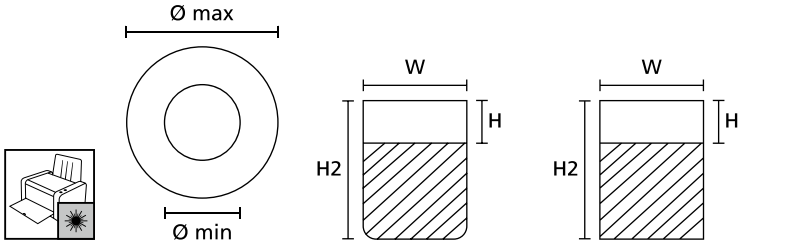
Laminating the mark gives long-term print survivability.

Features and benefits

- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength
- Standard material (25 micron) for standard labels
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new

MATERIAL	Type 1104, Polyester, white transparent, self-laminating (1104)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	25 µm
Chem. Material Properties	Excellent resistance to alcohol, gasoline, cleaning solvents, butanol, ethyl and Butylcellosolve solvent, battery acid.

HF ✓ RoHS ✓



Only 594-11041 and 594-11040

Software TagPrint Pro for troublefree printing see page 526. For MS-Windows Word design templates for simple applications please refer to www.HellermannTyton.com/templates.

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG26LA4-1104-WHCL	1.5	3.0	12.7	9.5	19.1	180 pcs.	5,000 pcs.	White (WH), Transparent (CL)	594-11041
TAG130LA4-1104-WHCL	2.4	4.8	12.7	9.0	24.0	165 pcs.	5,000 pcs.	White (WH), Transparent (CL)	594-21104
TAG49LA4-1104-WHCL	2.6	5.3	25.4	8.8	25.4	70 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-11042
TAG131LA4-1104-WHCL	3.8	7.6	12.7	12.7	36.5	105 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-31104
TAG132LA4-1104-WHCL	3.8	7.6	20.3	12.7	36.5	63 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-41104
TAG02LA4-1104-WHCL	3.8	7.6	25.4	12.7	36.5	49 pcs.	2,450 pcs.	White (WH), Transparent (CL)	594-01104
TAG133LA4-1104-WHCL	5.1	10.1	19.1	12.7	44.5	60 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-51104
TAG134LA4-1104-WHCL	5.1	10.1	25.4	12.7	44.5	42 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-61104
TAG09LA4-1104-WHCL	5.8	11.6	25.4	19.1	55.5	35 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-11104
TAG135LA4-1104-WHCL	6.7	13.5	48.5	12.7	55.0	20 pcs.	500 pcs.	White (WH), Transparent (CL)	594-71104
TAG137LA4-1104-WHCL	7.1	14.3	31.8	22.9	67.7	24 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-91104
TAG136LA4-1104-WHCL	7.7	15.5	25.4	19.1	67.7	28 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-81104
TAG145LA4-1104-WHCL	11.1	22.3	25.4	25.4	95.3	21 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-11040

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-480

Date of issue: September 2022

Self-laminating labels, laser printer

Helatag 1105 (White-Transparent)

These labels are ideal for marking cables of a larger diameter. The type 1105 self-laminating labels exceed the length of 100 mm and are made of a thicker material than type 1104.

Because of its greater material rigidity these labels can be easily removed from the sheet and applied by hand to larger cables and hoses.

Features and benefits

- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength
- Thicker material (50 micron) for longer labels
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new

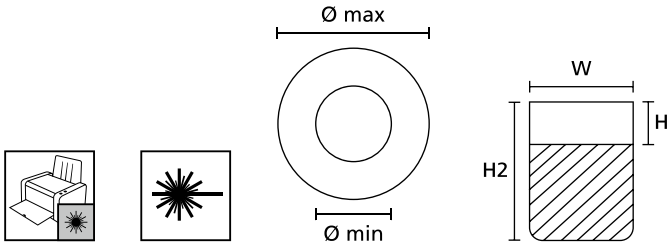
Software TagPrint Pro for troublefree printing see page 526. For MS-Windows Word design templates for simple applications please refer to www.HellermannTyton.com/templates.



Laminating the mark gives long-term print survivability.

MATERIAL	Type 1105, Polyester, white transparent, self-laminating (1105)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from +2 °C
Adhesive	Acrylic
Thickness of Foil	50 µm
Chem. Material Properties	Excellent resistance to alcohol, gasoline, cleaning solvents, butanol, ethyl and Butylcellosolve solvent, battery acid.

HF ✓ RoHS ✓



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG138LA4-1105-WHCL	11.8	23.6	38.1	19.1	93.1	15 pcs.	500 pcs.	White (WH), Transparent (CL)	594-13876
TAG139LA4-1105-WHCL	18.2	36.4	38.1	25.4	139.7	10 pcs.	500 pcs.	White (WH), Transparent (CL)	594-13976

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Self-laminating labels, manual marking

RiteOn, Starter Pack, Material 1401 dispenser

A specially developed material for use in labels required to wrap around cables and wires. The conformable structure of the label ensures that once the label is applied to the wire it remains in place without lifting.

The SPRO200-1401-WH Starter Pack contains all you need to start work identifying your wires,

1 x RiteOn dispenser

1 x RO202 reel of 150 self-laminating labels for cable diameters ranging from 6 mm to 12 mm

1 x T82S-BK black indelible ink marker pen

Features and benefits

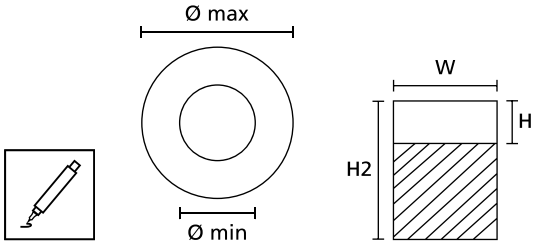
- Palm sized hand held self-laminating label dispenser
- Easy to write on and dispense labels
- Wide range of wire diameters covered as standard
- Ideal for low volume maintenance and repair work
- Write text with specially formulated fast-drying ink T82 pens



Easy to write and dispense labels with RiteOn label dispenser.

MATERIAL	Type 1401, Vinyl (1401)
Operating Temperature	-40 °C to +80 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	80 µm
Chem. Material Properties	Resistant to water, oil and many solvents.

RoHS



www.HellermannTyton.co.uk/RiteOn-cat22

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Pack Cont.	Colour	Article-No.
RO201-1401-WH	Filled dispenser	4.0	8.1	12.7	12.7	38.1	200 pcs.	White (WH), Transparent (CL)	550-14011
RO202-1401-WH		6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-14012
RO203-1401-WH		9.1	18.2	19.1	25.4	76.2	100 pcs.	White (WH), Transparent (CL)	550-14013
RO201REF-1401-WH	Refill packs	4.0	8.1	12.7	12.7	38.1	200 pcs.	White (WH), Transparent (CL)	550-14014
RO202REF-1401-WH		6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-11401
RO203REF-1401-WH		9.1	18.2	19.1	25.4	76.2	100 pcs.	White (WH), Transparent (CL)	550-71401
SPRO200-1401-WH	Starter pack	6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-14010

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-482

Self-laminating labels, manual marking

HELASIGN, Material 1402, Booklet

A quick and simple on-site solution, for either permanent or temporary marking of wires, cables and pipes.

Features and benefits

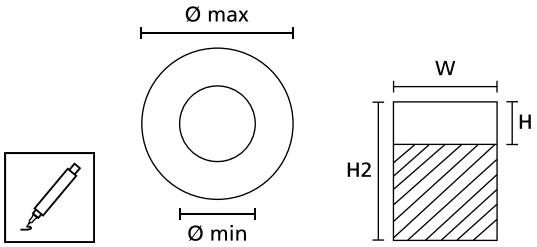
- Self-laminating labels supplied in handy pocket-sized booklets
- Booklet cover protects labels when stored
- Ideal for low volume maintenance and repair work
- Easy to write on and dispense labels
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Applicator tool for clean application enclosed
- Write text with specially formulated fast-drying ink T82 pens



Always on hand: Labels in a convenient, pocket sized and lightweight booklet.

MATERIAL	Type 1402, Vinyl (1402)
Operating Temperature	-40 °C to +80 °C
Curing Temperature	from +8 °C
Adhesive	Acrylic
Thickness of Foil	80 µm
Chem. Material Properties	Resistant to water, oil and many solvents.

RoHS



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Pack Cont.	Colour	Article-No.
HSMB-C2-1402-BU	6.1	12.1	19.1	12.7	50.8	120 pcs.	Blue (BU), Transparent (CL)	598-11402
HSMB-C2-1402-GN	6.1	12.1	19.1	12.7	50.8	120 pcs.	Green (GN), Transparent (CL)	598-01402
HSMB-C2-1402-OG	6.1	12.1	19.1	12.7	50.8	120 pcs.	Orange (OG), Transparent (CL)	598-14028
HSMB-C2-1402-RD	6.1	12.1	19.1	12.7	50.8	120 pcs.	Red (RD), Transparent (CL)	598-14027
HSMB-C2-1402-WH	6.1	12.1	19.1	12.7	50.8	120 pcs.	White (WH), Transparent (CL)	598-14026
HSMB-C2-1402-YE	6.1	12.1	19.1	12.7	50.8	120 pcs.	Yellow (YE), Transparent (CL)	598-14029
HSMB-C3-1402-BU	9.1	18.2	25.4	19.1	76.2	60 pcs.	Blue (BU), Transparent (CL)	598-71402
HSMB-C3-1402-GN	9.1	18.2	25.4	19.1	76.2	60 pcs.	Green (GN), Transparent (CL)	598-61402
HSMB-C3-1402-OG	9.1	18.2	25.4	19.1	76.2	60 pcs.	Orange (OG), Transparent (CL)	598-41402
HSMB-C3-1402-RD	9.1	18.2	25.4	19.1	76.2	60 pcs.	Red (RD), Transparent (CL)	598-31402
HSMB-C3-1402-WH	9.1	18.2	25.4	19.1	76.2	60 pcs.	White (WH), Transparent (CL)	598-21402
HSMB-C3-1402-YE	9.1	18.2	25.4	19.1	76.2	60 pcs.	Yellow (YE), Transparent (CL)	598-51402
HSMB-C4-1402-WH	16.2	32.3	25.4	25.4	127.0	30 pcs.	White (WH), Transparent (CL)	598-40402
HSMB-C5-1402-WH	20.2	40.3	25.4	25.4	152.0	30 pcs.	White (WH), Transparent (CL)	598-50402

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-483

Pre-printed Cable Markers

Helagrip, slide on, chevron cut

The Helagrip range consists of pre-printed markers that slide easily onto cables and wires. The anti-skew chevron-cut ensures that markers are locked together and stay in place.

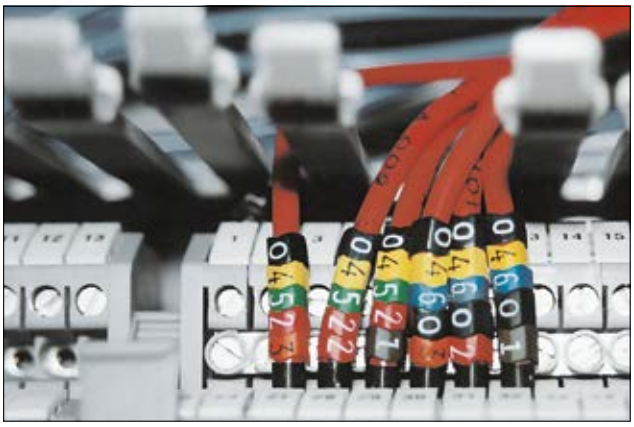
The markers are ideally suited for panel building, mass transit, utilities, telecommunications and electrical contracting.

Markers are available as standard in international resistor colour code and yellow material marked in black. White material marked in black is available to special order.

Characters are 0-9, A-Z and standard electrical symbols.

Features and benefits

- Easily apply one size marker to wide range of cables
- Markers are applied before termination takes place
- Chevron cut to lock markers together ensuring text remains in place
- Traditional wire marking available in yellow, white and colour code
- Flexible material so product returns securely on the wire
- Applicator tool TJC available

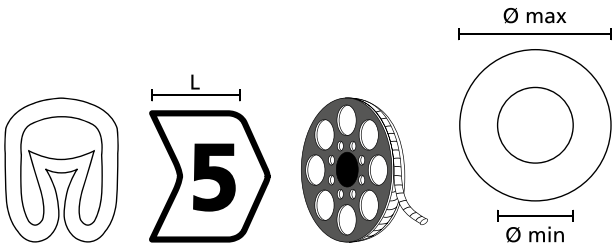


Clearly a better way to identify in confined spaces.

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-65 °C to +105 °C, intermittent +135 °C
Flammability	UL 94 V0 (3 mm)

RoHS

The products have been tested in-house according to UL224.



Helagrip chevron cut.

TYPE	Bundle Ø min.	Bundle Ø max.	Length (L)	Pack Cont.
HGDC1-3	1.0	3.0	3.5	1,000 pcs.
HGDC2-5	2.0	5.0	3.5	1,000 pcs.
HGDC4-9	4.0	9.0	5.0	250 pcs.

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	For Size	Article-No.
TJC1-3	Applicator tool TJC1-3	Helagrip 1-3	518-00113
TJC2-5	Applicator tool TJC2-5	Helagrip 2-5	518-00125
TJC4-9	Applicator tool TJC4-9	Helagrip 4-9	518-00149

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Date of issue: September 2022

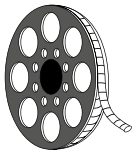
Add items to your watchlist!
www.HT.click/49-484

Pre-printed Cable Markers

Helagrip, slide on, chevron cut

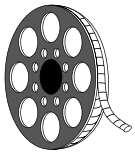
HGDC1-3	
	Article-No.
A	515-01014
B	515-01024
C	515-01034
D	515-01044
E	515-01054
F	515-01064
G	515-01074
H	515-01084
I	515-01094
J	515-01104
K	515-01114
L	515-01124
M	515-01134
N	515-01144
O	515-01154
P	515-01164
Q	515-01174
R	515-01184
S	515-01194
T	515-01204
U	515-01214
V	515-01224
W	515-01234
X	515-01244
Y	515-01254
Z	515-01264

HGDC1-3	
	Article-No.
0	515-01604
1	515-01614
2	515-01624
3	515-01634
4	515-01644
5	515-01654
6	515-01664
7	515-01674
8	515-01684
9	515-01694
+	515-01704
–	515-01714
/	515-01724
⏚	515-01734
•	515-01804
0	515-01600
1	515-01611
2	515-01622
3	515-01633
4	515-01644
5	515-01655
6	515-01666
7	515-01677
8	515-01688
9	515-01699



HGDC2-5	
	Article-No.
A	515-02014
B	515-02024
C	515-02034
D	515-02044
E	515-02054
F	515-02064
G	515-02074
H	515-02084
I	515-02094
J	515-02104
K	515-02114
L	515-02124
M	515-02134
N	515-02144
O	515-02154
P	515-02164
Q	515-02174
R	515-02184
S	515-02194
T	515-02204
U	515-02214
V	515-02224
W	515-02234
X	515-02244
Y	515-02254
Z	515-02264

HGDC2-5	
	Article-No.
0	515-02604
1	515-02614
2	515-02624
3	515-02634
4	515-02644
5	515-02654
6	515-02664
7	515-02674
8	515-02684
9	515-02694
+	515-02704
–	515-02714
•	515-02715
/	515-02724
⏚	515-02734
0	515-02600
1	515-02611
2	515-02622
3	515-02633
4	515-02644
5	515-02655
6	515-02666
7	515-02677
8	515-02688
9	515-02699



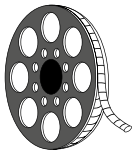
Add items to your watchlist!
www.HT.click/49-485

Pre-printed Cable Markers

Helagrip, slide on, chevron cut

HGDC4-9	
	Article-No.
A	515-03014
B	515-03024
C	515-03034
D	515-03044
E	515-03054
F	515-03064
G	515-03074
H	515-03084
I	515-03094
J	515-03104
K	515-03114
L	515-03124
M	515-03134
N	515-03144
O	515-03154
P	515-03164
Q	515-03174
R	515-03184
S	515-03194
T	515-03204
U	515-03214
V	515-03224
W	515-03234
X	515-03244
Y	515-03254
Z	515-03264

HGDC4-9	
	Article-No.
0	515-03604
1	515-03614
2	515-03624
3	515-03634
4	515-03644
5	515-03654
6	515-03664
7	515-03674
8	515-03684
9	515-03694
+	515-03704
–	515-03714
/	515-03724
•	515-01946
⏚	515-01947
0	515-03600
1	515-03611
2	515-03622
3	515-03633
4	515-03644
5	515-03655
6	515-03666
7	515-03677
8	515-03688
9	515-03699



Add items to your watchlist!
www.HT.click/49-486

Pre-printed Cable Markers

Ovalgrip, slide on, straight cut

The Ovalgrip range consists of pre-printed markers that slide easily onto cables and wires. The markers are ideally suited to panel building, mass transit, utilities, telecommunications and electrical contracting.

These markers are supplied as standard on a disk / reel.

They are available as a standard in yellow material marked in black, and international resistor colour code. Characters are 0-9, A-Z and standard electrical symbols.

White material marked in black available on special request.

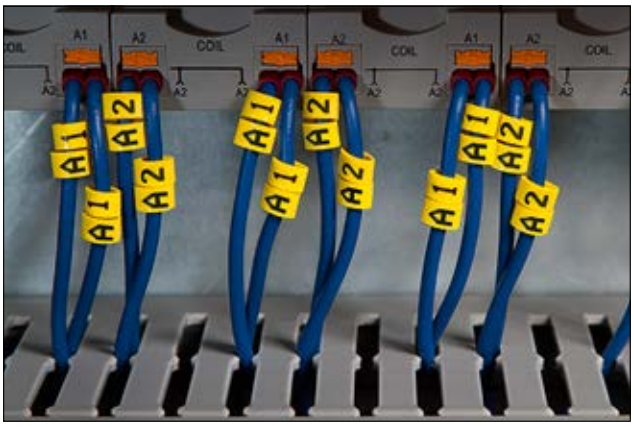
AT1 Arrowtags will fit 7 size 50 markers.

AT2 Arrowtags will fit 8 size 85 markers.

AT3 Arrowtags will fit 14 size 85 markers.

Features and benefits

- Oval shaped markers designed to fit AT1, AT2 or AT3 (depends on Ovalgrip size)
- Ideal for use in maintenance and repair and fixed with cable ties
- Direct application to wire and cable before termination is also recommended



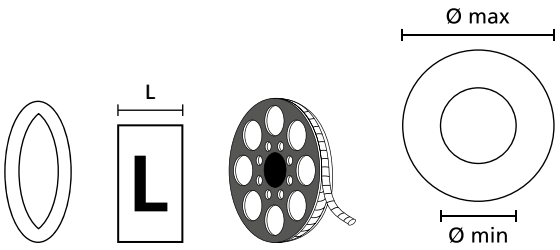
A simple idea for complex marking needs.

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-65 °C to +105 °C, intermittent +135 °C
Flammability	UL 94 V0 (3 mm)

RoHS

For details on Arrowtags please see page 492.

The products have been tested in-house according to UL224.



Ovalgrip straight cut.

TYPE	Bundle Ø min.	Bundle Ø max.	Length (L)	Pack Cont.	For Size
HODS50	1.7	3.7	4.0	1,000 pcs.	AT1
HODS85	1.8	6.0	4.5	1,000 pcs.	AT2/AT3

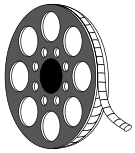
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Pre-printed Cable Markers

Ovalgrip, slide on, straight cut

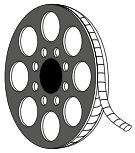
HODS50	
	Article-No.
A	531-15014
B	531-15024
C	531-15034
D	531-15044
E	531-15054
F	531-15064
G	531-15074
H	531-15084
I	531-15094
J	531-15104
K	531-15114
L	531-15124
M	531-15134
N	531-15144
O	531-15154
P	531-15164
Q	531-15174
R	531-15184
S	531-15194
T	531-15204
U	531-15214
V	531-15224
W	531-15234
X	531-15244
Y	531-15254
Z	531-15264

HODS50	
	Article-No.
0	531-15274
1	531-15284
2	531-15294
3	531-15304
4	531-15314
5	531-15324
6	531-15334
7	531-15344
8	531-15354
9	531-15364
.	531-00174
/	531-00175
⏚	531-00176
+	531-00451
-	531-00452
0	531-15365
1	531-15366
2	531-15367
3	531-15368
4	531-15314
5	531-15370
6	531-15371
7	531-15372
8	531-15373
9	531-15374



HODS85	
	Article-No.
A	531-07935
B	531-07936
C	531-07937
D	531-07938
E	531-07939
F	531-07940
G	531-07941
H	531-07942
I	531-07943
J	531-07944
K	531-07945
L	531-07946
M	531-07947
N	531-07948
O	531-07949
P	531-07950
Q	531-07951
R	531-07952
S	531-07953
T	531-07954
U	531-07955
V	531-07956
W	531-07957
X	531-07958
Y	531-07959
Z	531-07960

HODS85	
	Article-No.
0	531-07925
1	531-07926
2	531-07927
3	531-07928
4	531-07732
5	531-07930
6	531-07931
7	531-07932
8	531-07933
9	531-07934
.	531-00384
/	531-07961
⏚	531-00386
+	531-07924
-	531-07923
0	531-07728
1	531-07729
2	531-07730
3	531-07731
4	531-07732
5	531-07733
6	531-07734
7	531-07735
8	531-07736
9	531-07737



Add items to your watchlist!
www.HT.click/49-488

Date of issue: September 2022

Pre-printed cable markers

WIC, snap on

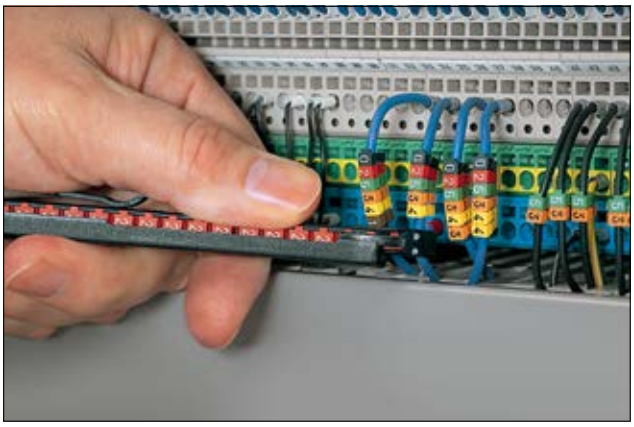
The WIC range of pre-printed cable markers easily snap onto cables and wires. The WIC tool ensures an easy application of the markers – simply insert the markers into the tool, slide down and press the markers onto the wire while twisting. Markers for fibre cables should be applied by hand.

All markers come with a locking mechanism to ensure perfect text alignment.

The two WICA accessories are ideal for marking cables of larger diameters (6 mm² - 95 mm²).

Features and benefits

- Fast and easy to use pre-printed nylon snap-on marker
- Ideal where termination is completed or for maintenance and repair
- Markers lock together to give perfect text alignment
- Vibration resistant markers, WIC markers lock onto wire and cable tightly
- WIC tool holds 20 WIC marker in all three sizes
- Gripping system locks markers onto wire and resists rotation
- Available in Yellow, White and international resistor colour code
- Popular 2 digit markings such as L1, L2, L3, PE are available in Yellow or colour code
- Dispenser colour denotes marker size: WIC0 (GN), WIC1 (RD), WIC2 (BU), WIC3 (YE)



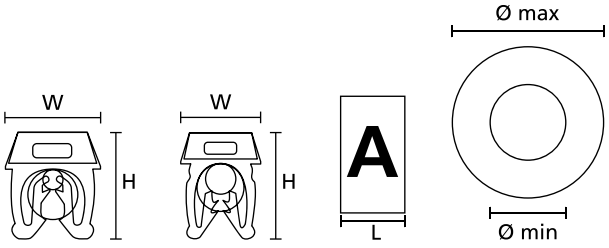
Use the applicator to simply snap the marker onto your cable.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C, (+105 °C, 500 h)
Flammability	UL 94 V0

HF ✓ RoHS ✓

Customized marking on request

www.HellermannTyton.co.uk/WIC-cat22



WIC0 *WIC1, WIC2, WIC3*

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Wire Size Range (mm²)	Pack Cont.	Application Tool
WIC0	0.80	2.20	5.0	5.5	3.0	0.15-0.75	1,000 pcs.	WIC Tool
WIC1	2.00	2.80	5.0	6.4	3.0	0.50-1.50	1,000 pcs.	
WIC2	2.80	3.80	5.6	7.1	3.0	1.50-2.50	1,000 pcs.	
WIC3	4.30	5.30	8.0	9.6	3.0	4.00-6.00	500 pcs.	

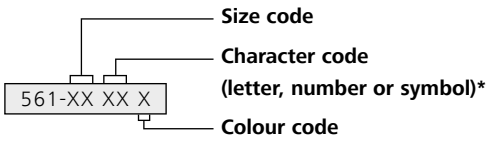
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

Date of issue: September 2022

Pre-printed Cable Markers

WIC, snap on

Use our coding system, to easily order the markers suitable for your use.



* For the assortment and the symbols ~ ⎓ please use the code with three digits.

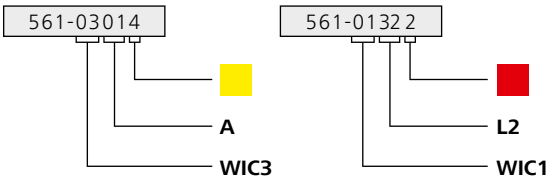


WIC – pre-printed wire and cable markers.

Step 1: Choose your size.

SIZE	WIC0	WIC1	WIC2	WIC3
				
Code	00	01	02	03

Example:



Step 2: Choose your letter, symbol, number or assortment.

LETTER	A	B	C	D	E	F	G	H	I	J	K
Code	01	02	03	04	05	06	07	08	09	10	11
LETTER	L	M	N	O	P	Q	R	S	T	U	V
Code	12	13	14	15	16	17	18	19	20	21	22
LETTER	W	X	Y	Z							
Code	23	24	25	26							

SYMBOL	L1	L2	L3	PE	+	-	/	⏚	.
Code	31	32	33	34	70	71	72	73	74
SYMBOL		↯	=	~	⎓				
Code	75	76	77	000	001				

NUMBER	0	1	2	3	4	5	6	7	8	9
Code	60	61	62	63	64	65	66	67	68	69

ASSORTMENT	0	1	2	3	4	5	6	7	8	9
Code	100									
ASSORTMENT	A	E	L	N	R	S	T	+	-	
Code	994									
ASSORTMENT	G	H	Y	Z	O	Q	J	K	X	L
Code	003									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	⏚	⏚
Code	300									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	⏚	⏚
Code	302									

ASSORTMENT	0	1	2	3	4	5	6	7	8	9
Code	101									
ASSORTMENT	B	C	U	V	W	P	D	F	I	M
Code	002									
ASSORTMENT	.	/	⎓	⏚	+	-	~	=	*	
Code	004									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	⏚	⏚
Code	301									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	⏚	⏚
Code	303									

Step 3: Choose your colour.

COLOUR										
Code	0	1	2	3	4	5	6	7	8	9

Customized marking on request

Date of issue: September 2022

Pre-printed cable markers

WIC Tool and accessories

The WIC range of pre-printed cable markers easily snap onto cables and wires. The WIC tool ensures an easy application of the markers – simply insert the markers into the tool, slide down and press the markers onto the wire while twisting. Markers for fibre cables should be applied by hand.

All markers come with a locking mechanism to ensure perfect text alignment.

The two WICA accessories are ideal for marking cables of larger diameters (6 mm² - 95 mm²).

Features and benefits

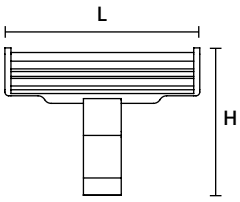
- Fast and easy to use pre-printed nylon snap-on marker
- Ideal where termination is completed or for maintenance and repair
- Markers lock together to give perfect text alignment
- Vibration resistant markers, WIC markers lock onto wire and cable tightly
- WIC tool holds 20 WIC markers in all four sizes
- Gripping system locks markers onto wire and resists rotation
- Available in yellow, white and international resistor colour code
- Popular 2 digit markings such as L1, L2, L3, PE are available in yellow or colour code
- Dispenser colour denotes marker size: WIC0 (green), WIC1 (red), WIC2 (blue), WIC3 (yellow)
- Two accessories available to identify cables from 2.5 mm² to 95 mm² (WICA-AC10-25 and WICA-ACT-BK)



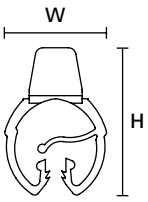
WIC cable markers and accessories.

MATERIAL	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)	Polyamide 6, glass-fibre reinforced (PA6GF15%)
Operating Temperature	-40 °C to +85 °C, (+105 °C, 500 h)	-40 °C to +85 °C
Flammability	UL 94 HB	UL 94 V0

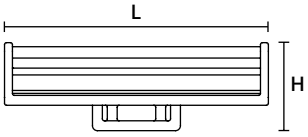
HF ✓ RoHS ✓



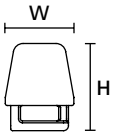
WICA-AC (front view)



WICA-AC (side view)



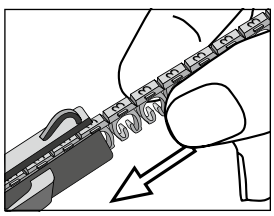
WICA-ACT (front view)



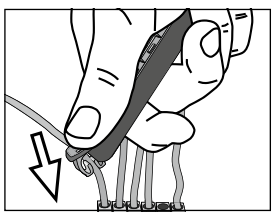
WICA-ACT (side view)

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Material	Marker tiles per carrier	Pack Cont.	Article-No.
WICA-AC10-25	Snap-on accessory	5.5	9.5	13.5	19.4	25.8	PA66HIRHS	8	100 pcs.	561-06001
WICA-ACT-BK	WIC adapter set for fixing with cable ties	3.0	38.0	7.0	8.9	26.7	PA66HIRHS	8	100 pcs.	561-06000
WIC Tool	Applicator	-	-	-	-	-	PA6GF15	-	5 pcs.	561-00001

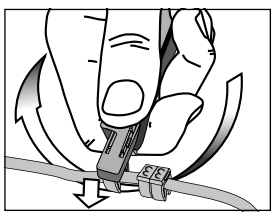
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Step 1



Step 2



Step 3

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-491

Identification ties and plates for marking cable bundles

Arrowtag

The plates are suitable for applying to larger pipes and cables before or after termination has taken place.

They can be marked with Ovalgrip markers or manually using the T82 series of indelible markers pens.

Features and benefits

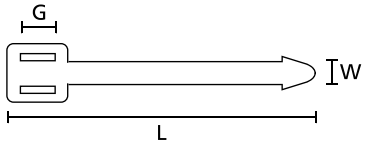
- Blank nylon arrowhead shape plate fixed with a cable tie
- Identify with a T82 pen or Ovalgrip markers
- AT1 for 7 size 50 Ovalgrip markers
- AT2 for 8 size 85 Ovalgrip markers
- AT3 for 14 size 85 Ovalgrip markers
- Custom printed plaques are available on request



A clearly better way of identifying cables and pipes.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓



AT1



AT2



AT3, AT4

TYPE	Length (L)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Article-No.
AT1	62.5	4.7	7.4	100 pcs.	Black (BK)	151-41110
	62.5	4.7	7.4	100 pcs.	Natural (NA)	151-41119
AT2	63.0	9.0	6.4	100 pcs.	Black (BK)	151-41210
	63.0	9.0	6.4	100 pcs.	Natural (NA)	151-41219
AT3	100.0	9.0	6.4	100 pcs.	Black (BK)	151-41310
	100.0	9.0	6.4	100 pcs.	Natural (NA)	151-41319
AT4	125.0	9.0	6.4	100 pcs.	Natural (NA)	151-41419
	125.0	9.0	6.4	100 pcs.	Black (BK)	151-41410

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-492

Identification tags for marking cable bundles

Q-tags

Q-tags are used to identify a cable or a cable bundle and are secured with a Q-tie. The Q-tag's flag design allows the user to quickly read or scan the printed information.

Features and benefits

- Identify cable or cable bundle
- Quickly read or scan printed information
- Mark by hand with T82 series marker pen or use printed adhesive label
- HellermannTyton offers complete printing solution (printers, labels, ribbons)
- Perfect combination with Q-ties to safely secure and mark cables with highly visible text



The flagged orientation of Q-tags ensures that printed texts are easily visible.

www.HellermannTyton.co.uk/QTags-cat22

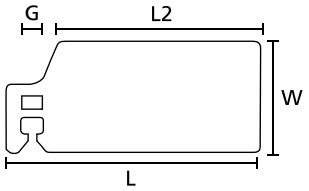
MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

HF ✓ RoHS ✓

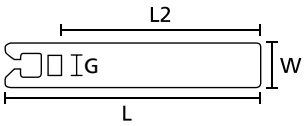
Please find more Q-Series products for your system solution on page 54, 165, 170.

Please find the corresponding labels on page 497.

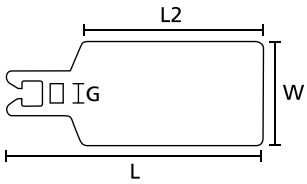




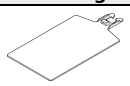
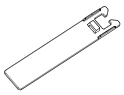
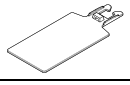
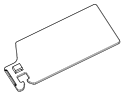
Q-tag QT7040S



Q-tag QT7016R



Q-tag QT7040R, QT10065R

TYPE	Drawing	Length (L)	Length (L2)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Recommended Labels	Article-No.
QT10065R		135.0	100.0	67.0	4.7	25 pcs.	White (WH)	TAG102-64TD1	151-10953
QT7016R		100.0	70.0	18.0	4.7	50 pcs.	White (WH)	TAG68-16TD1	151-10950
QT7040R		100.0	70.0	42.0	4.7	50 pcs.	White (WH)	TAG63TD1	151-10951
QT7040S		88.0	70.0	42.0	3.6	50 pcs.	White (WH)	TAG63TD1	151-10952

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-493

Identification ties and plates for marking cable bundles

IMP Plates

The IMP and IT range of marker plates are suitable for applying to large cable bundles before or after termination has taken place. The marker plates can also be riveted if required.

They are secured with cable ties of any length with a maximum width of 4.8 mm.

They can be written on by hand using either a black or red T82 indelible marker pen.

Features and benefits

- IT and IMP plates for identifying large cable bundles or flat surfaces
- Mark IT and IMP plates with printable labels or T82 pens
- Fix with cable ties or rivets
- Custom printed plaques are available on request

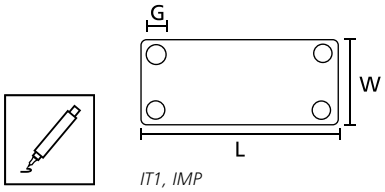


Unlimited cable bundle diameters can be securely identified.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C, (+105 °C, 500 h)
Flammability	UL 94 V2

HF ✓ RoHS ✓

Please find the corresponding labels on page 497.



IT1, IMP

TYPE	Length (L)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Recommended Labels	Article-No.
IMP1.5	38.1	19.1	4.8	100 pcs.	White (WH)	TAG18-16TD1	151-42159
IT1	44.0	19.0	4.8	100 pcs.	Natural (NA)	TAG28-16TD1	151-42119
IMP2	50.8	19.3	4.8	100 pcs.	White (WH)	TAG28-16TD1	151-42229
IMP2.5	63.5	19.3	4.8	100 pcs.	White (WH)	TAG43-16TD1	151-42259
IMP2.5W1.75	63.5	44.7	4.8	100 pcs.	White (WH)	TAG43-41TD1	151-42269
IMP3.5	88.9	19.3	4.8	100 pcs.	White (WH)	TAG68-16TD1	151-42359

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-494

Identification ties and plates for marking cable bundles

IT Ties

One of the major benefits is the ability to both secure and identify cable bundles at different times.

Features and benefits

- Identification ties made of Polyamide 6.6
- For simple identification and securing of cable bundles in one step
- Printable labels are available for a professional finish
- Manual or temporary marking is possible with an indelible pen (T82S-BK / T82R-RD)

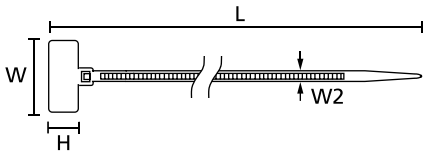


One operation with two benefits.

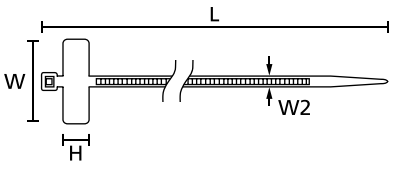
MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

Please find the corresponding labels on page 497.

HF ✓ RoHS ✓



IT18FL



IT18R

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)	N	Recommended Labels	Pack Cont.	Colour	Article-No.
IT18FL	1.5	19.0	20.5	9.0	110.0	2.5	80	TAG18-07TD1	100 pcs.	Natural (NA)	111-81919
	1.5	19.0	20.5	9.0	110.0	2.5	80	TAG18-07TD1	100 pcs.	Black (BK)	111-81910
IT18R	6.0	22.0	25.0	8.0	100.0	2.5	80	TAG23-06TD1	1,000 pcs.	Black (BK)	111-81860
	6.0	22.0	25.0	8.0	100.0	2.5	80	TAG23-06TD1	100 pcs.	Natural (NA)	111-81821

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Other packaging options may also be available. More colours on request.

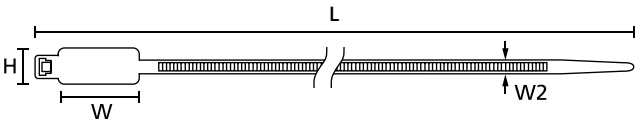
N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

c UL us For product specific approvals and specifications please refer to the Appendix.

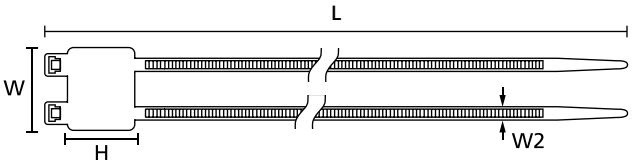
Add items to your watchlist!
www.HT.click/49-495

Identification ties and plates for marking cable bundles

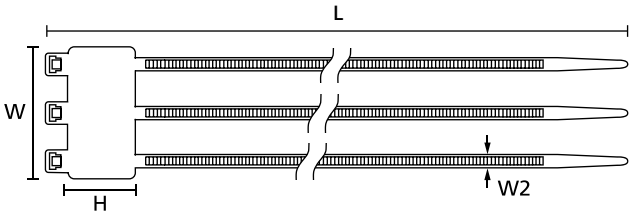
IT Ties



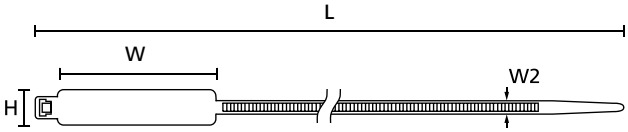
IT50R



IT50RD



IT50RT



IT50L



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)	N	Recommended Labels	Pack Cont.	Colour	Article-No.
IT50R	9.5	44.5	28.0	12.9	203.2	4.6	225	TAG23-10TD1	100 pcs.	Natural (NA)	111-85019
IT50RD	10.0	44.0	29.0	26.3	203.2	4.7	225	TAG26-21TD1	50 pcs.	Natural (NA)	111-85219
IT50RT	10.0	44.0	46.0	26.3	203.2	4.7	225	TAG43-21TD1	50 pcs.	Natural (NA)	111-85119
IT50L	19.0	100.0	56.0	12.8	390.0	4.7	225	TAG52-10TD1	100 pcs.	Natural (NA)	111-85319

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Other packaging options may also be available. More colours on request.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-496

Date of issue: September 2022

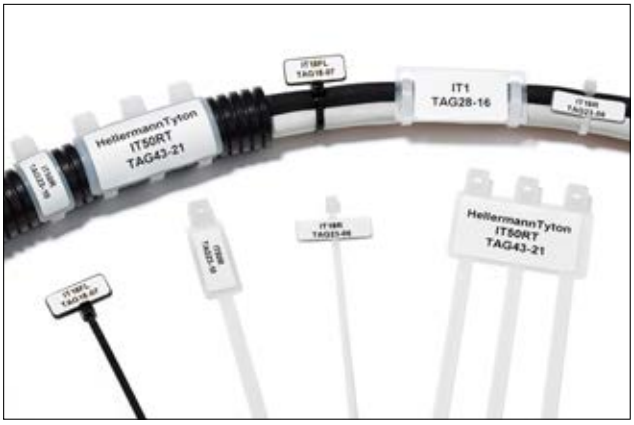
Labels for IT ties, IMP plates and Q-tags, thermal transfer

Helatag 892

These labels are specially tailored to the sizes used in the IT marking tie and IMP/IT as well as Q-tag range. The flexible material sticks to the marking tie or tag, even on rounded surfaces. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. Using unique numbering, graphics or barcodes the labels give excellent asset identification possibilities. This solution produces professional marking of tubes, pipes, cables and other parts.

Features and benefits

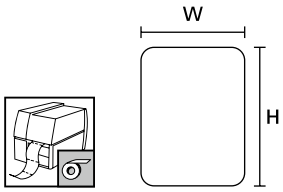
- Suited to the slightly rough surfaces of Q-tags, IT ties and IMP/IT plates
- Adheres to rounded surfaces
- Rounded corners ensure better long term durability of adhesion
- White labels give excellent contrast



Identification ties and tags.

MATERIAL	Type 892, Vinyl, white (892)
Operating Temperature	-40 °C to +80 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	83 µm
Chem. Material Properties	Good resistance against water, oils and most solvents.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	For Size	Pack Cont.	Colour	Article-No.
TAG18-07TD1-892-WH	18.0	7.0	24.0	1 pc.	IT18FL	5,000 pcs.	White (WH)	596-12253
TAG18-16TD1-892-WH	18.0	16.0	24.0	1 pc.	IMP1.5	2,500 pcs.	White (WH)	596-12254
TAG23-06TD1-892-WH	23.0	6.0	30.0	1 pc.	IT18R	5,000 pcs.	White (WH)	596-12255
TAG23-10TD1-892-WH	23.0	10.0	30.0	1 pc.	IT50R	5,000 pcs.	White (WH)	596-12256
TAG26-21TD2-892-WH	26.0	21.0	57.0	2 pcs.	IT50RD	2,500 pcs.	White (WH)	596-12257
TAG28-16TD1-892-WH	28.0	16.0	34.0	1 pc.	IT1, IMP2	2,500 pcs.	White (WH)	596-12258
TAG43-16TD1-892-WH	43.0	16.0	50.0	1 pc.	IMP2.5	2,500 pcs.	White (WH)	596-12259
TAG43-21TD1-892-WH	43.0	21.0	50.0	1 pc.	IT50RT	2,500 pcs.	White (WH)	596-12260
TAG43-41TD1-892-WH	43.0	41.0	50.0	1 pc.	IMP2.5W1.75	1,000 pcs.	White (WH)	596-12261
TAG52-10TD1-892-WH	52.0	10.0	58.0	1 pc.	IT50L	5,000 pcs.	White (WH)	596-12262
TAG63TD1-892-WH	63.5	38.1	70.0	1 pc.	QT7040R, QT7040S	1,000 pcs.	White (WH)	596-12263
TAG68-16TD1-892-WH	68.0	16.0	74.0	1 pc.	IMP3.5, QT7016R	2,500 pcs.	White (WH)	596-12264
TAG102-64TD1-892-WH	102.0	64.0	106.0	1 pc.	QT10065R	250 pcs.	White (WH)	596-12265

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-497

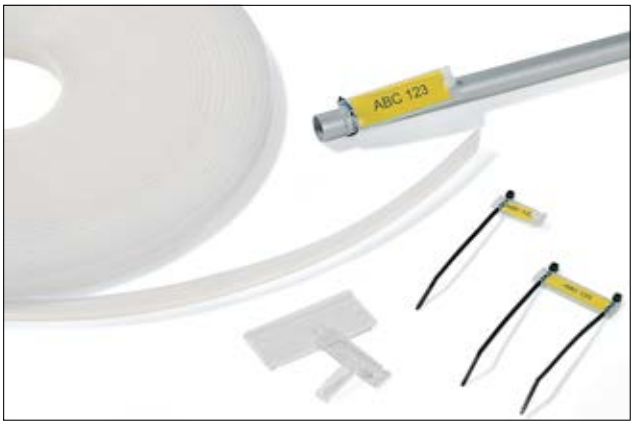
Carrier marking system, laser printer

Helafix HC and HCR Carriers

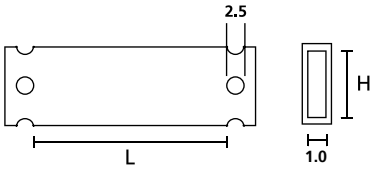
Marking of cable looms, cables, pipes, transport systems, valves, sensors, for inventory marking on machines or other parts.

Features and benefits

- Versatile transparent carriers for HFX labels used for temporary or permanent marking
- Fixed in place using T18 series cable ties, screws or rivets (carrier HC06, no rivet hole)
- Protects inserted HFX label against damp, dirt, damage and UV radiation
- Helafix HC supplied as cut lengths in bags, pre-cut and pre-punched rivet hole (carrier HC06 has no punched hole)
- Helafix HCR supplied in continuous tube format and can be cut to size with HCT tool
- Helafix HFX labels designed to fit into HC and HCR carriers



Multi-purpose identification potential: Helafix HC and HCR.



MATERIAL	Polyethylene, UV Resistant (PEUV)
Operating Temperature	-60 °C to +65 °C
Flammability	UL 94 HB
Chem. Material Properties	Resistance to UV light, water and a variety of solvents.

HF ✓ RoHS ✓

TYPE	Length (L)	Height (H)	Reel Length	Pack Cont.	Recommended Labels	Tools	Article-No.
HCR06	-	7.0	25 m	25 m	-	-	525-07003
HCR09	-	10.0	25 m	25 m	HFX9	50	525-10003
HCR12	-	13.0	25 m	25 m	HFX12	51	525-13003
HCR18	-	19.0	25 m	25 m	-	-	525-19003
HCR24	-	25.0	25 m	25 m	-	-	525-25003
HC06-17	17.5	7.0	-	50 pcs.	-	-	525-07173
HC09-17	17.5	10.0	-	50 pcs.	HFX9-17P	-	525-10173
HC12-17	17.5	13.0	-	50 pcs.	-	-	525-13173
HC06-35	35.0	7.0	-	50 pcs.	-	-	525-07353
HC09-35	35.0	10.0	-	50 pcs.	HFX9-35P	-	525-10353
HC12-35	35.0	13.0	-	50 pcs.	HFX12-35P	-	525-13353
HC18-35	35.0	19.0	-	50 pcs.	-	-	525-19353
HC09-52	52.0	10.0	-	50 pcs.	HFX9-52P	-	525-10523
HC12-52	52.0	13.0	-	50 pcs.	HFX12-52P	-	525-13523
HC18-52	52.0	19.0	-	50 pcs.	-	-	525-19523
HC24-52	52.0	25.0	-	50 pcs.	-	-	525-25523
HC12-70	70.0	13.0	-	50 pcs.	-	-	525-13703
HC18-70	70.0	19.0	-	50 pcs.	-	-	525-19703
HC24-70	70.0	25.0	-	50 pcs.	-	-	525-25703

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	50 HCT1	51 HCT2
	571	571

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-498

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Carrier marking system, laser printer

Helafix HFX Labels

Use marking pen T82 or print the labels with laser printer. For indoor use in bundle applications in machines, panel building or wherever flexible self marked marking is needed.

Features and benefits

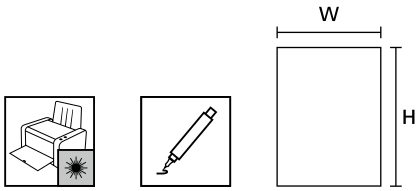
- Laser printable non-adhesive labels for Helafix carrier strip (HC and HCR) range
- Every sheet in two colours (front yellow, back white)
- A4 format
- Simple and efficient label design and printing with TagPrint Pro software
- Mark manually with T82 series indelible markers pens
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word



A precise match for Helafix, for permanent identification coding.

MATERIAL	Polyester (SP)
Operating Temperature	-70 °C to +125 °C
Chem. Material Properties	Resistance to a variety of solvents. Good UV light resistance.

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Colour	Article-No.
HFX9-17P	17.5	9.0	319 pcs.	20 pcs.	Yellow (YE), White (WH)	526-01014
HFX9-35P	35.0	9.0	145 pcs.	20 pcs.	Yellow (YE), White (WH)	526-01514
HFX12-35P	35.0	12.0	110 pcs.	20 pcs.	Yellow (YE), White (WH)	526-01714
HFX9-52P	52.5	9.0	124 pcs.	20 pcs.	Yellow (YE), White (WH)	526-02014
HFX12-52P	52.5	12.0	92 pcs.	20 pcs.	Yellow (YE), White (WH)	526-02214
HFX12-105P	105.0	12.0	44 pcs.	20 pcs.	Yellow (YE), White (WH)	526-02514
HFX24-105P	105.0	24.0	22 pcs.	20 pcs.	Yellow (YE), White (WH)	526-03014
HFX12-210P	210.0	12.0	22 pcs.	20 pcs.	Yellow (YE), White (WH)	526-05014
HFX24-210P	210.0	24.0	11 pcs.	20 pcs.	Yellow (YE), White (WH)	526-05514

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-499

Labels for control panel identification, thermal transfer

Helatag 880, removable

Helatag 1211

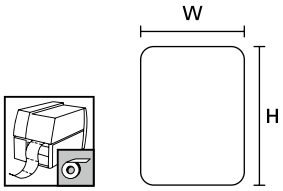
These labels are suitable for the permanent identification of components and preassembled units within electrical industry as well as asset identification. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. They can also be used in the design and setup as well as in the repair and expansion of control cabinets and control units. Due to the structure of the vinyl label they are suitable for rougher surfaces.

Features and benefits

- Suited to labelling electrical panels
- Where high label visibility is required
- Partially suitable for critical surfaces
- Rounded corners ensure better long term durability of adhesion



Switchgear application.



MATERIAL	Type 880, Vinyl (880)
Operating Temperature	-40 °C to +80 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	80 µm
Chem. Material Properties	Good resistance to water, oil and most solvents.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS

MATERIAL	Type 1211, Vinyl, yellow gloss (1211)
Operating Temperature	-20 °C to +80 °C
Curing Temperature	from +5 °C
Adhesive	Acrylic
Thickness of Foil	84 µm
Chem. Material Properties	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG15-09TE-880-YE	15.0	9.0	89.0	5 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12174
TAG16-06TE-880-YE	16.5	6.0	101.6	5 pcs.	20,000 pcs.	Yellow matt (MTYE)	596-12172
TAG19-11TE-880-YE	19.0	11.0	89.0	4 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12175
TAG20-08TE-880-YE	20.0	8.0	101.6	4 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12173
TAG38-11TE-880-YE	38.0	11.0	85.1	2 pcs.	5,000 pcs.	Yellow matt (MTYE)	596-12176
TAG56-22TE-880-YE	56.0	22.0	62.0	1 pc.	2,000 pcs.	Yellow matt (MTYE)	596-12177

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG15-09TE-1211-YE	15.0	9.0	89.0	5 pcs.	10,000 pcs.	Yellow gloss (GSYE)	596-21211
TAG16-06TE-1211-YE	16.5	6.0	101.6	5 pcs.	20,000 pcs.	Yellow gloss (GSYE)	596-01211
TAG20-08TE-1211-YE	20.0	8.0	101.6	4 pcs.	10,000 pcs.	Yellow gloss (GSYE)	596-11211
TAG38-11TE-1211-YE	38.0	11.0	85.1	2 pcs.	5,000 pcs.	Yellow gloss (GSYE)	596-41211
TAG56-22TE-1211-YE	56.0	22.0	62.0	1 pc.	2,000 pcs.	Yellow gloss (GSYE)	596-51211

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-500

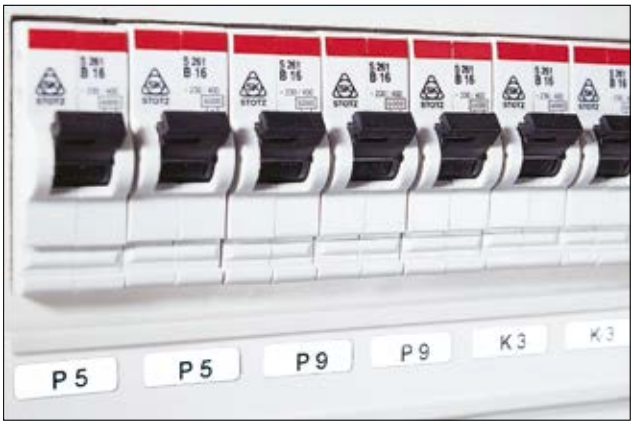
Labels for control panel identification, thermal transfer

Helatag 1216 (White) for rough surfaces

These labels are suitable for the permanent identification of components and preassembled units within electrical industry as well as asset identification. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. They can also be used in the design and setup as well as in the repair and expansion of control cabinets and control units.

Features and benefits

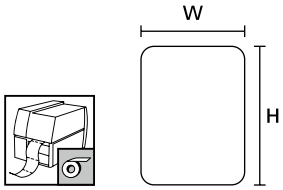
- Suited to labelling electrical panels
- White labels give excellent contrast
- Also suitable for critical surfaces
- Rounded corners ensure better long term durability of adhesion



Clear and permanent identification.

MATERIAL	Type 1216, Polyethylene, white (1216)
Operating Temperature	-30 °C to +80 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	105 µm
Chem. Material Properties	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG05-08TC-1216-WH	5.0	8.0	85.0	16 pcs.	25,000 pcs.	White (WH)	596-12147
TAG05-15TC-1216-WH	5.0	15.0	85.0	16 pcs.	25,000 pcs.	White (WH)	596-12151
TAG06-10TC-1216-WH	6.0	10.0	85.0	13 pcs.	25,000 pcs.	White (WH)	596-12149
TAG08-15TC-1216-WH	8.0	15.0	85.0	10 pcs.	25,000 pcs.	White (WH)	596-12152

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-501

Labels for control panel identification, laser printer

Helatag 1102 (Yellow)

These yellow labels come in various sizes and are ideal for marking flat surfaces inside control panels to ensure easy wire and cable management. The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's TagPrint Pro software so label design including barcodes or logos has been made easy even with office printers.

Features and benefits

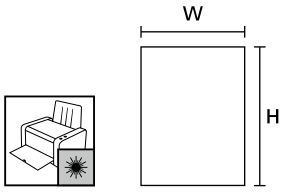
- Yellow rating labels for component marking and control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Clearly identified labels ensure easy network wire and cable management.

MATERIAL	Type 1102, Polyester, yellow (1102)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	55 µm
Chem. Material Properties	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG122LA4-1102-YE	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	Yellow (YE)	594-21102
TAG120LA4-1102-YE	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-01102
TAG154LA4-1102-YE	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	Yellow (YE)	594-51102
TAG124LA4-1102-YE	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	Yellow (YE)	594-41102
TAG13LA4-1102-YE	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	Yellow (YE)	594-31102
TAG121LA4-1102-YE	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	Yellow (YE)	594-11102
TAG62LA4-1102-YE	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	Yellow (YE)	594-81102

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-502

Labels for control panel identification, laser printer

Helatag 1101 (White)

These white labels come in various sizes and are ideal for marking flat surfaces inside control panels to ensure easy wire and cable management. The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's TagPrint Pro software so label design including barcodes or logos has been made easy even with office printers.

Features and benefits

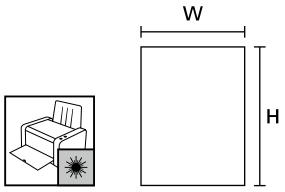
- White rating labels for component marking as well as for control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Clearly identified labels ensure easy network wire and cable management.

MATERIAL	Type 1101, Polyester, white (1101)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	55 µm
Chem. Material Properties	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1101-WH	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-81101
TAG122LA4-1101-WH	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	White (WH)	594-31101
TAG120LA4-1101-WH	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-11101
TAG11LA4-1101-WH	16.5	5.1	605 pcs.	17 pcs.	10,000 pcs.	White (WH)	594-01101
TAG154LA4-1101-WH	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	White (WH)	594-61101
TAG124LA4-1101-WH	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	White (WH)	594-11017
TAG13LA4-1101-WH	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	White (WH)	594-41101
TAG121LA4-1101-WH	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	White (WH)	594-21101
TAG155LA4-1101-WH	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	White (WH)	594-71101
TAG15LA4-1101-WH	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	White (WH)	594-91101
TAG162LA4-1101-WH	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	White (WH)	594-11010

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-503

Cotton cloth labels, manual marking

HELASIGN, Material 270 (Yellow), Booklet

These handwritten labels are made of yellow fabric and have been designed for fast on-site identification of component parts, switching devices and other operating equipment. The synthetic rubber adhesive allows the easy removal or repositioning of the label when needed. For professional handwriting we recommend the marking pen T82, equipped with a fast-drying and UV-resistant ink.

Features and benefits

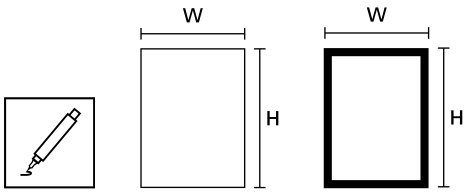
- Yellow fabric adhesive labels
- Supplied in handy pocket-sized booklets
- Booklet cover protects labels when stored
- Easily remove or reposition labels as required
- No sticky residue on removal
- Labels available with or without black border
- Also suitable for difficult surfaces
- Use T82 marker pen for market leading mark endurance



Always on hand: Labels in a convenient, pocket sized and lightweight booklet.

MATERIAL	Type 270, Cotton cloth, yellow (270)
Operating Temperature	-29 °C to +80 °C
Curing Temperature	from +10 °C
Adhesive	Synthetic rubber
Thickness of Foil	150 µm
Chem. Material Properties	Good resistance to water, oils and most solvents, alcohols and gasoline.

RoHS



TYPE	Drawing	Width (W)	Height (H)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG120B-270-YE		15.0	6.0	105 pcs.	1,050 pcs.	Yellow (YE)	598-12027
TAG122B-270-YE		15.0	9.0	70 pcs.	700 pcs.	Yellow (YE)	598-12227
TAG124B-270-YE		19.0	11.0	44 pcs.	440 pcs.	Yellow (YE)	598-12427
TAG121B-270-YE		20.0	8.0	60 pcs.	600 pcs.	Yellow (YE)	598-12127
TAG122FB-270-YE		15.0	9.0	70 pcs.	700 pcs.	Yellow (YE)	598-92227
TAG124FB-270-YE		19.0	11.0	44 pcs.	440 pcs.	Yellow (YE)	598-92427
TAG121FB-270-YE		20.0	8.0	60 pcs.	600 pcs.	Yellow (YE)	598-92127
TAG125FB-270-YE		38.0	11.0	22 pcs.	220 pcs.	Yellow (YE)	598-92527

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-504

Panel plate labels, thermal transfer

Helatag 1220 (White)

Panel labels are durable adhesive labels especially made from a thick material that is designed to replace traditional engraved plastic plates. The white glossy colour is suited to industrial control panels, switchgear, data racks and general equipment labelling. Create crisp and clear professional looking labels by printing with HellermannTyton thermal transfer printers and ribbons.

Simple label design creation is easily achieved using TagPrint Pro.

Features and benefits

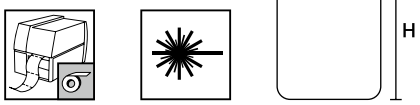
- Cost-effective replacement for engraved plastic plates, no need for additional label holder
- High performance adhesive and compressible foam backing ensures optimal adhesion to uneven surfaces if required
- Rounded corners ensure better long term durability of adhesion
- Print high contrast text and barcodes
- Print 'On Site' not order 'Off Site'
- Special sizes and colours are possible on request
- For outstanding chemical resistance use TT122OUT



Panel labels Helatag 1220 – high performance adhesive ensures optimal adhesion to uneven surfaces.

MATERIAL	Type 1220, Polyester, white (1220)
Operating Temperature	-40 °C to +90 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	50 µm
Chem. Material Properties	Excellent resistance to aging, weathering and UV-radiation. Extensive resistance to the influence of chemicals and solvents.
Recommended Ribbon Type	TT122OUT, TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG13-07TDK1-1220-WH	13.0	7.0	21.0	1 pc.	1,000 pcs.	White (WH)	596-00560
TAG22-22TDK1-1220-WH	22.0	22.0	28.0	1 pc.	1,000 pcs.	White (WH)	596-00561
TAG27-08TDK1-1220-WH	27.0	8.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00562
TAG27-12.5TDK1-1220-WH	27.0	12.5	33.0	1 pc.	1,000 pcs.	White (WH)	596-00558
TAG27-15TDK1-1220-WH	27.0	15.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00563
TAG27-18TDK1-1220-WH	27.0	18.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00564
TAG27-27TDK1-1220-WH	27.0	27.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00565
TAG35-18TDK1-1220-WH	35.0	18.0	41.0	1 pc.	1,000 pcs.	White (WH)	596-00566
TAG45-15TDK1-1220-WH	45.0	15.0	51.0	1 pc.	1,000 pcs.	White (WH)	596-00567
TAG45-25TDK1-1220-WH	45.0	25.0	51.0	1 pc.	1,000 pcs.	White (WH)	596-00568
TAG60-30TDK1-1220-WH	60.0	30.0	66.0	1 pc.	500 pcs.	White (WH)	596-00569
TAG90-45TDK1-1220-WH	90.0	45.0	96.0	1 pc.	500 pcs.	White (WH)	596-00570
TAG100-30TDK1-1220-WH	100.0	30.0	106.0	1 pc.	250 pcs.	White (WH)	596-00571
TAG100-70TDK1-1220-WH	100.0	70.0	106.0	1 pc.	250 pcs.	White (WH)	596-00572

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-505

Panel plate labels, thermal transfer

Helatag 1221 (Silver)

Panel labels are durable adhesive labels especially made from a thick material that is designed to replace traditional engraved plastic plates. The silver colour is suited to industrial control panels, switchgear, data racks and general equipment labelling.

Create crisp and clear professional looking labels by printing with HellermannTyton thermal transfer printers and ribbons.

Simple label design creation is easily achieved using TagPrint Pro.

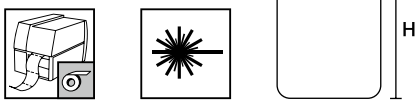
Features and benefits

- Cost-effective replacement for engraved plastic plates, no need for additional label holder
- High performance adhesive and compressible foam backing ensures optimal adhesion to uneven surfaces if required
- Rounded corners ensure better long term durability of adhesion
- Print high contrast text and barcodes
- Print 'On Site' not order 'Off Site'
- Special sizes and colours are possible on request
- For outstanding chemical resistance use TT122OUT



Panel labels are an ideal replacement for engraved plates.

MATERIAL	Type 1221, Polyester, silver (1221)
Operating Temperature	-40 °C to +90 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	50 µm
Chem. Material Properties	Excellent resistance to aging, weathering and UV-radiation. Extensive resistance to the influence of chemicals and solvents.
Recommended Ribbon Type	TT122OUT, TT822OUT
Thermal Transfer Printer	TT431, TT4030



RoHS

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG13-07TDK1-1221-SR	13.0	7.0	21.0	1 pc.	1,000 pcs.	Silver (SR)	596-00573
TAG22-22TDK1-1221-SR	22.0	22.0	28.0	1 pc.	1,000 pcs.	Silver (SR)	596-00574
TAG27-08TDK1-1221-SR	27.0	8.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00575
TAG27-12.5TDK1-1221-SR	27.0	12.5	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00576
TAG27-15TDK1-1221-SR	27.0	15.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00577
TAG27-18TDK1-1221-SR	27.0	18.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00578
TAG27-27TDK1-1221-SR	27.0	27.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00579
TAG35-18TDK1-1221-SR	35.0	18.0	41.0	1 pc.	1,000 pcs.	Silver (SR)	596-00580
TAG45-15TDK1-1221-SR	45.0	15.0	51.0	1 pc.	1,000 pcs.	Silver (SR)	596-00581
TAG45-25TDK1-1221-SR	45.0	25.0	51.0	1 pc.	1,000 pcs.	Silver (SR)	596-00582
TAG60-30TDK1-1221-SR	60.0	30.0	66.0	1 pc.	500 pcs.	Silver (SR)	596-00583
TAG90-45TDK1-1221-SR	90.0	45.0	96.0	1 pc.	500 pcs.	Silver (SR)	596-00584
TAG100-30TDK1-1221-SR	100.0	30.0	106.0	1 pc.	250 pcs.	Silver (SR)	596-00585
TAG100-70TDK1-1221-SR	100.0	70.0	106.0	1 pc.	250 pcs.	Silver (SR)	596-00586

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-506

Type label identification, thermal transfer

Helatag 1204

This silver-matt label is scratch-resistant and is ideal for usage as identification or name plate in industrial environments. The high temperature range suits a wide range of applications on flat surfaces. The adhesive is also suitable for critical surfaces like plastic and paint.

Designing and printing labels is simple and users can quickly print out professional labels in a matter of moments when using TagPrint Pro labelling software.

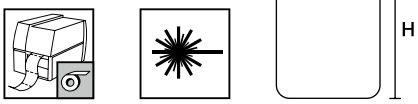
Features and benefits

- Replacement option for aluminium plates
- For applications on flat surfaces
- Allows the identification on critical surfaces, e.g. paints and plastic variants
- Print labels with customer unique references
- Use text, graphics and barcodes as required



Professional type plate on a heating unit.

MATERIAL	Type 1204, Polyester (1204)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	53 µm
Chem. Material Properties	Excellent resistance to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030



HF ✓ RoHS ✓

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1204-SR	12.7	11.1	101.6	6 pcs.	15,000 pcs.	Silver matt (SR)	596-12071
TAG13TD4-1204-SR	19.1	6.4	101.6	4 pcs.	10,000 pcs.	Silver matt (SR)	596-12043
TAG34TD3-1204-SR	25.4	9.5	85.1	3 pcs.	7,500 pcs.	Silver matt (SR)	596-34120
TAG15TD3-1204-SR	25.4	12.7	85.1	3 pcs.	7,500 pcs.	Silver matt (SR)	596-12045
TAG35TD3-1204-SR	31.8	9.5	101.6	3 pcs.	7,500 pcs.	Silver matt (SR)	596-12035
TAG17TD2-1204-SR	38.1	6.4	85.1	2 pcs.	5,000 pcs.	Silver matt (SR)	596-12047
TAG27TD2-1204-SR	38.1	19.1	85.1	2 pcs.	5,000 pcs.	Silver matt (SR)	596-27120
TAG67TD2-1204-SR	38.1	31.8	85.1	2 pcs.	1,000 pcs.	Silver matt (SR)	596-12067
TAG69TD2-1204-SR	40.6	22.9	89.0	2 pcs.	2,500 pcs.	Silver matt (SR)	596-12069
TAG77TD1-1204-SR	50.8	22.9	55.0	1 pc.	2,000 pcs.	Silver matt (SR)	596-12077
TAG73TD1-1204-SR	50.8	25.4	55.0	1 pc.	2,000 pcs.	Silver matt (SR)	596-73124
TAG66TD1-1204-SR	50.8	36.5	56.8	1 pc.	1,000 pcs.	Silver matt (SR)	596-12066
TAG63TD1-1204-SR	63.5	38.1	70.0	1 pc.	1,000 pcs.	Silver matt (SR)	596-12063
TAG76TD1-1204-SR	63.5	50.8	70.0	1 pc.	500 pcs.	Silver matt (SR)	596-12076
TAG72TD1-1204-SR	69.9	31.8	76.0	1 pc.	1,000 pcs.	Silver matt (SR)	596-12072

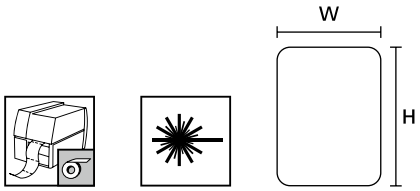
All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-507

Type label identification, thermal transfer

Helatag 1204



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG65TD1-1204-SR	76.2	36.5	82.0	1 pc.	1,000 pcs.	Silver matt (SR)	596-12065
TAG62TD1-1204-SR	76.2	50.8	82.0	1 pc.	500 pcs.	Silver matt (SR)	596-12062
TAG64TD1-1204-SR	88.9	36.5	95.0	1 pc.	1,000 pcs.	Silver matt (SR)	596-12064
TAG97TD1-1204-SR	101.6	74.0	106.0	1 pc.	500 pcs.	Silver matt (SR)	596-71204
TAGR3TD1-1204-SR	104.0	-	108.0	1 pc.	75.0 m	Silver matt (SR)	596-31204
TAG02TD1-1204-SR	104.0	12.0	104.0	1 pc.	5,000 pcs.	Silver matt (SR)	596-21204

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Asset identification label, thermal transfer

Helatag 1206

This label is scratch-resistant and is ideal for usage as identification or name plate in industrial environments. The high temperature range suits a wide range of applications on flat surfaces. The adhesive is also suitable for critical surfaces like plastic and paint.

Designing and printing labels is simple and users can quickly print out professional labels in a matter of moments when using TagPrint Pro labelling software.

Features and benefits

- Ideal for machinery operating in high temperature areas (up to +150 °C)
- For applications on flat surfaces
- Chemical resistant polyester foil
- For permanent and ageing-resistant identification
- Barcodes and alphanumeric text remain pin sharp on this high quality material



Helatag label for a permanent asset identification.

MATERIAL	Type 1206, Polyester (1206)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	50 µm
Chem. Material Properties	Excellent resistance to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

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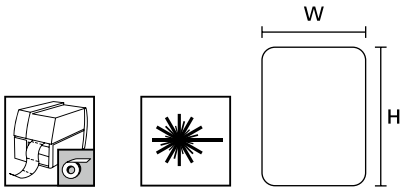
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Add items to your watchlist!
www.HT.click/49-508

Date of issue: September 2022

Asset identification label, thermal transfer

Helatag 1206



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1206-WH	12.7	11.1	101.6	6 pcs.	15,000 pcs.	White gloss (GSWH)	596-12671
TAG13TD4-1206-WH	19.1	6.4	101.6	4 pcs.	10,000 pcs.	White gloss (GSWH)	596-12061
TAG16TD3-1206-WH	22.9	6.4	80.0	3 pcs.	10,000 pcs.	White gloss (GSWH)	596-12616
TAG61TD3-1206-WH	25.4	4.8	89.0	3 pcs.	10,000 pcs.	White gloss (GSWH)	596-12661
TAG01TD3-1206-WH	25.4	6.4	89.0	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-01120
TAG34TD3-1206-WH	25.4	9.5	85.1	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12634
TAG15TD3-1206-WH	25.4	12.7	85.1	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12615
TAG31TD3-1206-WH	25.4	19.1	85.1	3 pcs.	5,000 pcs.	White gloss (GSWH)	596-12631
TAG35TD3-1206-WH	31.8	9.5	101.6	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12635
TAG17TD2-1206-WH	38.1	6.4	85.1	2 pcs.	5,000 pcs.	White gloss (GSWH)	596-12617
TAG27TD2-1206-WH	38.1	19.1	85.1	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12627
TAG67TD2-1206-WH	38.1	31.8	85.1	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12667
TAG69TD2-1206-WH	40.6	22.9	89.0	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12669
TAG77TD1-1206-WH	50.8	22.9	55.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-71206
TAG73TD1-1206-WH	50.8	25.4	55.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-12673
TAG68TD1-1206-WH	63.5	25.4	69.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-12668
TAG63TD1-1206-WH	63.5	38.1	70.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12663
TAG76TD1-1206-WH	63.5	50.8	70.0	1 pc.	500 pcs.	White gloss (GSWH)	596-61206
TAG4TD1-1206-WH	65.0	20.0	70.0	1 pc.	2,500 pcs.	White gloss (GSWH)	596-41206
TAG72TD1-1206-WH	69.9	31.8	76.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12672
TAG65TD1-1206-WH	76.2	36.5	82.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12665
TAG62TD1-1206-WH	76.2	50.8	82.0	1 pc.	500 pcs.	White gloss (GSWH)	596-12662
TAG64TD1-1206-WH	88.9	36.5	95.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12664

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-509

Type label identification, laser printer

Helatag 1103 (Silver)

These silver labels come in various sizes and are ideal for the identification of industrial assets.

The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's TagPrint Pro software so label design including barcodes or logos has been made easy even with office printers.

Features and benefits

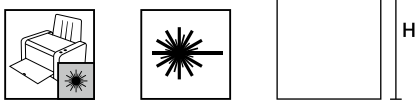
- Matt-silver rating labels for component marking
- For use on flat and smooth surfaces
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available fromwww.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Highly visible and clearly printed labels identify quality assets.

MATERIAL	Type 1103, Polyester, silver (1103)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	53 µm
Chem. Material Properties	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

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TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG155LA4-1103-SR	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	Silver (SR)	594-01103
TAG15LA4-1103-SR	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	Silver (SR)	594-11103
TAG162LA4-1103-SR	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	Silver (SR)	594-21103
TAG165LA4-1103-SR	48.3	21.2	52 pcs.	20 pcs.	1,000 pcs.	Silver (SR)	594-31103
TAG169LA4-1103-SR	48.3	33.9	32 pcs.	32 pcs.	1,000 pcs.	Silver (SR)	594-41103
TAG170LA4-1103-SR	63.5	33.9	24 pcs.	21 pcs.	500 pcs.	Silver (SR)	594-51103
TAG171LA4-1103-SR	210.0	297.0	1 pc.	25 pcs.	25 pcs.	Silver (SR)	594-61103

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-510

Type label identification, laser printer

Helatag 1102 (Yellow)

These yellow labels come in various sizes and are ideal for the identification of industrial assets.

The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's TagPrint Pro software so label design including barcodes or logos has been made easy even with office printers.

Features and benefits

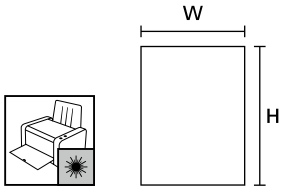
- Yellow rating labels for component marking and control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Optimal print results with a range of office laser printers.

MATERIAL	Type 1102, Polyester, yellow (1102)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	55 µm
Chem. Material Properties	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1102-YE	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-61102
TAG122LA4-1102-YE	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	Yellow (YE)	594-21102
TAG120LA4-1102-YE	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-01102
TAG154LA4-1102-YE	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	Yellow (YE)	594-51102
TAG124LA4-1102-YE	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	Yellow (YE)	594-41102
TAG13LA4-1102-YE	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	Yellow (YE)	594-31102
TAG121LA4-1102-YE	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	Yellow (YE)	594-11102
TAG62LA4-1102-YE	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	Yellow (YE)	594-81102
TAG171LA4-1102-YE	210.0	297.0	1 pc.	25 pcs.	25 pcs.	Yellow (YE)	594-71102

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-511

Type label identification, laser printer

Helatag 1101 (White)

Used where clarity of print is most important and is ideally suited for printing barcodes and high definition graphics.

A range of sizes and materials are available to suit most cable marking and asset identification needs.

For problem-free printing, we recommend our easy to use windows based TagPrint Pro software program, which comes pre-loaded with all our standard label templates so you can start producing labels immediately.

Features and benefits

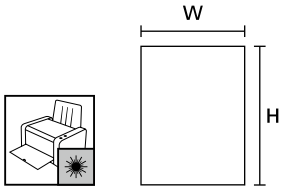
- White rating labels for component marking as well as for control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from www.HellermannTyton.com/templates for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Helatag label for permanent asset identification.

MATERIAL	Type 1101, Polyester, white (1101)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C
Adhesive	Acrylic
Thickness of Foil	55 µm
Chem. Material Properties	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

HF ✓ RoHS ✓



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1101-WH	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-81101
TAG122LA4-1101-WH	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	White (WH)	594-31101
TAG120LA4-1101-WH	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-11101
TAG11LA4-1101-WH	16.5	5.1	605 pcs.	17 pcs.	10,000 pcs.	White (WH)	594-01101
TAG154LA4-1101-WH	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	White (WH)	594-61101
TAG124LA4-1101-WH	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	White (WH)	594-11017
TAG13LA4-1101-WH	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	White (WH)	594-41101
TAG121LA4-1101-WH	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	White (WH)	594-21101
TAG155LA4-1101-WH	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	White (WH)	594-71101
TAG15LA4-1101-WH	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	White (WH)	594-91101
TAG62LA4-1101-WH	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	White (WH)	594-11016
TAG162LA4-1101-WH	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	White (WH)	594-11010
TAG150LA4-1101-WH	48.3	8.5	132 pcs.	19 pcs.	2,500 pcs.	White (WH)	594-51101
TAG163LA4-1101-WH	48.3	12.7	88 pcs.	29 pcs.	2,500 pcs.	White (WH)	594-11011
TAG165LA4-1101-WH	48.3	21.2	52 pcs.	20 pcs.	1,000 pcs.	White (WH)	594-11012
TAG169LA4-1101-WH	48.3	33.9	32 pcs.	32 pcs.	1,000 pcs.	White (WH)	594-11013
TAG170LA4-1101-WH	63.5	33.9	24 pcs.	21 pcs.	500 pcs.	White (WH)	594-11014
TAG171LA4-1101-WH	210.0	297.0	1 pc.	25 pcs.	25 pcs.	White (WH)	594-11015

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-512

Date of issue: September 2022

Warehouse and pipe labelling, thermal transfer

Helatag 1213

These coloured labels are used to identify storage systems with barcode and location information. They are also suitable for general marking of parts and components, samples and blocked goods in quality assurance, storage boxes and barrels.

Features and benefits

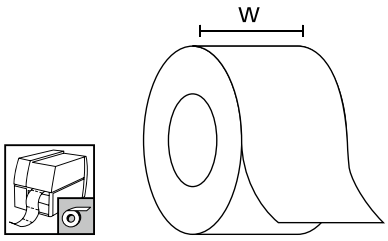
- Pipe, warehouse and shelving label
- Supplied on a continuous roll and cut by hand or automated with printer cutters
- Also for rough surfaces
- Good resistance in outdoor applications



Large and highly visible pipe marking.

MATERIAL	Type 1213, Vinyl, glossy colours (1213)
Operating Temperature	-40 °C to +90 °C
Curing Temperature	from +8 °C
Adhesive	Acrylic
Thickness of Foil	95 µm
Chem. Material Properties	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.

RoHS



TYPE	Width (W)	Pack Cont.	Colour	Article-No.
TAGR4TD1-1213-YE	25.0	50 m	Yellow gloss (GSYE)	596-03103
TAG108TD1-1213-BU	40.0	50 m	Blue (BU)	596-12181
TAG108TD1-1213-GN	40.0	50 m	Green (GN)	596-12166
TAG108TD1-1213-GY	40.0	50 m	Grey (GY)	596-12188
TAG108TD1-1213-PK	40.0	50 m	Pink (PK)	596-00971
TAG108TD1-1213-YE	40.0	50 m	Yellow gloss (GSYE)	596-12167
TAGR1TD-1213-GN	101.6	50 m	Green (GN)	596-12170
TAGR1TD-1213-RD	101.6	50 m	Red (RD)	596-12168
TAGR1TD-1213-WH	101.6	50 m	White gloss (GSWH)	596-12171
TAGR1TD-1213-YE	101.6	50 m	Yellow gloss (GSYE)	596-12169

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-513

Cable ties with integrated RFID transponder

T50RFID – Low frequency (LF) and high frequency (HF), blank

RFID cable ties provide an innovative solution for clear and rapid product identification. The nylon cable ties are equipped with an RFID transponder and therefore combine the numerous advantages of a regular cable tie with RFID technology. The ties are especially suited for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

Features and benefits

- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Low frequency (LF – 125 kHz) - Read only
- High frequency (HF – 13.56 MHz) - Rewritable

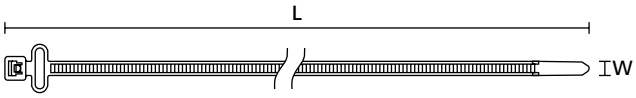
www.HellermannTyton.co.uk/RFID-cat22



T50RFID – cable ties with RFID transponder.

MATERIAL	Polyamide 6.6 (PA66)	Polyamide 6.6, UV-resistant (PA66W)
Frequency	125 kHz (LF)	13.56 MHz (HF)
Idle Temperature	-40 °C to +85 °C	
Operating Temperature	-40 °C to +85 °C	-25 °C to +85 °C
Flammability	UL 94 V2	

HF RoHS



T50RFID, MCTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	N	Colour	Pack Cont.	Material	Tools	Article-No.
T50RFIDCLA	125 kHz (LF)	1.5	50.0	4.6	200.0	225	Yellow (YE)	100 pcs.	PA66	5;25	111-01638
T50RFIDCHA	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Yellow (YE)	100 pcs.	PA66	5;25	111-01639
	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Black (BK)	100 pcs.	PA66	5;25	111-01591
	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Black (BK)	100 pcs.	PA66W	5;25	111-02406
	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Light Blue (LTBU)	100 pcs.	PA66	5;25	111-01673

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

N = Minimum Loop Tensile Strength for Cable Ties (newton)

Recommended Tools		
	5 EVO7i	25 EVOcut
	553	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-514

Detectable cable ties with integrated RFID transponder

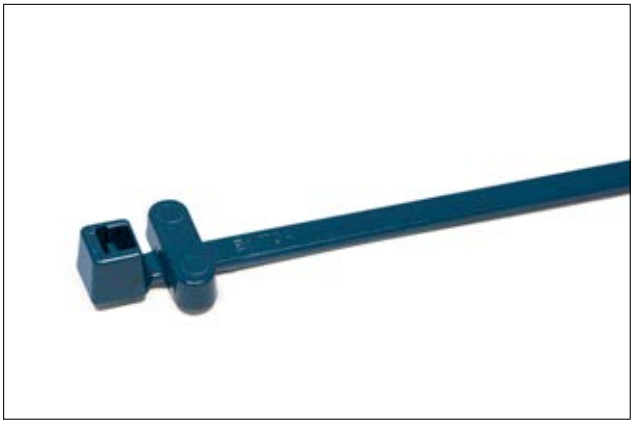
MCTRFID – Low frequency (LF) and high frequency (HF), blank

HellermannTyton has developed a range of nylon and metal identification cable ties with RFID tag to enable users to easily fix the RFID tag to equipment that needs to carry a serial number for tracking and identification purposes.

The products are provided to clients in the following areas: utility companies, healthcare, food processing, agriculture, hire shops and companies carrying out servicing and calibration.

Features and benefits

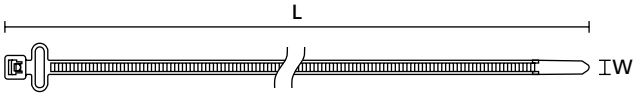
- Magnetic or X-Ray detectable RFID cable ties (detection level depending on specific application)
- Total metal dispersion throughout the tie
- For safe handling of production processes
- Blue colour for easy visual detection
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Low frequency (LF – 125 kHz) - Read only
- High frequency (HF – 13.56 MHz) - Rewritable



MCTRFID – detectable cable ties (metal content) with RFID transponder.

MATERIAL	Polyamide 6.6, with metal particles (PA66MP)	
Frequency	125 kHz (LF)	13.56 MHz (HF)
Idle Temperature	-40 °C to +85 °C	
Operating Temperature	-40 °C to +85 °C	-25 °C to +85 °C
Flammability	UL 94 HB	

HF ✓ RoHS ✓



T50RFID, MCTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	N	Colour	Pack Cont.	Tools	Article-No.
MCTRFIDCLA	125 kHz (LF)	1.5	50.0	4.6	200.0	225	Blue (BU)	100 pcs.	5;25	111-01976
MCTRFIDCHA	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Blue (BU)	100 pcs.	5;25	111-01676

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

Recommended Tools		
	5 EVO7i	25 EVOcut
	553	563

For more information on toolings please refer to the Application Tooling chapter.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-515

Cable ties with RFID transponder

Flag-head cable ties with RFID transponder – Ultra high frequency (UHF)

RFID cable ties provide an innovative solution for clear and rapid product identification. The ties are especially suited for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines. Bulk detection of up to 500 transponders per second using the UHF frequency, offering long read distances giving you a faster solution to manage your assets.

Features and benefits

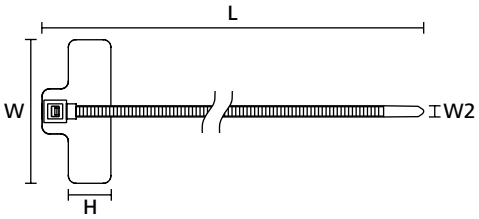
- Identification element with integrated RFID transponder
- UHF RFID Frequency - 865-868 Mhz
- Rewritable memory
- Clear identification of objects and / or locations through unique numbering systems
- 200 x 4.6mm cable tie
- robust and durable
- UHF chipset:512 bit
- ISO/IEC 18000-6C EPC Class1 Gen2
- Read range: 1-1.5 meters
- Bulk detection of up to 500 transponders per second using the UHF frequency.
- Faster and more secure and error free data management



Cable tie with UHF transponder.

MATERIAL	Thermoplastic Polyurethane (TPU), Polyamide 6.6 (PA66)
Frequency	865-868 MHz (UHF)
Idle Temperature	-25 °C to +80 °C
Operating Temperature	-25 °C to +80 °C

HF ✓ RoHS ✓



T50RFIDUHF

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Width (W2)	Length (L)	Height (H)	N	Colour	Pack Cont.	Material	Tools	Article-No.
T50RFIDUHF	865-868 MHz (UHF)	1.5	50.0	54.0	4.6	200.0	10.0	110	White (WH), Black (BK)	100 pcs.	TPU, PA66	5;25	111-02508

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

Recommended Tools		
	5 EVO7i	25 EVOcut
	553	563

For more information on toolings please refer to the Application Tooling chapter.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-516

Stainless steel ties with RFID transponder

MBTRFID – High frequency (HF) and ultra high frequency (UHF), blank

Stainless steel RFID cable ties are fitted with a slide-on carrier for a high frequency (HF) or an ultra-high frequency (UHF) RFID transponder. These ties are ideal for product identification in all areas of harsh environment where high tensile strength and durability is of importance. The ties are especially suited for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

Features and benefits

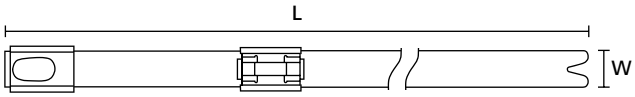
- MBT stainless steel (316) tie complete with RFID transponder
- Especially suited for applications in harsh environments
- Patented non-releasable locking feature
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- High frequency (HF – 13.56 MHz) and ultra high frequency (UHF – 869 MHz) available
- Rewritable
- Standard colour red, black coating is also available as a special



MBTRFID – stainless steel RFID cable ties for product identification in harsh environments.

MATERIAL	Stainless Steel (SS316), Polyester (SP)	
Frequency	13.56 MHz (HF)	869 MHz (UHF)
Idle Temperature	-25 °C to +70 °C	-40 °C to +85 °C
Operating Temperature	-25 °C to +70 °C	-40 °C to +85 °C
Flammability	non-burning (except coating)	

HF ✓ RoHS ✓



MBTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	N	Colour	Pack Cont.	Material	Tools	Article-No.
MBT8HFCRFID	13.56 MHz (HF)	17.0	50.0	7.9	201.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01167
MBT14HFCRFID	13.56 MHz (HF)	17.0	102.0	7.9	362.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	111-01586
MBT20HFCRFID	13.56 MHz (HF)	17.0	152.0	7.9	521.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	111-01587
MBT27HFCRFID	13.56 MHz (HF)	17.0	203.0	7.9	681.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	111-01588
MBT33HFCRFID	13.56 MHz (HF)	17.0	254.0	7.9	838.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	111-01589
MBT8HHFRFID	869 MHz (UHF)	17.0	50.0	7.9	201.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01565
MBT14HHFRFID	869 MHz (UHF)	17.0	102.0	7.9	362.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01566
MBT20HHFRFID	869 MHz (UHF)	17.0	152.0	7.9	521.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01567
MBT27HHFRFID	869 MHz (UHF)	17.0	203.0	7.9	681.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01568
MBT33HHFRFID	869 MHz (UHF)	17.0	254.0	7.9	838.0	1,020	Red (RD)	50 pcs.	SS316, SP	15-18	156-01569

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

Recommended Tools				
	15 MK9SST	16 MK9PSST	17 HDT16	18 KST-STG200
	559	559	560	560

For more information on toolings please refer to the Application Tooling chapter.

Add items to your watchlist!
www.HT.click/49-517

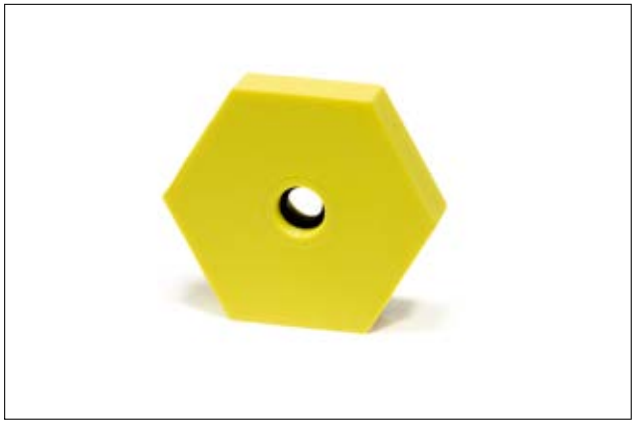
Hard tags with RFID transponder

HardLine – High frequency (HF), bolt-on, blank

The HEXTAG made from PA66 is equipped with a transponder of HF frequency. The central hole allows a simple mounting in applications where a RFID cable tie solution is not suitable. All HellermannTyton RFID products can be used for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

Features and benefits

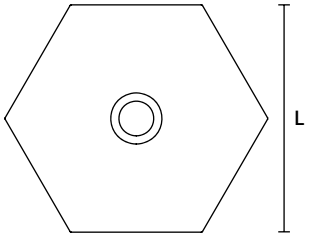
- Can be fitted using a chosen fixing element through fixing holes
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- High frequency (HF – 13.56 MHz)
- Rewritable
- Different colours possible



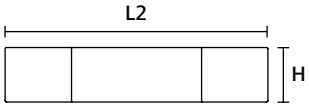
RFID HEXTAG – for applications where a RFID cable tie solution is not suitable.

MATERIAL	Polyamide 6.6 (PA66)
Frequency	13.56 MHz (HF)
Idle Temperature	-40 °C to +85 °C
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

RoHS



HEXTAG (front view)



HEXTAG (side view)

TYPE	Frequency	Height (H)	Length (L)	Hole Ø (FH)	Length (L2)	Colour	Pack Cont.	Article-No.
RFID HEXTAG	13.56 MHz (HF)	8.0	33.4	5.2	38.39	Yellow (YE)	100 pcs.	151-01582

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-518

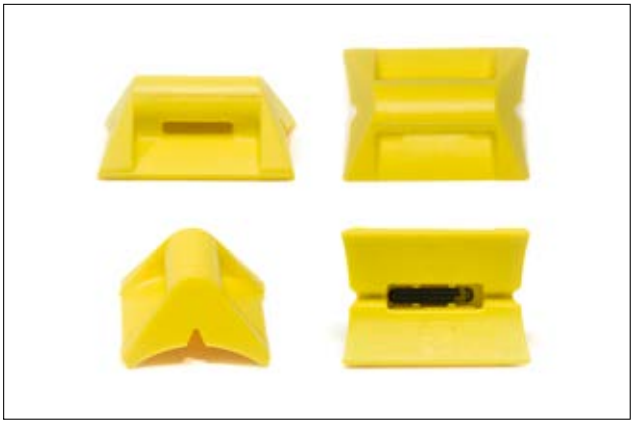
Hard tags with RFID transponder

HardLine – High frequency (HF), tie-on, blank

The CRADLE equipped with a HF transponder can be used with standard HellermannTyton cable ties. All HellermannTyton RFID products can be used for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

Features and benefits

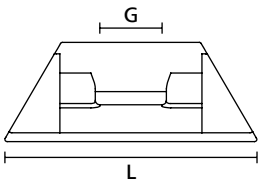
- Cable tie slot to suit HellermannTyton's standard cable ties up to 7.9 mm wide
- Made from durable TPU and is suitable to be used in salt water conditions
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Date on RFID chip can be reprogrammed (HF) – no waste
- Yellow colour for easy visual detection
- Other colours and frequencies are available on request
- High frequency (HF – 13.56 MHz)
- Rewritable



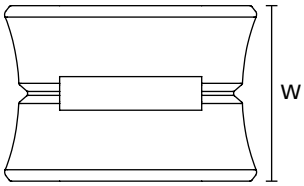
RFID CRADLE – can be used with a standard HellermannTyton cable tie.

MATERIAL	Thermoplastic Polyurethane (TPU)
Frequency	13.56 MHz (HF)
Idle Temperature	-40 °C to +85 °C
Operating Temperature	-25 °C to +85 °C
Flammability	UL 94 V2

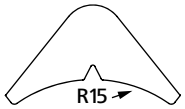
RoHS



CRADLE (front view)



CRADLE (rear view)



CRADLE (side view)

TYPE	Frequency	Width (W)	Length (L)	Strap Width max. (G)	Colour	Pack Cont.	Article-No.
RFID CRADLE	13.56 MHz (HF)	19.8	27.9	7.9	Yellow (YE)	100 pcs.	151-01472

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-519

Tamper-evident security labelling, thermal transfer

Helatag 1203 (Silver)

These labels are ideal for tamper-proof marking of valuable inventory items as well as for type labels, security and guarantee labels for components and housings.

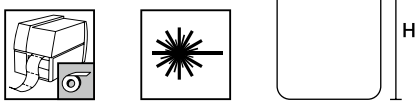
Features and benefits

- Tamper-evident labels leave clear reminder that label has been removed
- Mark assets securely and unambiguously
- Print labels with customer unique references
- Use text, graphics and barcodes as required



Highly visible tamper evidence.

MATERIAL	Type 1203, Polyester, silver matt, tamper-proof (1203)
Operating Temperature	-40 °C to +120 °C
Curing Temperature	from +7 °C
Adhesive	Acrylic
Thickness of Foil	53 µm
Chem. Material Properties	Excellent resistance to water, alcohol, most oils, greases, fuel, freezing fluid, brake fluid, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030



HF ✓ RoHS ✓

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1203-SR	12.7	11.1	101.6	6 pcs.	15,000 pcs.	Silver (SR)	596-71120
TAG15TD3-1203-SR	25.4	12.7	85.1	3 pcs.	7,500 pcs.	Silver (SR)	596-51203
TAG27TD2-1203-SR	38.1	19.1	85.1	2 pcs.	2,500 pcs.	Silver (SR)	596-71203
TAG67TD2-1203-SR	38.1	31.8	85.1	2 pcs.	1,000 pcs.	Silver (SR)	596-67120
TAG73TD1-1203-SR	50.8	25.4	55.0	1 pc.	2,000 pcs.	Silver (SR)	596-73120
TAG66TD1-1203-SR	50.8	36.5	56.8	1 pc.	1,000 pcs.	Silver (SR)	596-66120
TAG68TD1-1203-SR	63.5	25.4	69.0	1 pc.	2,000 pcs.	Silver (SR)	596-68120
TAG63TD1-1203-SR	63.5	38.1	70.0	1 pc.	1,000 pcs.	Silver (SR)	596-63120
TAG76TD1-1203-SR	63.5	50.8	70.0	1 pc.	500 pcs.	Silver (SR)	596-76120
TAG62TD1-1203-SR	76.2	50.8	82.0	1 pc.	500 pcs.	Silver (SR)	596-21203
TAG64TD1-1203-SR	88.9	36.5	95.0	1 pc.	1,000 pcs.	Silver (SR)	596-64120
TAG98TD1-1203-SR	101.0	160.0	105.0	1 pc.	250 pcs.	Silver (SR)	596-98120
TAG97TD1-1203-SR	101.6	74.0	106.0	1 pc.	500 pcs.	Silver (SR)	596-97120

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

c UL us CSA

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-520

Date of issue: September 2022

Tamper-evident security labelling, thermal transfer

Helatag 1208 (White), fragmenting

These special labels are optimally suited for tamper-proof identification of valuable inventory items as well as a security and guarantee seal for components and housings.

Features and benefits

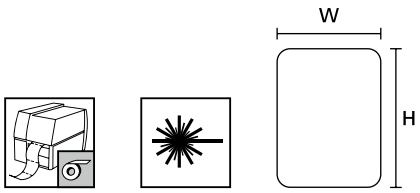
- Security label
- Fragments on removal
- Designed weak spots makes label removal time consuming



Helatag 1208 – a secure way of identifying if an asset label has been tampered with.

MATERIAL	Type 1208, Acetate foil, white, tamper-proof (1208)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from +4 °C
Adhesive	Acrylic
Thickness of Foil	56 µm
Chem. Material Properties	Resistant to oils, water and solvents
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1208-WH	12.7	11.1	101.6	6 pcs.	15,000 pcs.	White (WH)	596-20871
TAG15TD3-1208-WH	25.4	12.7	85.1	3 pcs.	7,500 pcs.	White (WH)	596-12080
TAG27TD2-1208-WH	38.1	19.1	85.1	2 pcs.	2,500 pcs.	White (WH)	596-12082
TAG67TD2-1208-WH	38.1	31.8	85.1	2 pcs.	2,500 pcs.	White (WH)	596-12087
TAG69TD2-1208-WH	40.6	22.9	89.0	2 pcs.	2,500 pcs.	White (WH)	596-12089
TAG73TD1-1208-WH	50.8	25.4	55.0	1 pc.	2,000 pcs.	White (WH)	596-31208
TAG66TD1-1208-WH	50.8	36.5	56.8	1 pc.	1,000 pcs.	White (WH)	596-12086

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Add items to your watchlist!
www.HT.click/49-521

Tamper-evident security labelling, thermal transfer

Helatag 1251, 2 parts

These labels are primarily used for tamper-proof type label applications in the automotive and electrical industries.

They are ideally suited for labelling flat surfaces, e.g. on vehicle frames and can be used as a replacement for conventional aluminium plates.

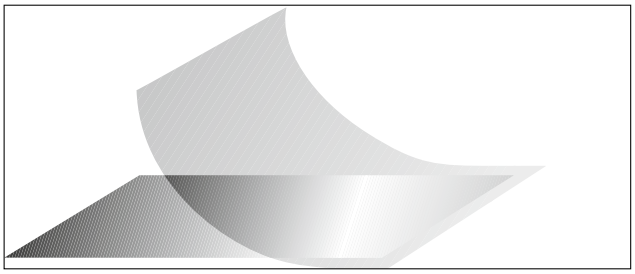
The transparent protective laminate guarantees good resistance to dirt and abrasion and can be easily applied by hand.

Features and benefits

- 2-part label, delivered on reel together with the protective label
- Designed for highly visible and rugged identification on trucks and trailers
- Tamper-evident, when pulled off a checkered pattern will be visible as evident
- High durability in outside use
- Meets requirements of the KBA (Kraftfahrtbundesamt [German Federal Motor Transport Authority])
- Particularly suitable as type label for vehicles



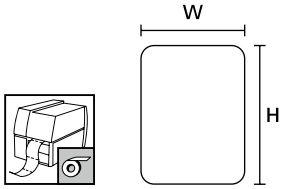
Type plate of an HGV trailer with protective laminate.



The printed silver type plate (Mat. 951A) is protected by the transparent laminate (Mat 951B).

MATERIAL	Type 1251, Polyester, silver and Polyester, transparent (1251)
Operating Temperature	-40 °C to +150 °C
Curing Temperature	from 0 °C (label), from +4 °C (laminate)
Adhesive	Acrylic
Thickness of Foil	63 µm, 35 µm
Chem. Material Properties	Resistant to gasoline, mineral oils, greases, aliphatic solvents, weak acids, salts and alkalis.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG50.8-25.4T1-SET	50.8	25.4	56.8	1 pc.	1,000	Silver (SR), Transparent (CL)	596-90001
TAG63.5-50.8T1-SET	63.5	50.8	69.5	1 pc.	500	Silver (SR), Transparent (CL)	596-90002
TAG101-74T1-SET	101.6	74.0	107.0	1 pc.	250	Silver (SR), Transparent (CL)	596-90003
TAG101-160T1-SET	101.6	160.0	105.8	1 pc.	250	Silver (SR), Transparent (CL)	596-90000

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-522

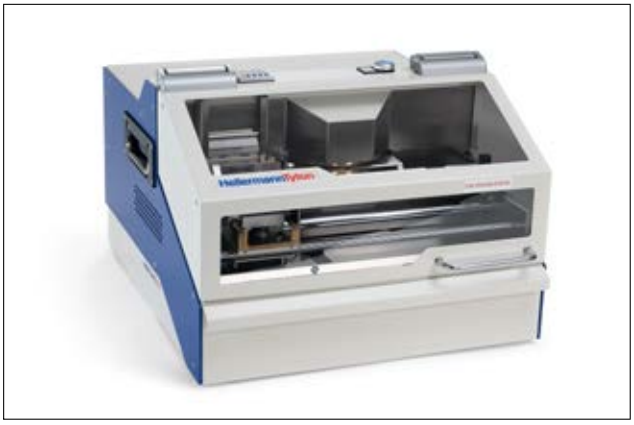
Stainless steel embossing system

M-BOSS Compact

M-BOSS Compact is a quiet easy-to-use metal plate embossing printer with a small production footprint. It is simple to install and operate and only needs a standard electrical supply and a PC. Texts are created with TagPrint Pro 4.0. Simply open the easy to use program to create print lists. Improved cooling system now ensures a continuous operation between 8-10 hours. Marker plates are attached to pipes and cables using 4.6 mm width MBT cable ties and a MK9SST hand tool.

Features and benefits

- Small and easy to use metal plate embosser
- Quiet embossing mechanism suited to production and office environments
- Embossed characters have been tested to withstand 1.5 million strikes each
- Improved cooling systems allows 8-10 hours continuous printing
- Use Tagprint Pro labelling software with pre-loaded templates to simplify print jobs
- 42 piece character set as standard - can be upgraded to 60 characters
- Letters: A B C D E F G H I J K L M N 0 P Q R S T U V W X Y Z
  Numbers: 0 1 2 3 4 5 6 7 8 9
  Symbols: & - / . , ’
- Other symbols available on request



A quiet, durable, and easy to use metal plate embossing printer.

Print Method	Embossing
Power Supply	AC 110V-240V, 45/65 Hz, 1.5A-3A
Cycle Time	< 1 second per character
Interfaces	USB 2.0
System Requirements	Win 7, 8, 10
Dimensions W x H x D	480 mm x 353 mm x 570 mm
Weight	41.0 kg

RoHS

For problem-free printing we recommend TagPrint Pro, page 526.

TYPE	Article-No.
M-BOSS Compact	544-20000

Subject to technical changes.

1.5 million strikes per character without maintenance

M-BOSS Compact inlcuding Organiser

The M-BOSS Compact with included Organiser system gives the added advantage of a self-contained storage system within the print unit.

The organiser is a 10 container carousel storage system that can be programmed to hold either an individual or a pre-defined set of marker plates. This means that users have the flexibility to manage how they work with the printed output. A simple input screen on the top of the machine is used to specify the quantity per container within the carousel. The carousel drawer when opened extends 430 mm from the front of the printer.

Features and benefits

- Ability to manage how the printed marker plates are organised
- Carousel system under the printer has 10 removable marker plate containers
- Flexible output means all marker plates or a set amount can be sent to each container
- Carousel system will hold up to 400 markers
- Each container can hold 40 marker plates



A simple solution to managing your printer output.

TYPE	Article-No.
M-BOSS Compact Organiser	544-21000

Subject to technical changes.

CE For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-523

Stainless Steel Printing System

M-BOSS Compact Markers

M-BOSS Compact Markers are used in all areas where severe mechanical or chemical conditions occur e.g. offshore industry, marine engineering, petrochemical industry, mining, underground or on radio and cellular masts where mark permanence is critical.

The raised surface of the embossed print ensures that the text remains visible even with dirt, grease, and paint cover the marker. The physical characteristics of the metal and the height of the embossed mark allows users to apply a stiff or metallic brush to the surface and remove excess layers of paint or grease without damaging the integrity of the text.

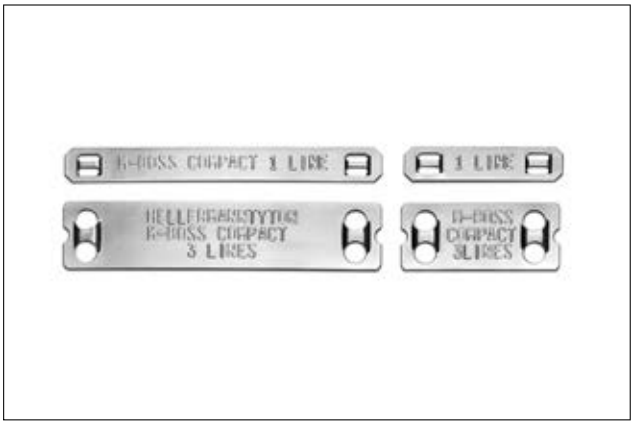
Features and benefits

- Raised marking ensure text visibility even when covered in dust, debris, grease and oil
- Stainless steel grade SS316 is suited for use in harsh environments
- Marker plates are designed for use with stainless steel cable ties with a 4.6 mm strap width
- Apply ties with a MK9SST

www.HellermannTyton.co.uk/M-BOSS-cat22

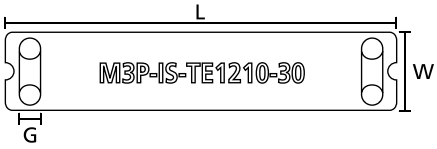


Identification for hazardous environments: M-BOSS Compact stainless steel markers.



A range of metal plate sizes to suit your needs.

MATERIAL	Stainless Steel (SS316)
Operating Temperature	-80 °C to +538 °C



MBML

HF LFH RoHS

TYPE	Strap Width max. (G)	Number of lines	Characters per line	Number of characters	Width (W)	Length (L)	Pack Cont.	Article-No.
MBML10X45	4.6	1	8	8	10.0	44.5	1,000 pcs.	544-80101
MBML10X90	4.6	1	23	23	10.0	89.5	500 pcs.	544-80102
MBML20X45	4.6	3	8	24	20.0	44.5	1,000 pcs.	544-80201
MBML20X90	4.6	3	23	69	20.0	89.5	500 pcs.	544-80202

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-524

Protective Laminates, thermal transfer

Helatag 323, high temperature

Protective laminates are used for the additional protection of printed type labels, for example in the automotive sector and for other outdoor installations. The protective laminates are also used if the contours of a label, for example on glass surfaces or backlit objects, should not be visible (no-label look).

Features and benefits

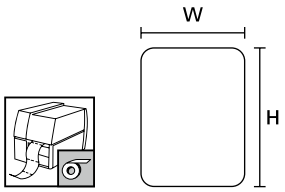
- High temperature transparent material
- Ideal as a protective laminate or as a printed label
- The barrier label needs to overlap the covered label
- Survives 5 years external weathering in central European climate
- Provides additional protection against chemicals for the underlying label



Helatag protective laminates.

MATERIAL	Type 323, Polyvinylidene Fluoride, transparent (323)
Operating Temperature	-40 °C to +140 °C
Curing Temperature	from +10 °C
Adhesive	Acrylic
Thickness of Foil	25 µm
Chem. Material Properties	Excellent resistance against water, UV radiation, weather influence and solvents based on petroleum.
Recommended Ribbon Type	TT822OUT
Thermal Transfer Printer	TT431, TT4030

RoHS



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG0638TL2-323-CL	43.2	11.4	94.9	2 pcs.	5,000 pcs.	Transparent (CL)	596-38321
TAG1351TL1-323-CL	55.9	17.8	62.0	1 pc.	2,000 pcs.	Transparent (CL)	596-51321
TAG2551TL1-323-CL	55.9	30.5	62.0	1 pc.	1,000 pcs.	Transparent (CL)	596-52321
TAG3863TL1-323-CL	68.6	43.2	75.0	1 pc.	1,000 pcs.	Transparent (CL)	596-63321

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-525

Labelling software

TagPrint Pro 4.0

TagPrint Pro 4.0 is the easy-to-use label/marker design and printing software in the HellermannTyton printing world. Compatible with Windows® 7, 8.1 and 10, TagPrint Pro 4.0 delivers an individualised, task-based experience that enables a user to easily develop print templates including bar codes, text and graphics to meet numerous applications. TagPrint Pro 4.0 streamlines labeling production by offering a user full control over the importing or entering of data, advanced security features, the option to group label designs under a single file name or job number, and the ability to batch print to either one or more printers at the same time.

Features and benefits

- TagPrint Pro 4.0 runs on Windows 7, 8.1 and 10, allowing full compatibility and error-free operation with the most widely used systems
- Print automation allows one-step printing of label jobs – even multi-label groups – to one or more printers simultaneously
- Visual preview allows users to see label designs before opening them
- Single-user and network-user versions accommodate the needs of any size operation
- Select saved labels visually or by part number
- Convert existing XMT files to the TagPrint data table
- Allows devmode printing to the TT4030 thermal transfer printer, for the ultimate in printer control
- Includes pre-saved designs for all common ANSI/OSHA compliant safety labels and pre-made solar installation labels



The easy to use software speeds up production of markers, labels and identification tags.

System Requirements	PC running Microsoft Windows XP SP3, Vista SP1 or later, Windows 7 .NET Framework 4, Windows 8 512 MB RAM (XP SP3) 1.0 GB RAM (Vista/Windows 7/Windows 8) 500 MB available hard disk space

RoHS

TYPE	Article-No.
TagPrintPro4.0-EMEA	556-00059

Subject to technical changes.

www.HellermannTyton.co.uk/TagPrint-cat22

Add items to your watchlist!
www.HT.click/49-526

Date of issue: September 2022

Thermal transfer printer

TT431, Small to medium volume printing

The TT431 thermal transfer printer is perfect for printing on HellermannTyton materials such as self-adhesive labels, shrinkable tubing and identification tags. Thanks to its low weight and compact construction, the TT431 integrates seamlessly into any workstation. It is easy to use due to its intuitive colour LCD touch display and clear status messages which can be shown in multiple languages. The optional cutter and perforator make this printer ideal for a wide range of applications. 300 dpi resolution ensures that barcodes, warning symbols, logos and text are as sharp as they can be.

Features and benefits

- Small to medium volume single sided printing
- Print on HellermannTyton cable markers and labels
- Uses standard ribbons
- Barcodes: standard and 2D
- Print speed up to 150 mm/s
- Adjustable label sensor
- Multiple language selection
- Windows drivers: 32/64 Bit Windows Vista, 7, 8, 10, Windows Server 2008, 2008 R2, 2012, 2012 R2, 2016, 2019

www.HellermannTyton.co.uk/TT431-cat22



TT431 thermal transfer printer designed for ease of operation.

Print Method	Thermal transfer printing
Print Head Type	300 dpi, flat type
Print Speed	up to 150 mm/s
Max. Print Width	105.70 mm
Label Height Max (metric)	4,000 mm
Interfaces	USB 2.0, Ethernet 10/100 Base T, RS232
Supported Barcodes, Printer	Standard and 2D
Printer Memory	256 MB RAM
Dimensions W x H x D	253 mm x 189 mm x 322 mm
Weight	4.0 kg

RoHS

TYPE	Article-No.
TT431	556-00400

All dimensions in mm. Subject to technical changes.

TYPE	Description	Article-No.
TT430/TT431 300dpi Printhead	Printhead for TT430/TT431	556-00453
TT430/TT431 Print Roller	Print Roller for TT430/TT431	556-00454
S430 Cutter	Cutter for TT430/TT431	556-00452
P430 Perforator	Perforator for TT430/TT431	556-00456
TT External Reel Holder	External Reel Holder	556-00451

Subject to technical changes.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-527

Thermal transfer printer

TT4030, High volume printing

HellermannTyton's premium printer TT4030 is specifically designed for medium and heavy duty industrial applications. The 300 dpi print head fulfils all standard requirements for printing bar codes, warning signs, logos and written information. Optional premium quality accessories such as a perforator and cutter are designed to work seamlessly with the printer and will suit the most demanding needs.

Printing high definition graphics such as 2d barcodes, standard bar codes, numbers and text on adhesive labels, thermo plastics such as heat shrink and cable markers (Tiptags) is easily done.

A colour LCD Touchscreen with modern user interface helps intuitive operation.

Creation of professional looking industrial identification is simplified by the use of HellermannTyton´s label creation software TagPrint Pro.

Whether in stand-alone mode, as a PC application or in a network - the robust TT4030 printers can meet every requirement.

Features and benefits

- High volume single sided printing
- Print on HellermannTyton heatshrink tubing, cable markers and labels
- Uses standard 300 m ribbons
- Barcodes: standard and 2D
- Print speed up to 300 mm/s (30 mm/s recommended for ladder style products and tubing)
- Multiple language selection
- Windows drivers: 32 / 64 bit for Windows XP, Windows Vista, Windows 7, 8, 10



TT4030 thermal transfer printer for high volumes.

Print Method	Thermal transfer printing
Print Head Type	300 dpi, flat type
Print Speed	up to 300mm/s
Max. Print Width	105.70 mm
Label Height Max (metric)	2,000 mm
Interfaces	RS232 C, USB 2.0, Ethernet 10/100 Base T
Supported Barcodes, Printer	Standard, 2D
Printer Memory	256 MB RAM
Dimensions W x H x D	252 mm x 288 mm x 460 mm
Weight	9.98 kg

RoHS

TYPE	Article-No.
TT4030	556-04037

Subject to technical changes.

www.HellermannTyton.co.uk/TT4030-cat22

TYPE	Description	Article-No.
TT4030 Printhead	Printhead for TT4030	556-04041
Printer Roller TT4030/TT4000+	Printer Roller for TT4030/TT4000+	556-04005
S4030 Cutter	S4030 Cutter for TT4030	556-04050
P4030 Perforator	Perforator for TT4030	556-04051
TT External Reel Holder	External Reel Holder	556-00451

Subject to technical changes.

CE For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-528

Date of issue: September 2022

Thermal transfer printer

TrakMark DS, Double Sided

The TrakMark DS is a high-performance printer for double-sided printing. This printer is perfect for double-sided printing on HellermannTyton shrinkable tubing. With two print heads mounted one on top of the other, the TrakMark DS prints onto both sides of the material at the same time. High reliability and multiple peripherals enable applications and solutions tailored to specific customer requirements. It is easy to use thanks to its display and clear status messages which can be shown in multiple languages. 300 dpi resolution ensures that barcodes, warning symbols, logos and text are as sharp as they can be.

Features and benefits

- High volume double sided printing
- Prints perfectly on HellermannTyton heat shrink ladder style products
- Uses standard 300 m ribbons
- Barcodes: standard and 2D
- Print speed up to 125 mm/s (30 mm/s recommended for ladder style products and tubing)
- Multiple language selection
- Windows drivers: 32/64 bit for Windows XP, Windows Vista, Windows 7, 8, 10

www.HellermannTyton.co.uk/TrakMark-cat22



TrakMark DS printer – for double sided printing.

Print Method	Thermal transfer printing
Print Head Type	300 dpi, flat type
Print Speed	30, 40, 50, 75, 100, 125 mm/s
Max. Print Width	105.6 mm
Label Height Max (metric)	2,000 mm
Interfaces	RS232 C, USB 2.0, Ethernet 10/100 Base T
Supported Barcodes, Printer	Standard, 2D
Printer Memory	64 MB RAM
Dimensions W x H x D	248 mm x 395 mm x 554 mm
Weight	21.0 kg

RoHS

TYPE	Article-No.
TrakMark DS	556-05000

Subject to technical changes.

TYPE	Description	Article-No.
S4000 Cutter	S4000 Cutter for TT4000+ and TrakMark DS	556-04025
P4000 Perforator	Perforator for TT4000+ and TrakMark DS	556-04024
TT External Reel Holder	External Reel Holder	556-00451

Subject to technical changes.

Date of issue: September 2022

For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-529

Selection matrix: materials and ribbons

Use this selection matrix to find the right combination of material and ribbon to suit your application.

Material (Page)	TT ribbon	Resistance to: Smudgeproof	Scratchproof	Partly smudgeproof	Oils / benzenes	Alcoholic solvents	Etching	Approved	Market (suggested): Aerospace	Automotive	Electronics	Machine Building	Military	Process Control	Rail
1232 (478)	TT822OUT	●	●	–	●	–	–	–	–	–	●	●	–	●	–
323 (525), **1209** (476)	TT932DOUT	●	–	–	–	–	–	–	–	–	●	●	–	●	–
1206 (508)	TT822OUT	●	●	–	●	–	–	●	–	–	●	●	–	●	–
1251 (522)	TT822OUT	●	●	–	●	–	–	●	–	●	●	●	–	–	–
880 (500)	TT822OUT	●	●	–	●	–	–	–	–	–	–	●	–	●	–
892 (497)	TT822OUT	●	●	–	●	–	–	–	–	–	–	●	–	●	–
1203 (520)	TT822OUT	●	●	–	●	–	–	●	–	–	●	●	–	●	–
1204 (507)	TT822OUT	●	●	–	●	–	–	●	–	●	●	●	–	●	–
1208 (521)	TT822OUT	●	●	–	●	–	–	–	–	–	●	–	–	–	–
1211 (500)	TT822OUT	●	●	–	●	–	–	–	–	–	–	●	–	●	–
1213 (513)	TT822OUT	●	●	–	●	–	–	–	–	–	–	●	–	●	–
1216 (501)	TT822OUT	●	●	–	●	–	–	–	–	–	●	–	–	–	–
1220 (505), **1221** (506)	TT122OUT	●	●	–	●	●	–	–	–	–	●	●	–	●	–
	TT822OUT	●	●	–	●	–	–	–	–	–	●	●	–	●	–
TCGT (459), **TULT** (461)	TT822OUT8	–	–	●	–	–	–	–	●	–	●	●	●	●	–
	TTDTHOUT	●	●	–	●	●	–	–	●	●	●	●	●	●	–
	TTRC+	●	●	–	●	●	●	–	●	–	–	●	●	●	–
	TTRW	–	–	●	–	–	–	–	●	–	●	●	●	●	–
TULT DS (463)	TTDTHOUT	●	●	–	●	●	–	–	●	●	●	●	●	●	–
TLFX (465), **TLFX DS** (467), **TLFD DS** (469), **TAGLF** (475), **TIPTAG HF** (471)	TTDTHOUT	●	●	–	●	●	–	–	–	–	–	●	–	–	●
TAGPU (474)	TTRHT	●	●	–	●	●	–	–	–	–	●	●	–	●	–
TIPTAG PU (472)	TTRC+	●	●	–	●	●	●	–	–	–	●	●	–	●	–

● yes
– no

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Thermal transfer ribbons for

Adhesive Labels

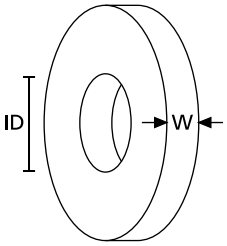
The thermal transfer print technology is based on heating up certain dots in the print head. This transfers the ink very precisely from the ribbon onto the surface of the printed material. All HellermannTyton ribbons consist of a special resin composition to maximise print performance. In combination with HellermannTyton printers the ribbons ensure the highest of print quality on all HellermannTyton thermal printable identification materials.

Features and benefits

- Thermal transfer ribbons for highest quality and performance of printed labels
- Ribbons are specifically designed to maximise print performance for the recommended material



Ribbons for printing on adhesive labels.



ID: The standard inside core diameter is 25.4 mm.

TYPE	Recommended Material	Colour	Width (W)	Reel Length	Article-No.
TT822OUT 60MM	323/823/880/892/1203/1204/1206/1208/1210/1211/1213/1216/1220/1221/1232/1251	Black (BK)	60.0	300 m	556-00111
TT822OUT 110MM	323/823/880/892/1203/1204/1206/1208/1210/1211/1213/1216/1220/1221/1232/1251	Black (BK)	110.0	300 m	556-00101
TT932DOUT 85MM	323/1209	Black (BK)	85.0	300 m	556-00117
TT932DOUT 110MM	323/1209	Black (BK)	110.0	300 m	556-00118
TT122OUT 60MM	1220/1221	Black (BK)	60.0	300 m	556-00060
TT122OUT 110MM	1220/1221	Black (BK)	110.0	300 m	556-00061
TTRR 110	Labels/1220/1221	Red (RD)	110.0	300 m	556-00208
TT822OUT8 110MM	TCGT/TULT	Silver (SR)	110.0	300 m	556-00161

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

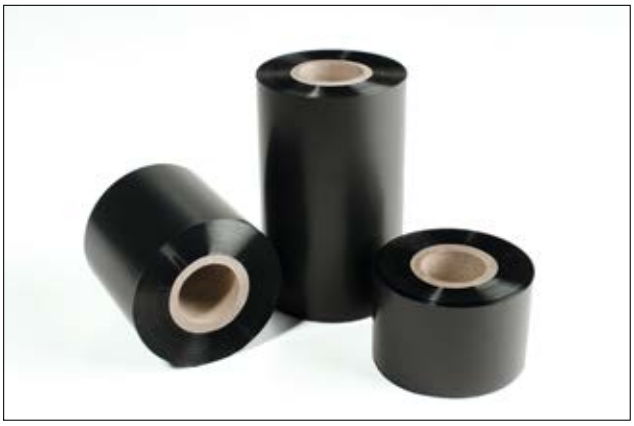
Thermal printer ribbons for

Heatshrink and Tiptags

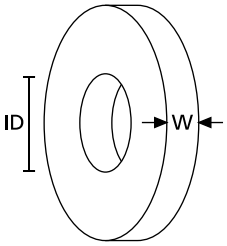
The thermal transfer print technology is based on heating up certain dots in the print head. This transfers the ink very precisely from the ribbon onto the surface of the printed material. All HellermannTyton ribbons consist of a special resin composition to maximise print performance. In combination with HellermannTyton printers the ribbons ensure the highest of print quality on all HellermannTyton thermal printable identification materials.

Features and benefits

- Thermal transfer ribbons for high quality print results on heat shrink tubing and Tiptag identification tags
- Ribbons are specifically designed to maximize print performance for the recommended material



Ribbons for printing on tubes and Tiptags.



ID: The standard inside core diameter is 25.4 mm.

TYPE	Recommended Material	Colour	Width (W)	Reel Length	Article-No.
TTRHTBK 70MM	TAGPU	Black (BK)	70.0	300 m	556-00204
TTRHTBK 100MM	TAGPU	Black (BK)	100.0	300 m	556-00210
TTRHTWH 70MM	TAGPU	White (WH)	70.0	300 m	556-00209
TTRHTWH 100MM	TAGPU	White (WH)	100.0	300 m	556-00211
TT822OUT8 110MM	TCGT/TULT	Silver (SR)	110.0	300 m	556-00161
TTDTHOUT 40MM	TCGT/TULT/TLFX/TLFD/TIPTAG	Black (BK)	40.0	300 m	556-00139
TTDTHOUT 60MM	TCGT/TULT/TLFX/TLFD/TIPTAG	Black (BK)	60.0	300 m	556-00140
TTDTHOUT 100MM	TCGT/TULT/TLFX/TLFD/TIPTAG	Black (BK)	100.0	300 m	556-00141
TTRW 30MM	TCGT/TULT/TTAGMC	White (WH)	30.0	300 m	556-00125
TTRW 60MM	TCGT/TULT/TTAGMC	White (WH)	60.0	300 m	556-00137
TTRC+ 30MM	TIPTAG PU/TAGPU	Black (BK)	30.0	300 m	556-00114
TTRC+ 60MM	TIPTAG PU/TAGPU	Black (BK)	60.0	300 m	556-00115
TTRC+ 100MM	TIPTAG PU/TAGPU	Black (BK)	100.0	300 m	556-00103

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-532

HellermannTyton

Hit the road with the CPK hybrid

The new CPK hybrid offers full flexibility for automated cable tying: Use cordless design when far away from power source (e.g. solar fields or other) or corded design when working in factory environment. With the new CPK hybrid, binding takes just 0.65 seconds at maximum speed. The long lasting batteries have a fast charging time and at least 8,000 bindings per battery charge. More information here:

www.HellermannTyton.co.uk/hybrid

MADE FOR REAL®



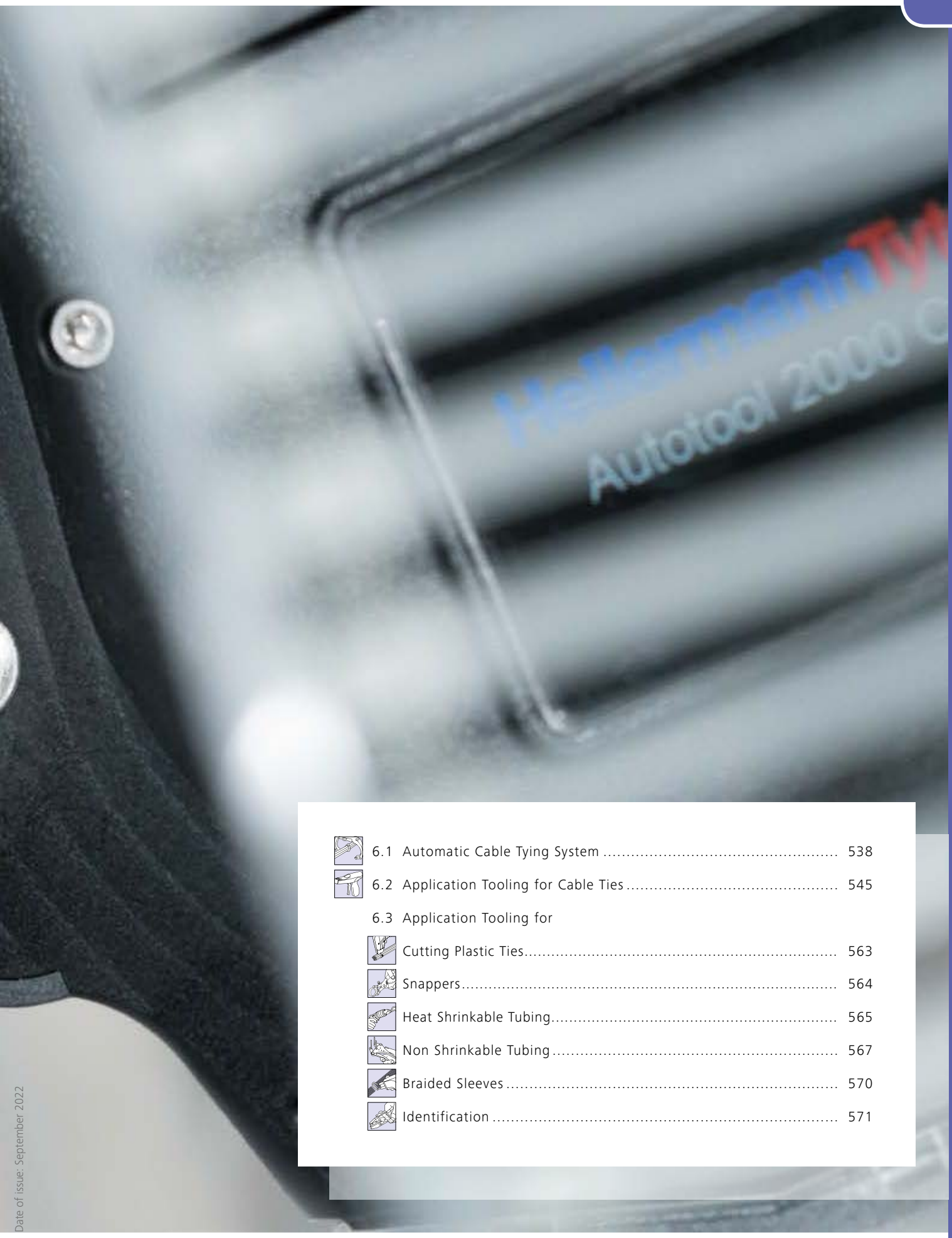
Date of issue: September 2022



Inspired by automation

Highly automated production requires processes you can count on, which is why our developers have systematically enhanced our automated bundling techniques. The Autotool CPK hybrid (see page 538) can be used with a battery or a power pack. It offers high reproducibility of binding results, individual control and complete documentation. Bulk quantities – such as in cable confectioning, the automotive industry and the packaging sector – can be processed more quickly and reliably as a result.

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 6.2 Application Tooling for Cable Ties 545

6.3 Application Tooling for

 Cutting Plastic Ties 563

 Snappers 564

 Heat Shrinkable Tubing 565

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 Braided Sleeves 570

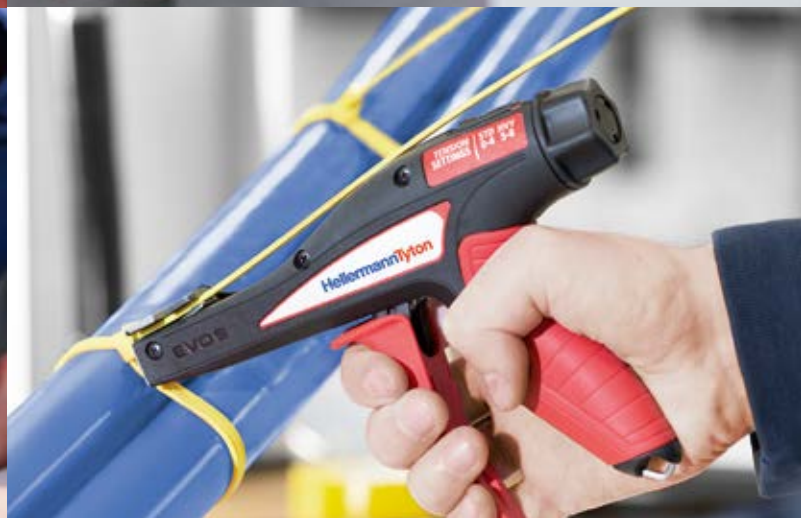
 Identification 571

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6.1 Automatic Cable Tying System

Automatic bundling up to Ø 20 mm	
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6.2 Application Tooling for Cable Ties

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Manual tensioning tool, simple version	
MK20, MK21	550
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KR8PNSE	558
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MK9SST	559
KST-STG200	560
Manual tensioning tool for metal ties MBT-, MLT- and AMT-Series	
HDT16	560
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MST6	561
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6.3 Product Selection

Tool Overview 562

6.3 Application Tooling for Cutting Plastic Ties

Manual cutting tool for plastic ties

EVO cut 563

6.3 Application Tooling for Snappers

Manual Tool

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6.3 Application Tooling for Heat Shrinkable Tubing

Gas powered hot air tool

CHG900 565

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6.3 Application Tooling for Non Shrinkable Tubing

Three-pronged pliers for sleeves and grommets

NA 567

VA2.5/5 - reinforced 568

K, S, SS 569

6.3 Application Tooling for Braided Sleeves

Helagaine Braided Sleeving

HSG0 hot cutting tool 570

6.3 Application Tooling for Identification

Manual Tool for Helafix HCR

Helafix HCT application tool 571

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Automatic bundling up to Ø 20 mm

CPK hybrid T18RA

The Autotool CPK hybrid T18RA is an automated cable tying system that is either operated electrically with a Power pack or with a battery. It has been developed to speed up bundling processes and to make the production more consistent and efficient. Besides the high speed bundling, this cable tying system is characterized by its simple operation and user-friendly ergonomics. The CPK hybrid offers a display for the settings and presets and user information in 20 languages. One main feature of the CPK hybrid is the software "HT Data Management CPK".

This feature enables the easy parameterization of the tool for customers applications. The parameterization can easily be carried out via computer. Additionally the "HT Data Management CPK" offers an export function for the saved manufacturing data as well as further service functions. Therefore it ensures a consistent documentation for every binding process through the tool. The firmware of the CPK hybrid tool enables various bundling and cutting functions. It is possible to define a loop diameter and to choose the length of an extended strap as an example. The function to cut with the tension released is of great value especially for applications with a very flexible bundling good (like silicone cables).

The CPK hybrid is ideally suited for handling high volume applications in wire harness facilities, automotive and industrial companies, in the packaging sector and in the solar industry. With either the Bench mount kit CPK or the Overhead suspension CPK, the CPK hybrid is suitable for both stationary and flexible applications.

By using the optional Power pack CPK with control box the CPK hybrid can be integrated into fully automated production lines through a serial interface. Due to the removable handle less assembly space is needed. When using the battery at the bottom of the handle the tool can be used without the need for a power supply.

Bandoliers of 50 cable ties as well as reels of 3,500 cable ties can be used.

Features and benefits

- Cable tying system operated elecrically via Power pack or with a battery
- Power supply through Power pack CPK - Input: 100-240 V a.c., 50/60 Hz; Output: 25.2 V d.c., max. 150 W
- Or use with 18V 2,0 Ah rechargeable Li-Ion Battery
- Integration into fully automated production lines (Power pack CPK with control box necessary)
- Cycle time 0.65 - 1.0 sec. depending on quality and force
- Stationary and flexible use with devices possible or independently with battery
- HT Data Management CPK software (included) - for extensive data evaluation and monitoring of the tensioning process
- User-friendly menu in various languages included
- Process-reliable, constant and reproducible bundling and cutting up to Ø 20 mm
- Removable handle for space-saving integration into automated production lines

www.HellermannTyton.co.uk/CPK-hybrid-cat22

TYPE	Article-No.
Autotool CPK hybrid	106-60000

Subject to technical changes.



Automated cable tie gun CPK hybrid - can be operated with Power Pack or battery.



Autotool CPK hybrid with Power Pack and Overhead Suspension.



Battery-operated Autotool CPK hybrid applying cable ties from bandolier.

Power Supply	Electronically operated or battery operated
Cycle Time	0.65-1.0 sec. depending on quality and force
Weight	1.559 kg
Tension Setting	Adjustable

RoHS

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-538

Automatic bundling up to Ø 20 mm

Power supply for Autotool CPK hybrid

Features and benefits

- Cable tying system operated elecrically via Power pack or with a battery
- Power supply through Power pack CPK - Input: 100-240 V a.c., 50/60 Hz; Output: 25.2 V d.c., max. 150 W
- Or use with 18V 2,0 Ah rechargeable Li-Ion Battery
- Integration into fully automated production lines (Power pack CPK with control box necessary)
- Smart Cable for updating the tool without Power pack



Power pack CPK Autotool CPK hybrid.



CAS battery 18 V for automated cable tie gun CPK hybrid.

TYPE	Article-No.
SP_CPK_CAS_Battery_Charger_UK	106-06022
SP_CPK_CAS_Battery_18V_2Ah	106-06020
NP CPK smart cable	123-90142
Power pack CPK	106-00100
Power pack CPK with control box	106-00110

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Automatic bundling up to Ø 20 mm

Accessories for Autotool CPK hybrid

Features and benefits

- Bench mount kit CPK for stationary use
- Overhead suspension CPK for flexible use
- Force measurement device CPK to measure the linear tensile force of the Autotool CPK hybrid. Available with grip mount or robot adapter



Bench mount kit CPK with foot pedal (also shown Autotool CPK hybrid, Power pack CPK and T18RA3500).

TYPE	Article-No.
Bench mount kit CPK	106-00040
Force measurement device with grip mount CPK	106-29010
Force measurement device with robot adapter CPK	106-29011
HH20	120-00080
Overhead suspension CPK	106-00050

Subject to technical changes.



Overhead suspension CPK with Autotool CPK hybrid battery operated (also shown T18RA3500).

Add items to your watchlist!
www.HT.click/49-540

Automatic bundling up to Ø 20 mm

Cable ties for Autotool CPK hybrid

The inside-serrated cable ties are designed for use specifically in the automatic cable tying systems. The Autotool CPK hybrid is ideally suited for handling high volumes applications in wire harness facilities, automotive and industrial companies as wells as the packaging sector.

Features and benefits

- Available in bandoliers of 50 cable ties or reels of 3,500 cable ties
- Repetitive tension on the bundles
- Easily recyclable

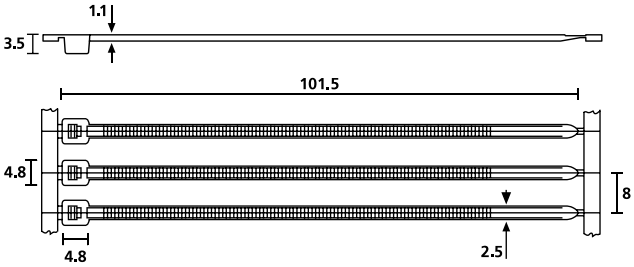


Cable ties for Autotool CPK hybrid.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)	Polyamide 6.6, heat and UV-resistant (PA66HSW)	Polyamide 4.6 (PA46)
Operating Temperature	-40 °C to +105 °C, (+145 °C, 500 h)		-40 °C to +150 °C, (+195 °C, 500 h)
Flammability	UL 94 V2		

HF ✓ RoHS ✓

HF ✓
LFH ✓
RoHS ✓



Bandoleer T18RA

Please find the corresponding Bundling Clips on page 136.

TYPE	Bundle Ø max.	N	Colour	Material	Pack Cont.	Article-No.
T18RA50	20.0	80	Black (BK)	PA66HSW	2,000 pcs.	120-40020
T18RA3500	20.0	80	Black (BK)	PA66HSW	3,500 pcs.	120-50010
	20.0	80	Natural (NA)	PA46	3,500 pcs.	120-46009
T18RA50	20.0	80	Natural (NA)	PA66HS	2,000 pcs.	120-40019
T18RA3500	20.0	80	Natural (NA)	PA66HS	3,500 pcs.	120-50009

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.
More colours on request. Please contact us.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

Halogen-free according to the interdictions of the GADSL list and compulsory registration of the SVHC list.

c UL us For product specific approvals and specifications please refer to the Appendix.

Add items to your watchlist!
www.HT.click/49-541

Waste-free bundling up to Ø 100 mm

Autotool System 3080

The Autotool System 3080 is an automated and electric cable tying system. It has been developed to speed up bundling processes and operates waste-free.

The advantage of three quick-changeable jaw sizes allows the Autotool System 3080 to adapt perfectly to different bundle diameters up to Ø 100 mm.

With either the Bench mount kit 3080 or the Overhead suspension 3080, the Autoool System 3080 is suitable for both stationary and flexible applications. The Autotool System 3080 can also be integrated into fully automated production lines.

Custom designed jaws are available to enable bundling of foot parts on production lines.

Features and benefits

- Electrically operated cable tying system (Power pack 3080 necessary)
- Power pack 3080 - Input: AC 100 V - 230V, 3A 50/60 Hz, Output: 48 V d.c., 100 W
- High quality, waste-free bundling up to Ø 100 mm with flush cut off
- Jaws with diameters of 30, 50 and 80 mm - included in delivery
- 100 mm jaw size solution as accessory on request
- Cycle time 1.1-2.4 seconds depending on bundle diameter
- Integration into Bench mount kit 3080 or Overhead suspension 3080 possible
- Integration into fully automated production lines possible
- Foot part bundling with custom jaw design Ø 50 mm

www.HellermannTyton.co.uk/ATS3080-cat22

TYPE	Article-No.
ATS3080	102-00000
Power pack 3080	102-00100

Subject to technical changes.



Autotool System 3080.



Autotool System 3080 with three different jaws - to optimize the cycle time for different bundle diameters.



Power pack 3080.

Power Supply	Electrically operated
Cycle Time	1.1-2.4 sec. depending on bundle diameter
Weight	2.068 kg
Tension Setting	Adjustable

RoHS

Add items to your watchlist!
www.HT.click/49-542

Date of issue: September 2022

Waste-free bundling up to Ø 100 mm

Accessories for Autotool System 3080

Features and benefits

- Bench mount kit automatic 3080 in fully automated production lines
- Bench mount kit horizontal 3080 for horizontal use in fully automated production lines
- Bench mount kit 3080 for stationary use, foot pedal included
- Overhead suspension 3080 for flexible use



Bench mount kit 3080 with foot pedal (also shown: Autotool System 3080, Power pack 3080 and consumables).



Optional: Bench mount kit 3080 with table board.



Packaging application with Bench mount kit horizontal 3080.



Overhead suspension 3080 (also shown: Autotool System 3080 and consumables).

TYPE	Article-No.
ATS3080 mod.100mm	102-10000
Bench mount kit automatic 3080	102-00042
Bench mount kit horizontal 3080	102-00041
Bench mount kit 3080	102-00040
Overhead suspension 3080	102-00050

Subject to technical changes.

Waste-free bundling up to Ø 100 mm

Cable ties for Autotool System 3080

The outside serrated strap is perfectly suitable for sensitive surfaces and can be used for bundling and fixing of cables, pipes and hoses, as well as for bag sealing.

The materials are particularly appropriate for high volume bundling applications in cable assembly, automotive, industrial and packaging applications.

Features and benefits

- Innovative two-piece consumables: closure and strap
- Outside serrated strap protects the bundle
- Available on reels of 500 m strap and 5,000 pcs. closures

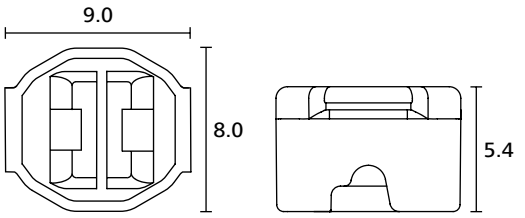


Closures and strap for ATS3080.

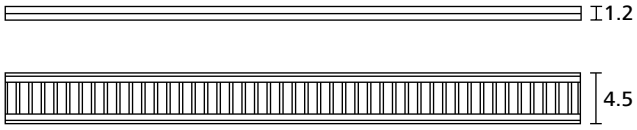
MATERIAL	Polyamide 6.6, high impact modified, heat and UV-stabilised (PA66HIRHSUV)	Polyamide 6.6, heat and UV-stabilised (PA66HSUV)
Operating Temperature	-40 °C to +95 °C, (+105 °C, 5000 h; +145 °C, 500 h)	-40 °C to +105 °C, (+145 °C, 500 h)
Flammability	UL 94 HB	UL 94 V2

RoHS ✓ RoHS ✓

Please find the corresponding Bundling Clips on page 136.



Closure



Strap ATS3080

TYPE	Bundle Ø max.	N	Colour	Material	Pack Cont.	Article-No.
Closures Black ATS3080	100.0	225	Black (BK)	PA66HSUV	5,000 pcs.	102-66210
Closures Natural ATS3080	100.0	225	Natural (NA)	PA66HSUV	5,000 pcs.	102-66209
Strap Black ATS3080	100.0	225	Black (BK)	PA66HIRHSUV	500 m	102-66110
Strap Natural ATS3080	100.0	225	Natural (NA)	PA66HIRHSUV	500 m	102-66109

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

N = **Minimum Loop Tensile Strength for Cable Ties (newton)**

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-544

Tensioning Tools for Cable Ties



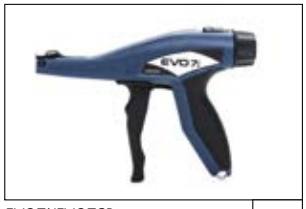
MK10-SB.
See page 550
1



MK20, MK21.
See page 550
2, 3



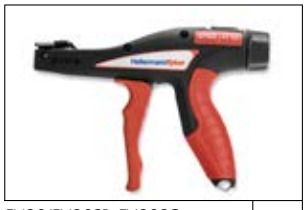
MK3PNSP2.
See page 551
4



EVO7i/EVO7SP.
See page 553
5



MK7P.
See page 555
6



EVO9/EVO9SP, EVO9SG.
See page 554
7,8



EVO9HT.
See page 554
9



MK9P.
See page 556
10

Tensioning Tools for Cable Ties KR-Series



KR6/8.
See page 557
11



EVO KR.
See page 557
12



KR8PNSE.
See page 558
13

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Flowchart for optimum tool selection

Manual and pneumatic tensioning tools for conventional plastic cable ties

≤ 4.8 mm

Manual tools	Page
EVO7i / EVO7SP	553
MK10-SB	550
MK20	550

Pneumatic tools	Page
MK3PNSP2	551
MK7P	555

≥ 4.8 mm

Manual tools	Page
EVO9 / EVO9SP, EVO9HT	554
MK10-SB	550
MK21	550

Pneumatic tools	Page
MK9P	556

Manual and pneumatic tensioning tools for KR-Series cable ties

= 6.0 mm

Manual tools	Page
EVO KR, KR6/8	557

= 8.0 mm

Manual tools	Page
EVO KR, KR6/8	557

Pneumatic tools	Page
KR8PNSE	558

Electrically operated and automated tensioning tools for plastic cable ties

= 2.5 mm

Automatic tools	Page
Autotool CPK hybrid	538

= 4.5 mm

Automatic tools	Page
Autotool System 3080	542

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Tensioning Tools for Metal Ties



MK9SST.
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MK9PSST.
See page 559
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HDT16.
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KST-STG200.
See page 560
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MST6.
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MST9.
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Flowchart for optimum tool selection

Manual and pneumatic tensioning tools for metal cable ties MBT-Series

≤ 12.3 mm

Manual tools	Page
KST-STG200	560

≤ 16.0 mm

Manual tools	Page
MK9SST	559
HDT16	560

Pneumatic tools	Page
MK9PSST	559

Manual tensioning tools for metal cable ties AMT- and MLT-Series

≤ 16.0 mm

Manual tools	Page
HDT16	560

Manual tensioning tools for metal cable ties MST-Series

= 5.9 mm

Manual tools	Page
MST6	561

= 8.9 mm

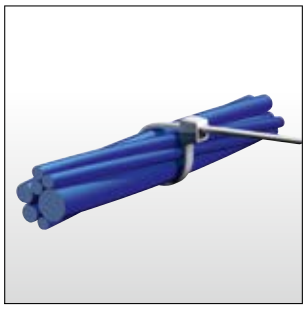
Manual tools	Page
MST9	561

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How to use a cable tie tool (using an EVO7 as an example)



1. Use tension adjustment knob to select your desired tension setting.



2. Fasten a nylon HellermannTyton cable tie around the bundle.



3. Insert strap of cable tie through side opening of nosepiece.



4. Place front of nosepiece flush to the head of the cable tie.



5. Pull trigger until cable tie tensions and cuts.

Tool testing - Determination of tensions

To date, no generally applicable test method has been established on the market. The companies within the HellermannTyton group work with a usual force meter with minimum 10 kHz frequency of data sampling to determine the tensile forces of the tools and to guarantee the quality of the tools.

It is more difficult to test cable tie tools than would appear at first glance. It is of supreme importance to comply with a standardised test procedure and consistent test conditions, e.g. the size and cross-section of the cable ties and the water content of the tie. A test using different ties and / or different conditioning can easily lead to different values.

In general, the speed of cut-off, the position of the tool with respect to the cable tie, the condition of the wearing parts in the tool and the state of the cable tie play a fundamental role in the determination of tensile forces.

Therefore we must point out that any values we provide must only ever be regarded as guide values for your information. The values cannot be transferred into practice "one for one".

In our user instructions, we specify an adjustment range for each type of cable tie. If tension values must be documented or comply with a specification, we recommend that you adjust them with the aid of the force meter. Also, as a guideline, half the minimum holding strength of the cable tie should be used as tensile force.

The minimum tensile strength (also referred to as minimum unlocking strength) is the least force which the cable tie can withstand before it tears or stretches. This strength is determined using a threaded tie, hence the following formula should be used for guidance as to the correct tensile force of the tool:

$$\frac{\text{Min. tensile strength}}{2} = \text{recommended tensile force}$$

Example:

$$\text{T50R} = \frac{\text{225 N minimum tensile strength}}{2}$$

$$\frac{\text{225 N}}{2} = \text{112.5 N recommended tensile force according to formula}$$

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The tensile force can of course be adjusted up or down, in line with the corresponding application.

Please bear in mind that this statement applies only to HellermannTyton products. Cable ties from other manufacturers may require a higher or lower force setting.

In order to secure the device after it has been adjusted using the force meter against manipulation or unintentional maladjustment, HellermannTyton offers an adjustment safety cap (Art. No.: 110-07200 for MK7HT, MK7P, MK9SST, MK9P) which you can push onto the device after removing the adjustment unit (loosening a screw is all it takes to remove).

After a period of time, to be defined, you test the device again and if necessary re-adjust it. The problem of determination of forces depends on the individual case and has no direct connection with the quality of our product. An exact value for each setting (e. g. in newtons), without stating a tolerance, cannot be confirmed.

Test set-up with a usual force meter and EVO7 cable tie tool.



The following describes how to check the tension force of a manual tensioning tool.

1. Lay the cable tie (green) into the fixture (A).
2. Bring the nose piece of the tensioning tool (B) flush to the test block (C).
3. Insert the strap of the cable tie into the tensioning tool and pull the strap flush against the fixture (A).
4. Re-set the force meter (D) to zero.
5. Pull the trigger of the tensioning tool continuously until the cable tie is cut.
6. The tension force achieved at the cut off point is determined.

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Manual tensioning tool for cable ties with low profile head

MK10-SB up to 9.5 mm strap width

Features and benefits

- Ideal for easy handling of entire HellermannTyton RPE, PE and LPH series
- Tensions and cuts off pre-looped cable ties flush at the head



MK10-SB.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK10-SB	9.5	2.5	0.372 kg	110-10001

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for cable ties, simple version

MK20 up to 4.8 mm strap width

MK21 up to 7.6 mm strap width

Features and benefits

- Lightweight, ergonomic tools
- For tensioning and cutting standard cable ties 4.8 - 7.6 mm width
- Ideal for on-site assembly
- Mounted and pretensioned ties are cut off by twisting tool
- Simply apply cable tie, tension and twist to cut



MK20, MK21.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK20	4.8	1.5	0.05 kg	110-20006
MK21	7.6	2.5	0.04 kg	110-21016

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-550

Pneumatic tensioning tool metal housing

MK3PNSP2 up to 4.8 mm strap width

Features and benefits

- Pneumatic tensioning tool
- Tough metal housing
- For cable ties up to 4.8 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed
- Reliable and low maintenance



The pneumatic tensioning tool MK3PNSP2 for plastic cable ties with max. width of 4.8 mm.

Air Supply	Non oiled, oiled
Air Pressure (min.)	5.5 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 225 x 140 x 40mm

RoHS

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK3PNSP2	4.8	1.5	0.555 kg	110-03400
SP MK3PNSP2 air hose 3 meters	-	-	0.139 kg	110-30002
SP MK3PNSP2 cutting blade	-	-	0.001 kg	110-30101

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-551

The EVO family delivers maximum performance whilst protecting muscles and joints

The next generation of application tools impresses with its advanced technology.

With the EVO family HellermannTyton has developed truly ergonomic cable tie application tools that are unique in the market, perfectly combining convenience with function. **The heart of the EVO family is the innovative TLC-technology (Tension/Lock/Cut).** This is designed to revolutionise the application of cable ties by significantly reducing the cutting effort. The EVO family cuts cable ties with ease, delivering a flush clean finish with no excess strap, whilst enormously reducing physical strain on the user.

The patent-pending TLC-technology delivers increased productivity:

- Application force and effort are significantly reduced
- Precise cutting of the cable tie right at the head
- Smooth fastening of the cable tie without recoil
- Protects muscles and joints and herewith the health of the user

Perfect cutting made easy with the EVO family:

From precise preliminary settings to the perfect cut, the EVO family allows an even lighter, gentler and easier cable tie application than ever before. The TLC-technology makes all the difference!



1. Tension
Tension the cable tie as usual. Use the tension adjustment knob to select the desired tension setting.



2. Lock
The locking mechanism detects when the desired tension is reached, locking the tie in place prior to cutting. No manual pressure is required to hold the cable tie in place.



3. Cut
For the final cut, very little effort is needed. By simply pulling the trigger back a little to cut the tie. Without recoil and vibration.

Date of issue: September 2022

Manual tensioning tool plastic housing

EVO7 up to 4.8 mm strap width

HellermannTyton's EVO7 mechanical hand tool was ergonomically designed to reduce the risks of repetitive stress injuries to operators while concurrently increasing productivity. The EVO7 Tension/Lock/Cut Technology delivers performance, safety and comfort for the operators. Available in a standard grip span (EVO7) or short grip span (EVO7SP), for smaller hands. Additional accessories are available.

Features and benefits

- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low-maintenance
- Fast and precise application with minimum effort (TLC mechanism)
- Convenient and simple tension adjustment
- Extended, slim nose for use in narrow spaces
- Housing made of resilient and lightweight glass fibre-reinforced polyester
- Standard grip span (90 mm) and short grip span (80 mm) available



The EVO7i: Maximum performance with minimum effort.

www.HellermannTyton.co.uk/EVO7i-cat22

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO7i	4.8	1.5	0.281 kg	110-77001
EVO7SP	4.8	1.5	0.275 kg	110-70130
SP EVO7 Blade Kit	-	-	0.002 kg	110-70106

All dimensions in mm. Subject to technical changes.

CALTOOL for calibration of EVO family

The CALTOOL serves for the fine or readjustment of the EVO family.

Features and benefits

- The factory setting (setting 0-8) of the EVO family can be changed



CALTOOL for calibration of EVO family.

TYPE	Weight	Article-No.
EVO Calibration Tool	0.032 kg	110-70089

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-553

Manual tensioning tool plastic housing

EVO9 up to 13.5 mm strap width

The EVO9 is available in a standard grip span 90 mm (EVO9) or short grip span 80 mm (EVO9SP), for smaller hands. Both tools perform between 53 N and 307 N. The EVO9HT (high tension) was designed to apply HellermannTyton cable ties from 120 N until 516 N with a maximum width of 13.5 mm.

Features and benefits

- Standard grip span (90 mm) and short grip span (80 mm) available
- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low-maintenance
- Fast and precise application with minimum effort (TLC-technology)
- Convenient and simple tension adjustment
- Integrated 3 position quick adjustment override (EVO9/EVO9SP/EVO9HT)
- Housing made of resilient and lightweight glass fibre-reinforced polyester



The EVO9 with TLC technology.

EVO9SG for the application of Soft Grip ties!

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO9SG	12.7	2.9	0.357 kg	110-80130
EVO9	13.5	2.0	0.357 kg	110-80002
EVO9SP	13.5	2.0	0.361 kg	110-80003
EVO9HT	13.5	2.0	0.357 kg	110-80017
SP EVO9 Blade	-	-	0.002 kg	110-80037

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-554

Pneumatic tensioning tool plastic housing

MK7P up to 4.8 mm strap width

The MK7P pneumatic bundling tool sets a new benchmark for the rational application of ties in the industrial production process. Improved compressed air supply moves the tensioning piston faster than in comparable tools.

Features and benefits

- Pneumatic tensioning tool
- Light glass-fibre-reinforced housing
- For cable ties up to 4.8 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed



The pneumatic tensioning tool MK7P for plastic cable ties with max. width of 4.8 mm.



The easy to use quick-set-knob.

Air Supply	Non oiled, oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 220 x 170 x 40 mm

RoHS

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK7P	4.8	1.5	0.87 kg	110-07100
SP MK3PNSP2 air hose 3 meters	-	-	0.139 kg	110-30002
SP MK7P replacement blade	-	-	0.001 kg	110-07111
SP MK7/MK9 Lock cap tensioning knob	-	-	0.011 kg	110-07200

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-555

Pneumatic tensioning tool plastic housing

MK9P up to 13.5 mm strap width

The MK9P is constructed with heavy duty parts to ensure optimum performance. It is ideally designed to apply heavy-duty ties like they are used in vehicle construction like trucks, busses and railways.

Features and benefits

- Pneumatic tensioning tool
- Glass-fibre-reinforced housing
- For cable ties up to 13.5 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed
- Holding ring for a balancer
- Optional with lower or upper air attachment



The pneumatic tensioning tool MK9P for plastic cable ties with max. width of 13.5 mm.



MK9P is also available with upper air attachment.

Air Supply	Non oiled, oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 280 x 200 x 55mm

RoHS

TYPE	Strap Width max.	Strap Thickness max.	Air att. Position	Weight	Article-No.
MK9P	13.5	2.5	Lower air connection	0.82 kg	110-09100
MK9P w/ Upper air	13.5	2.5	Top air connection	1.057 kg	110-09110
SP MK3PNSP2 air hose 3 meters	-	-	-	0.139 kg	110-30002
SP MK7/MK9 Lock cap tensioning knob	-	-	-	0.011 kg	110-07200
SP MK9P replacement blade	-	-	-	0.004 kg	110-09111

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-556

Manual tensioning tool for KR-Series

KR6/8

Application tool KR6/8 crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection.

Features and benefits

- Tough metal tool for applying KR cable ties only
- For tensioning, fixing and cutting KR cable ties
- Simply change the front plate to apply 6 mm or 8 mm straps



The manual tensioning tool KR6/8 for KR-Series cable ties.

TYPE	For Ties	Strap Width max.	Weight	Article-No.
KR6/8	KR6, KR8	8.0	0.69 kg	121-00680
SP KR6/8 replacement blade	KR6, KR8	-	0.002 kg	122-68019

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for KR-Series

EVO KR

Application tool EVO KR crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection. In combination with KR cable ties this system offers high vibration resistance. One reason for customers in the railway and automotive industry to take this system as a preferred solution.

Features and benefits

- One-handed operation
- Sideways insertion
- Durable plastic housing
- Tension adjustment
- Calibration of the EVO KR tool



The manual tensioning tool EVO KR for KR-Series cable ties.

www.HellermannTyton.co.uk/EVO-KR-cat22

TYPE	For Ties	Weight	Article-No.
EVO-KR	KR6, KR8	0.523 kg	121-68000
SP EVO KR Blade Kit	KR-Series	0.005 kg	121-68110

All dimensions in mm. Subject to technical changes.

Pneumatic tensioning tool for KR8-Series

KR8PNSE

Application tool KR8PNSE crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection.

Features and benefits

- Pneumatic tool with tough metal housing
- For applying KR8 cable ties only
- For tensioning, fixing and automatica cutting KR8 cable ties
- Tension force can be adapted depending on air pressure
- Holding ring for a balancer



The pneumatic tensioning tool KR8PNSE for KR8-Series cable ties.

Air Supply	Non oiled, oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	4 Bar
Hose Internal Diameter	6.0 mm
L x H x W	approx. 320 x 210 x 50 mm

RoHS

TYPE	For Ties	Strap Width max.	Weight	Article-No.
KR8PNSE	KR8	8.0	1.537 kg	121-00889
SP KR8PNSE replacement blade	KR8	-	0.002 kg	122-80032

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-558

Manual tensioning tool for metal ties MBT-Series

MK9SST up to 16.0 mm strap width

The MK9SST is constructed with heavy duty parts to ensure optimum performance. It is designed to apply our MBT cable ties with a strap width of up to 16 mm. The tool is ideally suited for use in most arduous environments such as found on board ships, oil rigs, constructions or in nuclear power stations.

Features and benefits

- Glass-fibre-reinforced housing
- Ergonomic design
- Consistent tensioning and automatic cutting of metal ties MBT-Series
- Infinitely adjustable tension force combined with two-step quick adjustment



MK9SST.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9SST	16.0	0.5	0.514 kg	110-95000
SP MK9SST replacement blade	-	-	0.004 kg	110-95273

All dimensions in mm. Subject to technical changes.

Pneumatic tensioning tool for metal ties MBT-Series

MK9PSST up to 16.0 mm strap width

The MK9PSST pneumatic stainless steel tool is constructed with heavy-duty parts to ensure optimum performance in demanding environments. It is ideally designed to apply stainless steel metal ball tie series (MBT) up to 16.0 mm width.

Features and benefits

- Unique levels of repeatability and accuracy
- High application speed and low maintenance
- Improved compressed air supply for faster tensioning piston movement
- Shorter processing time and greater volume of connecting tie application
- Ergonomic design
- Automatic ejection of cut-off cable tie end
- Ideally designed to apply stainless steel MBT-Series up to 16.0 mm width
- On air pressure between 3 and 6 bar



MK9PSST.

Air Supply	Non oiled, oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 280 x 200 x 55 mm

RoHS

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9PSST	16.0	0.5	0.972 kg	110-95350
SP MK9PSST replacement blade	-	-	0.004 kg	110-95307
SP MK7/MK9 Lock cap tensioning knob	-	-	0.011 kg	110-07200

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MBT-, MLT- and AMT-Series

HDT16 up to 16.0 mm strap width

The HDT16 application tool is designed for installing heavy duty stainless steel cable ties within a range of industries such as shipbuilding, oil rigs, mining and mass transit. The tool can easily be adjusted making it suitable for applying both MBT, MLT and AMT cable ties with a strap width of up to 16 mm.

Features and benefits

- Two way nose piece for use with MBT-Series and AMT-, MLT-Series stainless steel cable ties
- Easy adjustment of the handles to ensure the most ergonomic position for the operator
- Integrated cutting mechanism delivering a flush cut and professional finish every time
- The ideal tool for achieving a perfect installation of MBT, MLT and AMT cable ties



HDT16.

www.HellermannTyton.co.uk/HDT16-cat22

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
HDT16	16.0	0.8	0.78 kg	110-40000

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MBT-Series

KST-STG200 up to 12.3 mm strap width

The KST-STG200 application tool is designed for installing heavy duty stainless steel cable ties within a range of industries such as shipbuilding, oil rigs, mining and mass transit. The tensioning strength can be adjusted while pulling the trigger. The tool is easy to handle and far more reliable than trying to tension the ties by hand.

Features and benefits

- Tough metal tool
- Operator controlled tensioning
- Cut off by pulling the hand lever



KST-STG200.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
KST-STG200	12.3	0.3	0.562 kg	110-09950

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-560

Date of issue: September 2022

Manual tensioning tool for metal ties MST-Series

MST6 for 5.9 mm strap width

The MST6 tool has been specially developed for reliably applying HellermannTyton metal cable ties of the MST-S series. Due to the punch-lock mechanism the tie is mechanically crimped and leads to metal deformation of the tie ends. This punch-lock mechanism ensures a reliable bundling with perfect resistance to vibration. The tension force is freely adjustable by the operator.

Features and benefits

- Tough metal tool
- Ergonomic design
- Consistent tensioning and automatically cutting of metal ties
- Designed for use with MST-S Series ties (5.9 mm)
- For tensioning, fixing and cutting MST-S metal ties only



MST6.

www.HellermannTyton.co.uk/MST6-cat22

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST6	5.9	0.3	0.532 kg	110-61000
SP MST6 replacement blade	-	-	0.003 kg	110-61001
SP MST6 replacement punch	-	-	0.001 kg	110-61002

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MST-Series

MST9 for 8.9 mm strap width

The MST9 tool has been specially developed for reliably applying HellermannTyton metal cable ties of the MST-M series. Due to the punch-lock mechanism the tie is mechanically crimped and leads to metal deformation of the tie ends. This punch-lock mechanism ensures a reliable bundling with perfect resistance to vibration. The tension force is freely adjustable by the operator.

Features and benefits

- Tough metal tool
- Ergonomic design
- Consistent tensioning and automatic cutting of metal ties
- Designed for use with MST-M Series ties (8.9 mm)
- For tensioning, fixing and cutting MST-M metal ties only



MST9.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST9	8.9	0.4	0.532 kg	110-13000
SP MST9 replacement blade	-	-	0.004 kg	110-13001
SP MST9 replacement punch	-	-	0.001 kg	110-13002

All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-561

Application Tooling for Cutting Plastic Ties



EVO cut.
See page 563
25

Application Tooling for Snappers



MSNP, ASNP.
See page 564



ASNP.
See page 564

Application Tooling for Heat Shrinkable Tubing



H6100.
See page 566
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CHG900.
See page 565
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Application Tooling for Non Shrinkable Tubing



NA.
See page 567
35–38



VA.
See page 568
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K, S, SS.
See page 569

Application Tooling for Braided Sleeves



HSG0.
See page 570
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Application Tooling for Identification



HCT1, HCT2.
See page 571
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Manual cutting tool for plastic ties

EVO cut

The EVO cut is a cutting tool for plastic ties, which ensures the cut of the strap while preserving wires and harnesses from being damaged.

This applies to flexible cables, bundles and lines as well as rigid bundled goods. Its use is recommended in many applications for which wires and harnesses have a high value added. Especially for sensitive cable harnesses the use of the EVO cut is recommended.

The cutting tool is made of a lightweight plastic housing and an ergonomic, non-slip handle for a comfortable and secure grip.

The tool includes three interchangeable nosepieces for plastic cable ties of varying widths and thicknesses.



EVO cut – Cutting tool for plastic ties.

Features and benefits

- Cutting tool for plastic ties
- Tie can be cut off at any part of the strap
- Ensures the cable isolation from being damaged
- Light-weighting plastic housing, ergonomic design
- Single-handed operation
- Includes three interchangeable nosepieces for respective cable tie width and thickness



Tie can be cut off at any part of the strap.

www.HellermannTyton.co.uk/EVOcut-cat22



Single-handed operation.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVOcut	7.8	1.8	0.14 kg	110-05005

All dimensions in mm. Subject to technical changes.

Snapper Tools

MSNP1-70 for Snapper Size 1 to 70

ASNP2-22 for Snapper Size 2 to 22

ASNP24-70 for Snapper Size 24 to 70

Features and benefits

- For efficient fixing of the snapper hose clips
- MSNP tool: handy for installation on site
- ASNP tool: suitable for series production. Retaining screw limits the draw-in area prevents overstretching of the snapper



Snapper Application Tools MSNP1-70 and ASNP24-70.

Snapper hose clips for tubes and harnesses see page 204.

Pneumatic Tools for Snapper are available on request. Contact us!



Snapper Application Tool ASNP2-22.

TYPE	Application	Weight	Material	Colour	Article-No.
MSNP1-70	SNP-Series 1 up to 70	0.18 kg	Metal (MET), Plastic (PL)	Yellow (YE)	191-01700
ASNP2-22	SNP-Series 2 up to 22	0.2 kg	Metal (MET), Plastic (PL)	Blue (BU)	191-02220
ASNP24-70	SNP-Series 24 up to 70	0.25 kg	Metal (MET), Plastic (PL)	Red (RD)	191-24700

Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-564

Cordless Heat Gun - Gas powered

CHG900

The HellermannTyton CHG900 Cordless Heat Gun is powered by P445 gas cartridges, providing autonomous working of 90 minutes in one go. The tool is designed to produce flameless heat which makes it the ideal hot-air gun to apply a huge variety of heat shrink tubing and heat shrink wire markers as well as molded shapes or heat shrink boots, transition shapes, end caps and cable repair sleeves especially in harsh outdoor conditions covering freezing temperatures as low as -8 °C.

Features and benefits

- Cordless heat gun powered by P445 gas cartridges
- Flameless heat - no direct flame outlet
- 90 min autonomy per cartridge
- Qualified for harsh outdoor conditions (-8 °C)
- Lightweight 440 g tool (555 g incl. cartridge)
- Hands-free operation due to integrated standing pod
- Quick start piezo ignition
- Instant turnaround due to antiflare feature
- Precise gas flow adjustment
- Ergonomic rugged design
- Quick gas cartridge exchange
- Tool-free maintenance



HellermannTyton Cordless Heat Gun Kit - CHG900.



Gas Nozzle for CHG900 Heat Gun.



Piezo Ignition Trigger for CHG900 Heat Gun.

www.HellermannTyton.co.uk/CHG900-cat22

TYPE	Description	Article-No.
CHG900	Cordless Heat Gun - CHG900 Set incl. P445 Gas Cartridge and 2 nozzles.	391-90010
Piezo CHG900	CHG900 Spare Part - Piezo Ignition Trigger.	391-90011
Gas Nozzle	CHG900 Spare Part - Gas Nozzle.	391-90012
P445	P445 Gas Cartridge (Butane, Propane, Propene).	391-90101

Subject to technical changes.

Date of issue: September 2022

Electrical Hot Air Tool

H6100

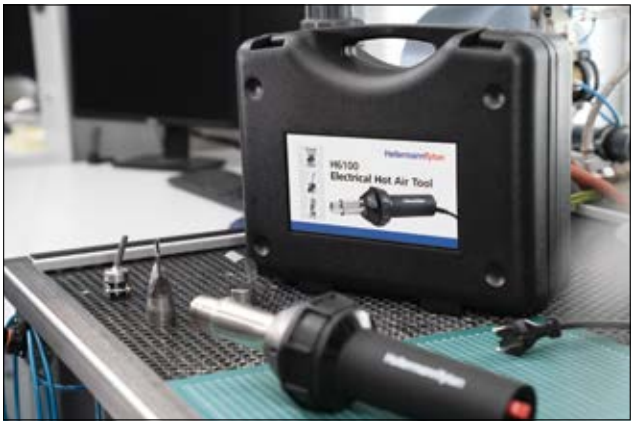
H6100 Electrical Hot Air Tool is designed for shrinking thin to medium wall heat shrink tubing, end caps and molded shapes.

Features and benefits

- Ergonomic and light weight hand tool
- Fatigue-free working due to low weight less than 1 kg
- Powerful 1600 W motor
- Non-slip rubber ring for safe work bench application
- Infinitely variable temperature setting up to +700 °C
- Ceramic heating element
- Integrated easy to clean air filter
- Heavy duty H07RN-F power cord
- Sturdy tool case incl. 3 push-on nozzles for precise heat shrink applications



H6100 Electrical Hot Air Gun.



H6100 comes in carrying case incl. push-on nozzles.

H6100 is supplied with an EU plug.



Adjusting H6100 operation temperature.

TYPE	Air Flow l/min	Operating Temperature	Standby Temp. °C	Wattage	Operational Voltage	Weight	Article-No.
H6100	240 l/min	+40 °C to +700 °C	40 °C	1,600 W	230 V	0.99 kg	391-00110

Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-566

Three-pronged pliers for sleeves and grommets

NA

Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

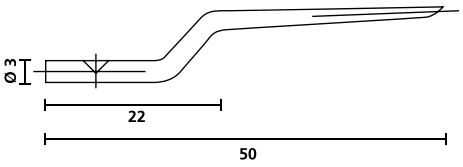
Features and benefits

- To easily affix expandable sleeves of every type onto cables/connectors
- Push pliers and pull over cable
- Close pliers, sleeve is placed easily
- Hellerine lubricant recommended for easy operation
- Replacement prongs available

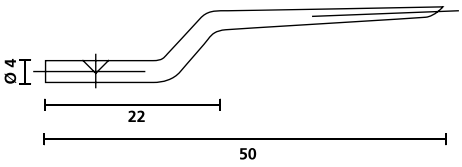


Fast, secure application with the NA three-pronged pliers.

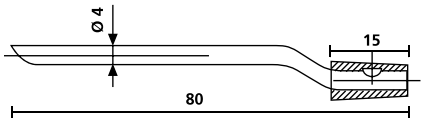
For Hellerine lubricant see page 306.



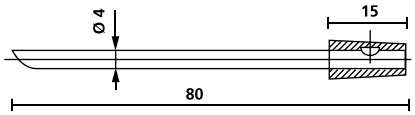
Replacement prong NA0/1



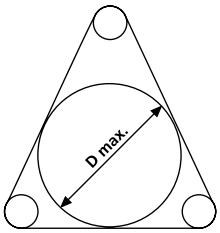
Replacement prong NA1K/3



Replacement prong NA4/5



Replacement prong NA8/10



Three-prong pliers max. application diameter

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
NA0/1	Expansion tool NA0/1	1.3	1.8	10.5	28	621-10001
NA1K/3	Expansion tool NA1/3	2.5	5.0	11.0	28	621-10103
NA4/5	Expansion tool NA4/5	7.5	10.0	15.5	50	621-10405
NA8/10	Expansion tool NA8/10	12.0	17.0	25.5	60	621-10810
NA0/1 PRONG	Replacement prongs for NA0/1	1.3	1.8	-	28	621-60001
NA1K/3 PRONG	Replacement prongs for NA1K/3	2.5	5.0	-	28	621-60103
NA4/5 PRONG	Replacement prongs for NA4/5	7.5	10.0	-	50	621-60405
NA8/10 PRONG	Replacement prongs for NA8/10	12.0	17.0	-	60	621-60810

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-567

Three-pronged pliers for sleeves and grommets

VA2,5/5 - Reinforced

Expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

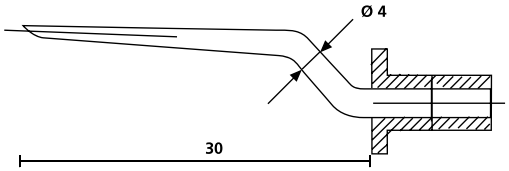
Features and benefits

- Suitable for expanding tubing cut lengths and rubber parts
- Withstands high loading
- Set of 3 2.5/5 pins
- Replacement pins available in sizes 8 and 18
- Hellerine lubricant recommended for easy operation

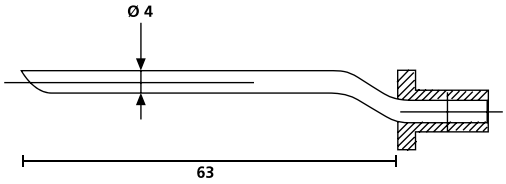
For Hellerine lubricant see page 306.



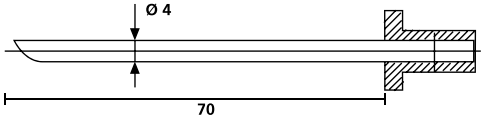
VA2.5/5.



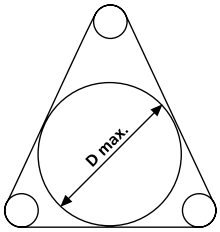
Replacement prong size 2.5/5



Replacement prong size 8



Replacement prong size 18



Three-prong pliers max. application diameter

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Article-No.
VA2.5/5	Expansion tool VA2.5/5	2.5	5.0	26.0	621-00200
VA-2.5/5 PRONG	Replacement prongs size 2.5/5	2.5	5.0	26.0	621-01200
VA2.5/5 PRONG 8	Replacement prongs size 8	8.0	10.0	28.0	621-02200
VA2.5/5 PRONG 18	Replacement prongs size 18	18.0	20.0	30.0	621-03200

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-568

Three-pronged pliers for sleeves and grommets

K, S, SS

Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

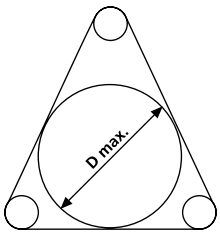
Features and benefits

- For speedy application of markers and sleeves
- Hellerine lubricant recommended for easy operation
- Handy D KIT contains a tool body, a range of prongs and small bottle of Hellerine lubricant.



Fast, secure application with the three-pronged expansion tools.

For Hellerine lubricant see page 306.



Three-prong pliers max. application diameter

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
SS TOOL	Three-pronged plier	1.2	2.0	15.0	20	621-80008
S TOOL	Three-pronged plier	2.5	4.0	15.0	20	621-80009
K TOOL	Three-pronged plier	5.0	10.0	17.0	32	621-80007
D KIT	Three-pronged plier kit	1.2	11.5	17.0	32	621-80005

All dimensions in mm. Subject to technical changes.

Date of issue: September 2022

Add items to your watchlist!
www.HT.click/49-569

Hot cutting tool

HSG0

The HSG0 hand tool is used to cut braided sleeving cleanly and without fraying.

Features and benefits

- Light and sturdy
- Heats up quickly with the press of button and cuts in seconds
- The yarn melts and fuses together
- No fraying of the sleeving



The HSG0 hot cutting tool prevents the braided sleeving from fraying.

www.HellermannTyton.co.uk/HSG0-cat22

TYPE	Description	Weight	Colour	Article-No.
HSG0	Hot cutting tool	1.0 kg	Blue (BU)	170-99003
HSG0BLADE	Replacement blade	0.027 kg	Metal (ML)	170-99002

Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-570

Date of issue: September 2022

Helafix Tool

HCT1 for carrier size HCR09

HCT2 for carrier size HCR12

HCT1 and HCT2 tools are ideal for cleanly cutting the carrier strip as well as punching out the securing holes. For HCR06, HCR18 and HCR24, the front part of the pliers can be used. To fix the character holders HC and HCR simply use the T18 range of cable ties, fixings or rivets.

Features and benefits

- Cleanly cut Helafix HCR carrier tubing
- Punch securing holes on edges of HCR09 (HCT1) and HCR12 (HCT2)
- Apply punched HCR09 and HCR12 with T18 range of cable ties
- Suitable for punching rivet holes in HCR06, HCR18 and HCR24 tubing
- Punch hole diameter 2.5 mm
- Fix with T18 range of cable ties or suitable rivets



Any length can be used…



…just cut to suit.

TYPE	For Carrier Width	For Size	Ø (D)	Article-No.
HCT1	10.0	HCR09	2.5	525-00010
HCT2	13.0	HCR12	2.5	525-00013

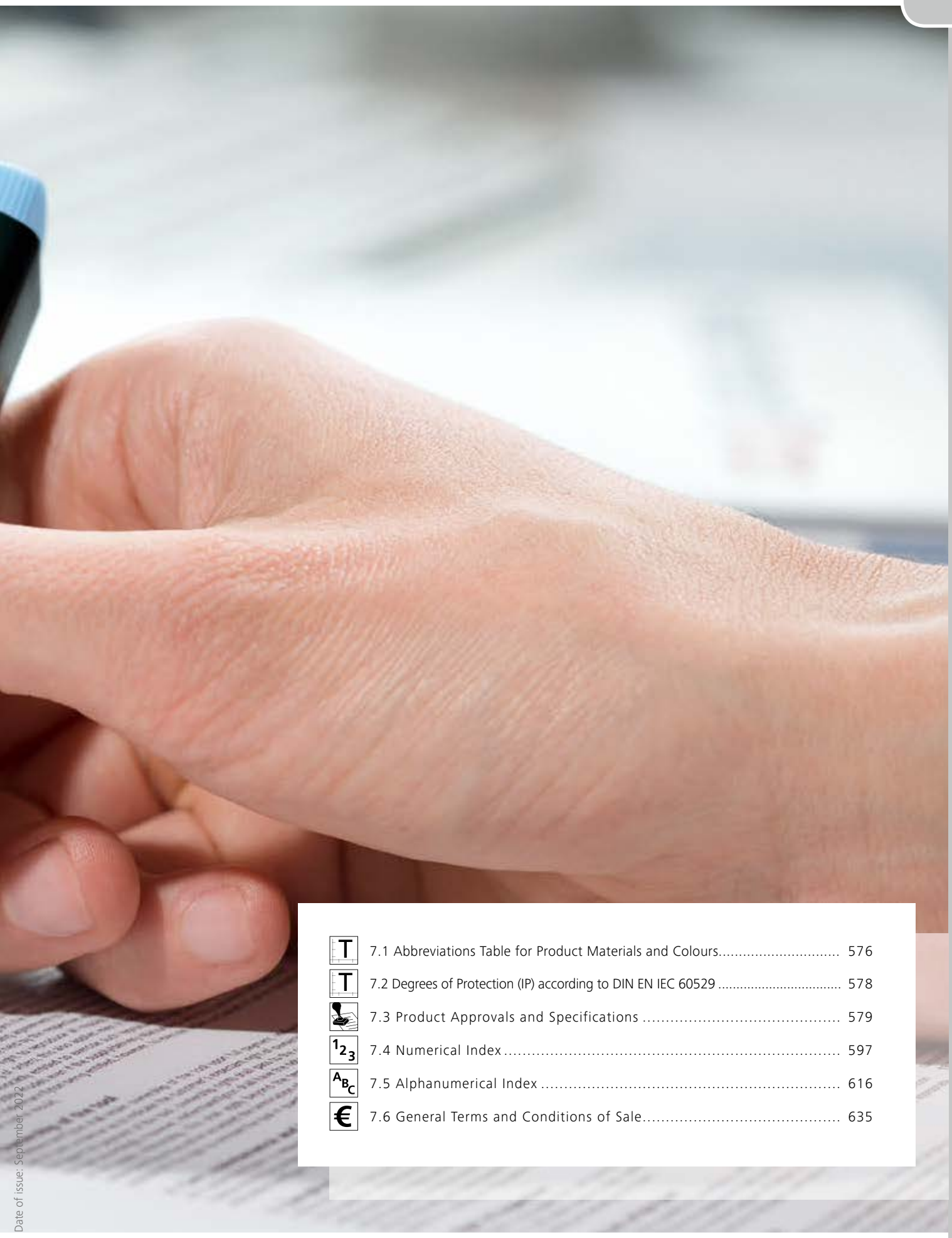
All dimensions in mm. Subject to technical changes.

Add items to your watchlist!
www.HT.click/49-571



Date of issue: September 2022

HellermannTyton



7.1 Abbreviations Table for Product Materials and Colours 576

7.2 Degrees of Protection (IP) according to DIN EN IEC 60529 578

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Date of issue: September 2022



7.1 Abbreviations Table for Product Materials and Colours

576

7.2 Degrees of Protection (IP) according to DIN EN IEC 60529

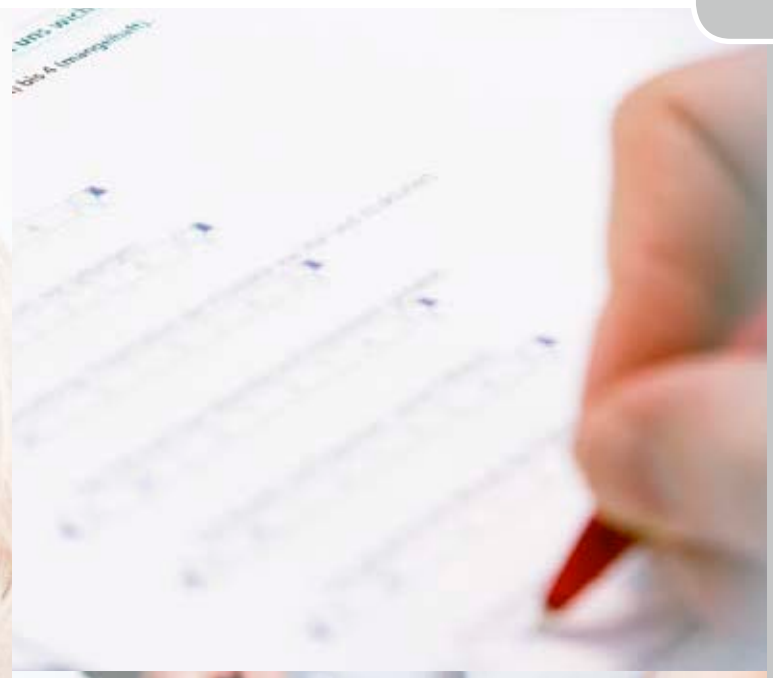
578

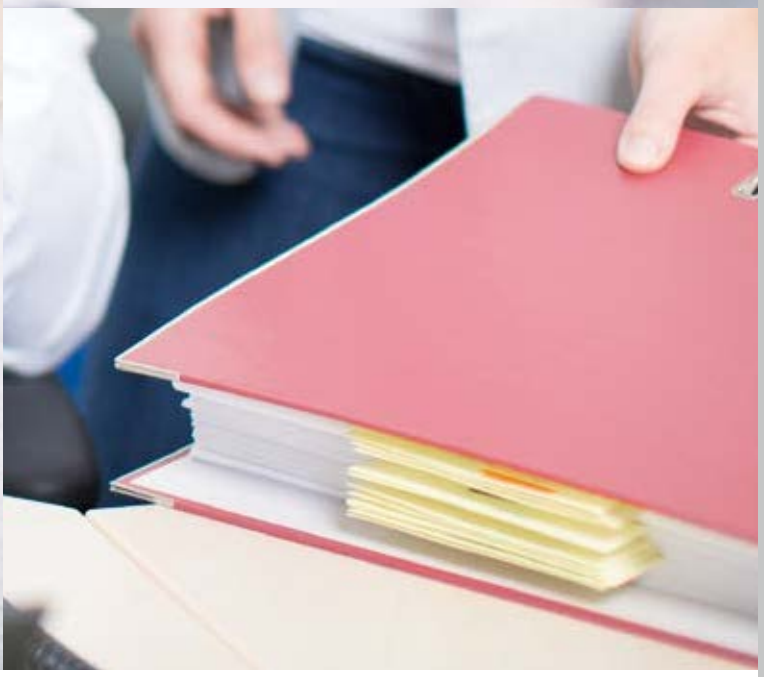
7.3 Product Approvals and Specifications

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Abbreviations Table for Product Materials and Colours

Abbreviation*	Material
1101	Type 1101, Polyester, white (1101)
1102	Type 1102, Polyester, yellow (1102)
1103	Type 1103, Polyester, silver (1103)
1104	Type 1104, Polyester, white transparent, self-laminating (1104)
1105	Type 1105, Polyester, white transparent, self-laminating (1105)
1203	Type 1203, Polyester, silver matt, tamper-proof (1203)
1204	Type 1204, Polyester (1204)
1206	Type 1206, Polyester (1206)
1208	Type 1208, Acetate foil, white, tamper-proof (1208)
1209	Type 1209, Vinyl (1209)
1211	Type 1211, Vinyl, yellow gloss (1211)
1213	Type 1213, Vinyl, glossy colours (1213)
1216	Type 1216, Polyethylene, white (1216)
1220	Type 1220, Polyester, white (1220)
1221	Type 1221, Polyester, silver (1221)
1232	Type 1232, Polyester, white transparent, self-laminating (1232)
1251	Type 1251, Polyester, silver and Polyester, transparent (1251)
1401	Type 1401, Vinyl (1401)
1402	Type 1402, Vinyl (1402)
270	Type 270, Cotton cloth, yellow (270)
323	Type 323, Polyvinylidene Fluoride (323)
880	Type 880, Vinyl (880)
892	Type 892, Vinyl, white (892)
ABS	Acrylonitrile Butadiene Styrene (ABS)
AL	Aluminium (AL)
BS	Brass (BS)
CO	Cotton (CO)
CR	Chloroprene rubber (CR)
DIV	Various (DIV)
E/TFE	Ethylene Tetrafluoroethylene (E/TFE)
EP	Epoxy resins (EP)
EPR	Ethylene Propylene Rubber (EPR)
EVA	Ethylenevinylacetate (EVA)
FPMX	Fluoropolymer, cross-linked (FPMX)
GF	Glass Fibre (GF)
GS	Galvanised Steel (GS)
IIR	Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
LPG+	Butane/Propane (LPG+)
MET	Metal (MET)
NPB	Nickel Plated Brass (NPB)
NR	Natural Rubber (NR)
PA	Polyamide (PA)
PA11	Polyamide 11 (PA11)
PA12	Polyamide 12 (PA12)
PA46	Polyamide 4.6 (PA46)
PA6	Polyamide 6 (PA6)
PA66	Polyamide 6.6 (PA66)
PA66/6HIRHS	Polyamide 6.6/6, high impact modified, heat stabilised (PA66/6HIRHS)
PA66/PP	Polyamide 6.6 Polypropylene (PA66/PP)
PA666V0	Polyamide 6.6/6, V0 (PA666V0)
PA66GF13	Polyamide 6.6, glass-fibre reinforced (PA66GF13%)
PA66GF15	Polyamide 6.6, glass-fibre reinforced (PA66GF15%)

Abbreviation*	Material
PA66HIR	Polyamide 6.6, high impact modified (PA66HIR)
PA66HIR(S)	Polyamide 6.6, high impact modified, scan black (PA66HIR(S))
PA66HIRHS	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
PA66HIRHSUV	Polyamide 6.6, high impact modified, heat and UV-stabilised (PA66HIRHSUV)
PA66HS	Polyamide 6.6, heat stabilised (PA66HS)
PA66HSUV	Polyamide 6.6, heat and UV-stabilised (PA66HSUV)
PA66HSW	Polyamide 6.6, heat and UV-resistant (PA66HSW)
PA66MP	Polyamide 6.6, with metal particles (PA66MP)
PA66MP+	Polyamide 6.6, with metal particles (PA66MP+)
PA66UV	Polyamide 6.6, UV-stabilised (PA66UV)
PA66V0	Polyamide 6.6 V0 (PA66V0)
PA66W	Polyamide 6.6, UV-resistant (PA66W)
PA6FR	Polyamide 6, flame retardant (PA6FR)
PA6GF15	Polyamide 6, glass-fibre reinforced (PA6GF15%)
PA6GF30	Polyamide 6, glass-fibre reinforced (PA6GF30%)
PA6HIR	Polyamide 6, high impact modified (PA6HIR)
PA6V0	Polyamide 6 V0 (PA6V0)
PBT	Polyester (PBT)
PC	Polycarbonate (PC)
PC/ABS	Acrylonitrile Butadiene Styrene alloyed with Polycarbonate (PC/ABS)
PE	Polyethylene (PE)
PEEK	Polyetheretherketone (PEEK)
PE-FR	Polyethylene (PEFR), Flame retardant
PET	Polyester (PET)
PEUV	Polyethylene, UV Resistant (PEUV)
PL	Plastic (PL)
PLGF	Plastic, glass-fibre reinforced (PLGF)
PMPI	Polyaramid Polymetaphenylene Isophthalamide (PMPI)
PO	Polyolefin (PO)
POA	Elastomer, cross-linked (POA)
POM	Polyacetal (POM)
PO-X	Polyolefin, cross-linked (PO-X)
PP	Polypropylene (PP)
PPMP+	Polypropylene with metal particles (PPMP+)
PTFE	Polytetrafluoroethylene (PTFE)
PUR	Polyurethane (PUR)
PVC	Polyvinylchloride (PVC)
PVC-FR	Polyvinylchloride, flame retardant (PVC-FR)
PVDF	Polyvinylidene Fluoride (PVDF)
SI	Silicone (SI)
SNCU	Tin Plated copper (SNCU)
SP	Polyester (SP)
SS	Stainless Steel (SS)
SS304	Stainless Steel (SS304)
SS316	Stainless Steel (SS316)
ST	Steel (ST)
TPE	Thermoplastic Elastomer (TPE)
TPU	Thermoplastic Polyurethane (TPU)
ZN	Zinc plated (ZN)

***according to EN ISO 1043 Part 1 and ISO 1629**

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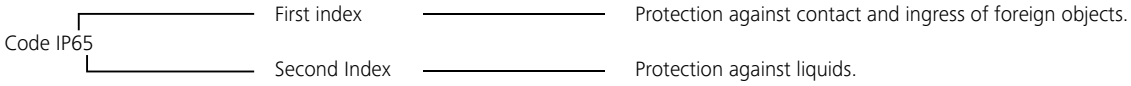
Abbreviation	Colour
BGE	Beige (BGE)
BK*	Black (BK)
BKIDWH	Black with White Identification Yarn (BKIDWH)
BN*	Brown (BN)
BS	Brass (BS)
BU*	Blue (BU)
CL	Transparent (CL)
DKBU	Dark Blue (DKBU)
DKGY	Dark Grey (DKGY)
FLPK	Fluorescent Pink (FLPK)
GN*	Green (GN)
GNYE*	Green-Yellow (GNYE)
GSWH	White gloss (GSWH)
GSYE	Yellow gloss (GSYE)
GY*	Grey (GY)
LTBU	Light Blue (LTBU)
MGN	Mint Green (MGN)
MIX	Various (MIX)
ML	Metal (ML)
MST	Mustard (MST)
MTSR	Silver matt (SR)
MTYE	Yellow matt (MTYE)
NA	Natural (NA)
OG*	Orange (OG)
PK	Pink (PK)
RD*	Red (RD)
RUS	Russet (RUS)
SR*	Silver (SR)
TCBK	Tin coloured and Black
TT	Translucent (TT)
VT*	Violet (VT)
WH*	White (WH)
YE*	Yellow (YE)

***according to DIN IEC 60757**

Definition of the degrees of protection according to DIN EN IEC 60529 (for HelaGuard flexible conduits and fittings)

The levels of protection are indicated by a code made up of two constant letters IP and two characteristic numbers for the degree of protection, e.g. IP54.

Example:



Degree of protection against access and foreign bodies

Index	Designation	Scope of protection
0	**Non-protected**	No special protection for persons against direct contact with live or moving parts. No protection of the equipment against ingress of solid foreign objects.
1	**Protection against large foreign bodies**	Protection against accidental contact of large areas with live and internal moving parts, e.g. back of hand, but not protection against deliberate access to the parts. Protection against ingress of solid foreign objects with a diameter greater than 50 mm.
2	**Protection against medium-sized foreign bodies**	Protection against contact between the finger and live or internal moving parts. Protection against ingress of solid foreign objects with a diameter greater than 12.5 mm.
3	**Protection against small foreign bodies**	Protection against contact between live or internal moving parts and tools, wires and the like with a thickness greater than 2.5 mm. Protection against ingress of solid foreign objects with a diameter greater than 2.5 mm.
4	**Protection against granular foreign objects**	Protection against contact between live or internal moving parts and tools, wires and the like with a thickness greater than 1 mm. Protection against ingress of solid foreign objects with a diameter greater than 1 mm.
5	**Protection against dust deposits**	Complete protection against contact with live or internal moving parts, protection against hazardous dust deposits. The ingress of dust is not completely prevented, but dust may not penetrate in such quantities as to impair the function.
6	**Protection against dust entry**	Complete protection against contact with live or internal moving parts. Protection against the ingress of dust.

Degrees of protection for water

Index	Designation	Scope of protection
0	**Non-protected**	No special protection.
1	**Protection against vertically dripping water**	Water dripping vertically must cause no damage.
2	**Protection against dripping water (tilted)**	Water dripping at an angle of 15° to the vertical from any direction must cause no damage.
3	**Protection against spraying water**	Water dripping at an angle of 60° to the vertical from any direction must cause no damage.
4	**Protection against splashing water**	Water that splashes against the equipment from any direction must cause no damage.
5	**Protection against water jets**	A water jet from a nozzle that is directed against the equipment from any direction must cause no damage.
6	**Protection against flooding**	Water must not penetrate the equipment in hazardous quantities in cases of temporary flooding, e.g. due to heavy seas.
7	**Protection during temporary immersion**	Water must not penetrate the equipment in hazardous quantities if the equipment is immersed in water under the specified conditions of pressure and time (1m for 30 min.).
8	**Protection during continuous immersion**	Water must not penetrate the equipment in hazardous quantities if the equipment is immersed in water (at least 2 bar for 2 h for HelaGuard IP68 non-metallic fittings and 5 bar for 5 h for HelaGuard IP68 metallic fittings.)
9k	**Protection against high pressure/steam jet cleaning**	Highly pressurised water directed at the enclosure from any direction must cause no damage.

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Standards/Standards Organisations/Authorities

ABS	American Bureau of Shipping	USA	ABS
ASN	AeroSpatiale Normalisation	France	ASN
ASTM	ASTM International	USA	ASTM
BS	British Standard	Great Britain	BS
DAN	Deutsche Airbus Norm	Europe	DAN
DEF STAN	Defence Standard	Great Britain	DEF STAN
DNV	Det Norske Veritas	Norway	DNV
ECE	World Vehicle and Vehicle Law Harmonization Forum	Europe	ECE R-118
EN 45545-2	European Standard EN 45545-2	Europe	EN 45545-2
EN 50343	European Standard EN 50343	Europe	EN 50343
FCC	Federal Communications Commission	USA	FC
LEA	Liste des Equivalences Approuvés	France	LEA
MIL	Military Specification	USA	MIL
MS	Military Standard	USA	MS
NASM	National Aerospace Standard, Metric	USA	NASM
NF F	Norme Française Ferroviaire	France	NF F
SAE	Society of Automotive Engineers	USA	SAE
STD	Standard for Dassault	France	STD
UL	Underwriters Laboratories	USA	UL
UNI CEI	Ente Nazionale Italiano di Unificazione Comitato Elettrotecnico Italiano	Italy	UNI CEI
VG	Verteidigungsgerätenorm der Bundeswehr	Germany	VG

References

NSA	Norm Sud Aviation	France	NSA

Testing Institute/Certifying Company

BV	Bureau Veritas	France	
CSA	Canadian Standards Association	Canada	
DEMKO	Danske Elektriske Materialekontrol	Denmark	
DNV	Det Norske Veritas	Norway	
IMQ	Certificazione di prodotti	Italy	
FIMKO	Suomalainen testaus ja sertifiointiyritys	Finland	
KEMA KEUR	KEMA Quality B.V.	Netherlands	
LR	Lloyd´s Register	Great Britain	
NEMKO	Norges Elektriske Materiellkontroll	Norway	
SEMKO	Sveriges Elektrisa Materielkontroll	Sweden	
UL Recognized	Underwriters Laboratories Recognized Canada and US	Canada, USA	
VDE	Verband der Elektrotechnik, Elektronik, Informationstechnik	Germany	

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Certification mark

ATEX	ATEX (Atmosphères Explosibles) Directive	International	
CE	Conformité Européenne	Europe	
CEBEC	Comitée for electrotechnical Belgium European Community	Belgium	
ECE	World Vehicle and Vehicle Law Harmonization Forum	Europe	
EN 45545-2	European Standard EN 45545-2	Europe	
EN 50343	European Standard EN 50343	Europe	
ENEC	European Norms Electrical Certification	Europe	
GS	Geprüfte Sicherheit	Europe	
JAR/FAR	Joint Aviation Regulations / Federal Aviation Regulations	Europe, USA	
JN	Particular Specification developed for Eurofighter Program		
UL	Underwriters Laboratories	USA	
UL Recognized	Underwriters Laboratories Recognized	USA	
cULus	Canadian Underwriters Laboratories	Canada, USA	
VDE	Verband der Elektrotechnik, Elektronik, Informationstechnik	Germany	

Standards for HellermannTyton Cable Ties and Fixings

Material	Colour	Specifications	UL-File Number
CTAM1			
PA66	WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTAM2			
PA66	WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTM0			
PA66	BK WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTM1			
PA66	BK WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTM2			
PA66	BK WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTM3			
PA66	BK WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTM4			
PA66	BK WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
CTQM5			
PA66	BK NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
CTT20R			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
PA66HS	BK		
CTT60R			
PA66 PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
H11P			
PA66	NA	DIN EN 45545-2	
H12P			
PA66	NA	DIN EN 45545-2	
H13P			
PA66	NA	DIN EN 45545-2	
H14P			
PA66	NA	DIN EN 45545-2	
H15P			
PA66	NA	DIN EN 45545-2	
H16P			
PA66	NA	DIN EN 45545-2	
H4P			
PA66	NA	DIN EN 45545-2	
H5P			
PA66	NA	DIN EN 45545-2	
H6P			
PA66	NA	DIN EN 45545-2	

Material	Colour	Specifications	UL-File Number
KR6/35			
PA66	NA	DIN EN 45545-2, IEC 62275:2006	
PA66HS		IEC 62275:2006	
PA66UV	BK		
KR6G5			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA66	NA	DIN EN 45545-2	
KR8/21			
PA66	NA	DIN EN 45545-2, IEC 62275:2006	
PA66UV	BK	IEC 62275:2006	
KR8/33			
PA66	NA	DIN EN 45545-2, IEC 62275:2006	
PA66UV	BK	IEC 62275:2006	
KR8/43			
PA66HS	BK	EN 45545-2	
KR8G5			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA66	NA	DIN EN 45545-2	
LK2			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, IEC 60092 series, IEC 62275:2006	E64963
LK2A			
PA66	BK	IEC 60092 series, IEC 62275	
	BU	IEC 60092 series	
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	RD	IEC 60092 series	
	YE		
PA66HIR	BK		
PA66HIR(S)			
PA66HS		CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	BN	IEC 60092 series	
PA66W	BK		

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Material	Colour	Specifications	UL-File Number
LK5			
PA66	BK	IEC 60092 series	
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, IEC 60092 series	E64963
PA66HIR(S)	BK	IEC 60092 series	
PA66HS	NA	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
PA66W	BK	IEC 62275:2006	
LPH175			
PA66	BK	IEC 60092 series	
LPH275			
PA66HIR(S)	BK	IEC 60092 series	
LPH350			
PA66HIR(S)	BK	IEC 60092 series	
MB5			
PA66	WH	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
MBT14H			
SS316	ML	IEC 60092, IEC 62275:2018, IEC 62275	
MBT14S			
SS316	ML	IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT14XH			
SS316	ML	IEC 60092, IEC 62275:2018	
MBT20H			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT20S			
SS316	ML	IEC 60092, IEC 62275:2018, IEC 62275	
MBT20XH			
SS316	ML	IEC 60092	
MBT27H			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT27S			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT27XH			
SS316	ML	IEC 60092	
MBT33H			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT33S			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MBT33XH			
SS316	ML	IEC 60092	
MBT5S			
SS316	ML	IEC 60092, IEC 62275:2018, IEC 62275	
MBT8H			
SS316	ML	IEC 62275:2006, IEC 62275:2018, IEC 62275	

Material	Colour	Specifications	UL-File Number
MBT8S			
SS316	ML	IEC 60092, IEC 62275:2006, IEC 62275:2018, IEC 62275	
MLT12SS10			
SS316	ML	IEC 60092 series	
MLT12SS5			
SS316	ML	IEC 60092 series	
MLT24SS5			
SS316	ML	IEC 60092 series	
MLT8SS10			
SS316	ML	IEC 60092 series	
MLT8SS5			
SS316	ML	IEC 60092 series	
MP3M3			
PA66	NA	NF EN 45545-2	
MP4M3			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64963
MSMP5/10			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
MSMP6/6			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
MST200S			
SS304	ML	IEC 62275:2006, IEC 62275	
MST360M			
SS304	ML	IEC 62275	
MST360S			
SS304	ML	IEC 62275:2006, IEC 62275	
MST500M			
SS304	ML	IEC 62275	
MST500S			
SS304	ML	IEC 62275:2006, IEC 62275	
MST700M			
SS304	ML	IEC 62275	
MST700S			
SS304	ML	IEC 62275:2006, IEC 62275	
NY3256			
PA66	NA	DIN EN 45545-2	
PE180			
PA66HS	BK	IEC 60092 series	
PA66HSW			
PE400			
PA66	BU	IEC 60092 series	
	GN		
	RD		
	YE		
PE530			
PA66HSW	BK	IEC 60092 series	
PMB3			
PA666V0	BK	EN 45545-2	

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Material	Colour	Specifications	UL-File Number
PT220			
PEEK	BGE	DIN EN 62275:2016-01, EN 62275:2009, IEC 62275	
PT2A			
PEEK	BGE	DIN EN 62275:2010-07, EN 62275:2009	
Q120R			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
	NA		
Q18R			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
	NA		
Q30R			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
	NA		
Q50L			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
	NA		
QM20			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E65344
RCD-CT-INSERT			
PA666V0	BK	EN 45545-2	
REL100			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	
REL140			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	
REL180			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	E64963
REL250			
PA66	BK	CAN/CSA-C22.2 no. 62275	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	
RELK2I			
PA66	BK	IEC 60092 series	
	NA		
RELK2L			
PA66	BK	IEC 60092 series	
	NA		E64963
RELK2M			
PA66	BK	IEC 60092 series	
	NA		E64963
RELK2R			
PA66	NA	IEC 60092 series	E64963
RLT120			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275, IEC 60092 series, IEC 62275:2006	E64963
	NA		
RLT150			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, IEC 60092 series, IEC 62275:2006	
PA66HS		IEC 60092 series	
PA66W	BK	IEC 62275:2006	
Robusto (LPH942)			
PA11	BK	IEC 62275	
Robusto (LPH962)			
PA11	BK	IEC 62275	
Robusto (LPH992)			
PA11	BK	IEC 62275	
RT250M			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, IEC 60092 series	E64139
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	
PA66W	BK		
RT250XL			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		
T120I			
PA66	BK	IEC 60092 series	
	NA	IEC 60092 series, IEC 62275:2006	
PA66HIR(S)	BK	IEC 60092 series	
PA66W		IEC 62275:2006	

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Material	Colour	Specifications	UL-File Number
T120L			
PA66	BK	IEC 60092 series	
	NA	IEC 60092 series, IEC 62275:2006	
PA66HIR(S)	BK	IEC 60092 series	
PA66HS			
	NA		
PA66W	BK	IEC 60092 series, IEC 62275:2006	
T120M			
PA66	BK	IEC 60092 series	
	NA		
PA66HS	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
T120MR			
PA66	BK	ANSI/UL 62275	E64139
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	
T120R			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E193818
T120R(E)			
PA46	NA	IEC 60092 series	
PA66	BK	IEC 60092 series, IEC 62275:2006	
	GN	IEC 60092 series	
	NA	IEC 60092 series, IEC 62275:2006	
	RD		
PA66HIR(S)	BK	IEC 60092 series	
PA66HS		CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	NA		
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, IEC 60092 series, IEC 62275:2006	E64963
T120ROS			
PA66HS	BK	NF EN 45545-2	
PA66V0	WH	DIN EN 45545-2	
PA66W	BK	EN 45545-2	
T120S			
PA66	NA	IEC 60092 series	
PA66HS	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
PA66W		IEC 62275:2006	
T120XM			
PA66	BK	IEC 60092 series	
	NA		
PA66HS	BK		
	NA		

Material	Colour	Specifications	UL-File Number
T150L			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		
PA66HS	BK		
T150M			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		
PA66HS	BK		
T150R(H)			
PA66HS	BK	VG U48/04101	
	NA	VG 95387 Part 4 Edition: 2008-12, VG U48/04101	
PA66W	BK	IEC 62275:2006	
T150XL			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		
PA66HS	BK		
PA66W			
T150XLL			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
PA66W			
T18I			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	
PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275	
	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	
PA66W	BK		
T18L			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275, IEC 62275:2006	
PA66HS	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	
	NA	BV 03856/H0 BV, CAN/CSA-C22.2 no. 62275	
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	IEC 62275:2006	
T18MR			
PA66	BK	CAN/CSA-C22.2 no. 62275	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	

Standards for HellermannTyton Cable Ties and Fixings

Material	Colour	Specifications	UL-File Number
T18R			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA11	BK	BV 03856/H0 BV, IEC 62275	
PA46	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	E85319
PA66	BK		
	BU	CAN/CSA-C22.2 no. 62275, IEC 60092 series, IEC 62275:2006	E64963
	GN	BV 03856/H0 BV, IEC 62275:2006	
	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	E85319
	RD	IEC 60092 series, IEC 62275:2006	
	YE		
PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	E85319
	NA	ANSI/UL 1565, ANSI/ UL 62275, EN 62275, STD78750, VG 95387 Part 2 Edition: 2008-12, VG 95387 Part 4 Edition: 2008-12	
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 62275:2006	E85319
T18ROS			
PA66V0	WH	DIN EN 45545-2	
T18S			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
T250I			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
T250L			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
T250M			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		

Material	Colour	Specifications	UL-File Number
T250R			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
PA66HIRHSUV	BK		
T250X			
PA66	BK	IEC 60092 series	
T250XL			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
T25L			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
	NA		
T25LL			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
PA66W	BK		
T30L			
PA66	NA	IEC 62275:2006	
PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
	NA	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
PA66W	BK	IEC 62275:2006	
T30LL			
PA66	NA	IEC 60092 series	-
PA66HS	BK		
	NA		
PA66W	BK	IEC 62275:2006	
T30LOS			
PA66V0	WH	DIN EN 45545-2	
T30MR			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		
T30R			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA11	BK	BV 03856/H0 BV, IEC 62275	
PA66	BU	IEC 60092 series	
	GN		
	NA	BV 03856/H0 BV, IEC 62275:2006	
	RD	IEC 60092 series	
	YE		
PA66HS	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	NA	ANSI/UL 1565, ANSI/ UL 62275, EN 62275, STD78750, VG 95387 Part 2 Edition: 2008-12, VG 95387 Part 4 Edition: 2008-12	E85319
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	IEC 62275:2006	

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Material	Colour	Specifications	UL-File Number
T30REC4A			
PA66HS, PA66HIRHS	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 62275	
T30RSF			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275	E64963
PA66HS	BK		E65344
T40R			
PA66	NA	BV 03856/H0 BV, EN 50149:1999, IEC 62275:2006	
PA66HS	BK	BV 03856/H0 BV, CAN/CSA-C22.2 no. 62275	E64963
	NA		
PA66W	BK	EN 50149:1999, IEC 62275:2006	
T50I			
PA11	BK	IEC 62275	
PA46	NA	IEC 60092 series	
PA66	BK	IEC 60092 series, IEC 62275:2006	
	NA		
PA66HIR(S)	BK	IEC 60092 series	
PA66HS		ANSI/UL 1565, ANSI/UL 62275, EN 62275, IEC 60092 series	E85319
	NA	CAN/CSA-C22.2 no. 62275, IEC 60092 series, VG 95387 Part 4 Edition: 2008-12	E64963
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	IEC 62275:2006	
T50IDH			
PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
PA66W			
T50L			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA66	BK	IEC 60092 series, IEC 62275:2006	
	BU	IEC 60092 series	
	GN		
	NA	IEC 60092 series, IEC 62275:2006	
	RD	IEC 60092 series	
	YE		
PA66HIR(S)	BK	BV 03856/H0 BV, CAN/CSA-C22.2 no. 62275, VG 95387 Part 4 Edition: 2008-12	E64963
PA66HS			
	NA	CAN/CSA-C22.2 no. 62275, IEC 60092 series, IEC 62275:2006	
PA66V0	WH	ANSI/UL 62275, DIN EN 45545-2	
PA66W	BK	IEC 62275:2006	

Material	Colour	Specifications	UL-File Number
T50LDH			
PA66HS	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
T50LL			
PA66	BK	IEC 60092 series, IEC 62275:2006	
PA66W		IEC 60092 series	
T50M			
PA66	BK	IEC 60092 series, IEC 62275:2006	
	NA		
PA66W	BK	IEC 62275:2006	
T50ML			
PA66	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
T50MOS			
PA66V0	WH	DIN EN 45545-2	
PA66W	BK	EN 45545-2	
T50MR			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	E64963
	NA		
PA66W	BK	VG 95387 Part 2 Edition: 2008-12	
T50R			
E/TFE	BU	ANSI/UL 1565, ANSI/UL 62275	E64962
PA11	BK	IEC 60092 series, IEC 62275	
PA46	NA	ANSI/UL 1565, ANSI/UL 62275, EN 62275	E85319
PA66		IEC 60092 series, IEC 62275:2006	
	RD	IEC 60092 series	
	YE		
PA66HIR(S)	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
PA66HS			
PA66V0	WH	DIN EN 45545-2, IEC 60092 series	
PA66W	BK	IEC 62275:2006	
T50RDH			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275	E64963
	NA	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	
PA66HS	BK	CAN/CSA-C22.2 no. 62275	
T50ROS			
PA66W	BK	EN 45545-2	
T50RSF(E)			
PA66	BK	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	E64139
	NA		E64963

Standards for HellermannTyton Cable Ties and Fixings

Material	Colour	Specifications	UL-File Number
T50S			
PA11	BK	IEC 60092 series, IEC 62275	
PA66	NA	IEC 60092 series, IEC 62275:2006	
PA66HS	BK	CAN/CSA-C22.2 no. 62275, IEC 60092 series	E64963
	NA		
PA66W	BK	IEC 62275:2006	
T80L			
PA66HS	BK	VG 95387 Part 4 Edition: 2008-12	
	NA	STD78750, VG 95387 Part 4 Edition: 2008-12	
T80R			
PA66HS	NA	STD78750, VG 95387 Part 2 Edition: 2008-12, VG 95387 Part 4 Edition: 2008-12	

Material	Colour	Specifications	UL-File Number
X120R			
PA66HIRHS	BK	IEC 62275	
PA66W			
X250I			
PA66HIRHS	BK	IEC 62275	
X250R			
PA66HIRHS	BK	IEC 62275	
PA66W		ANSI/UL 62275, CAN/CSA-C22.2 no. 62275	E64963
X80I			
PA66HIRHS	BK	IEC 62275	
X80L			
PA66HIRHS	BK	IEC 62275	
X80R			
PA66HIRHS	BK	IEC 62275	

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Standards for HellermannTyton Cable Ties and Fixings according to VG norm 95387

Designation as per VG-Norm	Type	Country of Origin
VG 95387 T04 A 201 L	**T18R**	SG
VG 95387 T04 A 202 L	**T80R**	
VG 95387 T04 A 203 L	**T50I**	GB
VG 95387 T04 A 204 L	**T150R(H)**	SG
VG 95387 T04 A 205 L	**T80L**	
VG 95387 T04 A 208 L	**T30R**	
VG 95387 T04 B 004 B	**T50MR**	GB

Standards for HellermannTyton Heatshrinkable Tubing

Type	Specifications
HA40	ASTM 2671/C, DIN EN ISO 8580
HFT-A	ANSI/UL 224, CLASS 903201, CSA-C22.2 No.198.1-99, UL 224, VG 95343-5:2006-06, VG 95343-5:2016-10
HIS-3	ANSI/UL 224, C22.2 no. 198.1-06
HIS-3 BAG	ANSI/UL 224, CSA-C22.2 No.198.1
HIS-A	ANSI/UL 224, C22.2 no. 198.1-06, CSA, CSA-C22.1, CSA-C22.2 No.198.1
HIS-PACK	ANSI/UL 224, CSA-C22.1, CSA-C22.2 No.198.1, UL 224
LVR	ANSI/UL 224
MA40	ASTM 2671/C, DIN EN ISO 8580
SE28	VG 95343-5:2016-10
TA32	ANSI/UL 224, C22.2 no. 198.1-99
TA37	conforms to BS6853, conforms to LUL E1042:A6, DIN EN 45545-2, DIN EN ISO 4892-2, DIN EN ISO 8580, IEC 60068-2-5:2018, Test Sa2 (Solar radiation test)
TA42	ANSI/UL 224
TCN20	ANSI/UL 224, C22.2 no. 198.1-06, CSA, UL 224 125 °C 600V VW-1
TCN20 overexpanded	C22.2 no. 198.1-06, CSA-C22.1, DIN EN 60068-1/03.95, IEC 60068-1/88 & 92, VW 80000/2009-10
TF21	ANSI/UL 224, C22.2 no. 198.1-99, JAR/FAR 25.853
TF24	VG 95343-5:2016-10
TF31	ANSI/UL 224, C22.2 no. 198.1-99, CSA-C22.2 No.198.1-99
TK20	ANSI/UL 224, UL 224 150 °C 600V VW-1, VG 95343-5:2016-10
TR27	DIN EN 45545-2
TREDUX	ANSI/UL 224, C22.2 no. 198.1-06
Viton®-E	LEA, VG 95343-5:2016-10

Specifications apply to limited article numbers. Please contact our sales desk for further information.

Standards for HellermannTyton Heat Shrinkable Moulded Shapes

Type	Specifications
1100 series 90 degree with Rib - VG	DAN341, VG 95343-6:2009-12
1100 series 90 high ratio	VG 95343-6:2009-12
1100 series 90 low profile with Rib	
1200 series T offset - VG	VG 95343-8:2016-03
1200 series T - VG	
1300 series 45 angle (and 30) T - VG	JN1000T, VG 95343-8:2016-03
130 series Long Outlet with Rib	VG 95343-6:2009-12
150 series Bottle with Rib - VG	
170 series Bottle with Rib	
190 series Bottle with external Ribs	
200 series 2-way Outlet - VG	JN1000T, VG 95343-8:2016-03
300 series 3-way Outlet - VG	VG 95343-8:2016-03
400 series 4-way Outlet - VG	
Epoxy adhesive	VG 95343-15:2019-08

Specifications apply to limited article numbers. Please contact our sales desk for further information.

Standards for HellermannTyton Non Shrinkable Tubing

Type	Specifications
Helsyn H PLC	BS-4G-198 Part 1 Type 1
Helsyn H Reel	
Helsyn TH PLC	
Helsyn TH Reel	

Specifications apply to limited article numbers. Please contact our sales desk for further information.

Standards for HellermannTyton Heat Shrinkable Tubing and Heat Shrinkable Moulded Shapes according to VG Norm 95343

Designation as per VG-Norm	Type
VG 95343 T05 A 001 A	HFT-A-1.2/0.6
VG 95343 T05 A 001 C	
VG 95343 T05 A 001 E	
VG 95343 T05 A 001 G	
VG 95343 T05 A 001 L	
VG 95343 T05 A 002 A	HFT-A-1.6/0.8
VG 95343 T05 A 002 C	
VG 95343 T05 A 002 E	
VG 95343 T05 A 002 G	
VG 95343 T05 A 002 L	
VG 95343 T05 A 003 A	HFT-A-2.4/1.2
VG 95343 T05 A 003 C	
VG 95343 T05 A 003 E	
VG 95343 T05 A 003 G	
VG 95343 T05 A 003 L	
VG 95343 T05 A 004 A	HFT-A-3.2/1.6
VG 95343 T05 A 004 C	
VG 95343 T05 A 004 E	
VG 95343 T05 A 004 G	
VG 95343 T05 A 004 L	
VG 95343 T05 A 004 N	
VG 95343 T05 A 005 A	HFT-A-4.8/2.4
VG 95343 T05 A 005 C	
VG 95343 T05 A 005 E	
VG 95343 T05 A 005 G	
VG 95343 T05 A 005 L	
VG 95343 T05 A 005 N	
VG 95343 T05 A 006 A	HFT-A-6.4/3.2
VG 95343 T05 A 006 C	
VG 95343 T05 A 006 E	
VG 95343 T05 A 006 G	
VG 95343 T05 A 006 L	
VG 95343 T05 A 006 N	
VG 95343 T05 A 007 A	HFT-A-9.5/4.8
VG 95343 T05 A 007 C	
VG 95343 T05 A 007 E	
VG 95343 T05 A 007 G	
VG 95343 T05 A 007 L	
VG 95343 T05 A 007 N	
VG 95343 T05 A 008 A	HFT-A-12.7/6.4
VG 95343 T05 A 008 C	
VG 95343 T05 A 008 E	
VG 95343 T05 A 008 G	
VG 95343 T05 A 008 L	
VG 95343 T05 A 008 N	

Designation as per VG-Norm	Type
VG 95343 T05 A 009 A	HFT-A-19.0/9.5
VG 95343 T05 A 009 C	
VG 95343 T05 A 009 E	
VG 95343 T05 A 009 G	
VG 95343 T05 A 009 L	
VG 95343 T05 A 009 N	
VG 95343 T05 A 010 A	HFT-A-25.4/12.7
VG 95343 T05 A 010 C	
VG 95343 T05 A 010 E	
VG 95343 T05 A 010 G	
VG 95343 T05 A 010 L	
VG 95343 T05 A 010 N	
VG 95343 T05 A 011 A	HFT-A-38.0/19.0
VG 95343 T05 A 011 C	
VG 95343 T05 A 011 E	
VG 95343 T05 A 011 G	
VG 95343 T05 A 011 L	
VG 95343 T05 A 011 N	
VG 95343 T05 A 012 A	HFT-A-50.8/25.4
VG 95343 T05 A 012 C	
VG 95343 T05 A 012 E	
VG 95343 T05 A 012 G	
VG 95343 T05 A 012 L	
VG 95343 T05 A 013 A	HFT-A-76.0/38.0
VG 95343 T05 A 013 C	
VG 95343 T05 A 013 E	
VG 95343 T05 A 013 G	
VG 95343 T05 A 013 L	
VG 95343 T05 A 014 A	HFT-A-101.6/50.8
VG 95343 T05 A 014 C	
VG 95343 T05 A 014 E	
VG 95343 T05 A 014 G	
VG 95343 T05 A 014 L	
VG 95343 T05 B 001 M	TF24-1.2/0.6
VG 95343 T05 B 002 M	TF24-1.6/0.8
VG 95343 T05 B 003 M	TF24-2.4/1.2

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Standards for HellermannTyton Heat Shrinkable Tubing and Heat Shrinkable Moulded Shapes according to VG Norm 95343

Designation as per VG-Norm	Type
VG 95343 T05 B 004 M	**TF24-3.2/1.6**
VG 95343 T05 B 005 M	**TF24-4.8/2.4**
VG 95343 T05 B 006 M	**TF24-6.4/3.2**
VG 95343 T05 B 007 M	**TF24-9.5/4.8**
VG 95343 T05 B 008 M	**TF24-12.7/6.4**
VG 95343 T05 B 009 M	**TF24-19.1/9.5**
VG 95343 T05 B 010 M	**TF24-25.4/12.7**
VG 95343 T05 B 011 M	**TF24-38.1/19.1**
VG 95343 T05 B 012 M	**TF24-50.8/25.4**
VG 95343 T05 B 013 M	**TF24-76.2/38.1**
VG 95343 T05 B 014 M	**TF24-101.6/50.8**
VG 95343 T05 D 001 A	**SE28 3.2/1.6**
VG 95343 T05 D 002 A	**SE28 4.8/2.4**
VG 95343 T05 D 003 A	**SE28 6.4/3.2**
VG 95343 T05 D 004 A	**SE28 9.5/4.8**
VG 95343 T05 D 005 A	**SE28 12.7/6.4**
VG 95343 T05 D 006 A	**SE28 19.0/9.5**
VG 95343 T05 D 007 A	**SE28 25.4/12.7**
VG 95343 T05 D 008 A	**SE28 38.0/19.0**
VG 95343 T05 D 009 A	**SE28 51.0/25.4**
VG 95343 T05 D 010 A	**SE28 76.0/38.0**
VG 95343 T05 D 011 A	**SE28 101.2/51.0**
VG 95343 T05 E 001 A	**VITON®-E-3.2/1.6**
VG 95343 T05 E 002 A	**VITON®-E-4.8/2.4**
VG 95343 T05 E 003 A	**VITON®-E-6.4/3.2**
VG 95343 T05 E 004 A	**VITON®-E-9.5/4.8**
VG 95343 T05 E 005 A	**VITON®-E-12.7/6.4**
VG 95343 T05 E 006 A	**VITON®-E-19.0/9.5**
VG 95343 T05 E 007 A	**VITON®-E-25.4/12.7**
VG 95343 T05 E 008 A	**VITON®-E-38.0/19.0**
VG 95343 T05 E 009 A	**VITON®-E-50.8/25.4**
VG 95343 T05 F 001 M	**TK20-1.2/0.6**
VG 95343 T05 F 002 M	**TK20-1.6/0.8**
VG 95343 T05 F 003 M	**TK20-2.4/1.2**
VG 95343 T05 F 004 M	**TK20-3.2/1.6**
VG 95343 T05 F 005 M	**TK20-4.8/2.4**
VG 95343 T05 F 006 M	**TK20-6.4/3.2**
VG 95343 T05 F 007 M	**TK20-9.5/4.8**
VG 95343 T05 F 008 M	**TK20-12.7/6.4**
VG 95343 T05 F 009 M	**TK20-19.1/9.5**
VG 95343 T05 F 010 M	**TK20-25.4/12.7**
VG 95343 T06 A 001 A	**152-41-G**
VG 95343 T06 A 002 A	**153-41-G**
VG 95343 T06 A 003 A	**154-41-G**
VG 95343 T06 A 005 A	**156-41-G**

Designation as per VG-Norm	Type
VG 95343 T06 A 006 A	**157-41-G**
VG 95343 T06 A 007 A	**158-41-G**
VG 95343 T06 A 008 A	**159-41-G**
VG 95343 T06 A 009 A	**160-41-G**
VG 95343 T06 A 010 A	**199-4-G**
VG 95343 T06 B 001 A	**152-42-G**
VG 95343 T06 B 002 A	**153-42-G**
VG 95343 T06 B 003 A	**154-42-G**
VG 95343 T06 B 004 A	**155-42-G**
VG 95343 T06 B 005 A	**156-42-G**
VG 95343 T06 B 006 A	**157-42-G**
VG 95343 T06 B 007 A	**158-42-G**
VG 95343 T06 B 008 A	**159-42-G**
VG 95343 T06 B 009 A	**160-42-G**
VG 95343 T06 B 010 A	**1306-1-G**
VG 95343 T06 C 001 A	**157-43-G**
VG 95343 T06 C 002 A	**158-43-G**
VG 95343 T06 C 004 A	**160-43-G**
VG 95343 T06 D 001 A	**129-1-G**
VG 95343 T06 D 002 A	**130-1-G**
VG 95343 T06 D 003 A	**131-1-G**
VG 95343 T06 D 004 A	**132-1-G**
VG 95343 T06 D 005 A	**133-1-G**
VG 95343 T06 D 006 A	**134-1-G**
VG 95343 T06 D 007 A	**135-1-G**
VG 95343 T06 D 008 A	**136-1-G**
VG 95343 T06 D 009 A	**138-1-G**
VG 95343 T06 D 011 A	**176-1-G**
VG 95343 T06 D 012 A	**177-1-G**
VG 95343 T06 D 013 A	**178-1-G**
VG 95343 T06 D 014 A	**179-1-G**
VG 95343 T06 E 001 A	**1152-4-G**
VG 95343 T06 E 002 A	**1154-4-G**
VG 95343 T06 E 003 A	**1155-4-G**
VG 95343 T06 E 004 A	**1156-4-G**
VG 95343 T06 E 005 A	**1157-4-G**
VG 95343 T06 E 006 A	**1158-4-G**
VG 95343 T06 E 007 A	**1159-4-G**
VG 95343 T06 E 008 A	**1160-4-G**
VG 95343 T06 F 001 A	**1121-1-G**
VG 95343 T06 F 002 A	**1122-1-G**
VG 95343 T06 F 003 A	**1123-1-G**
VG 95343 T06 F 004 A	**1124-1-G**
VG 95343 T06 F 005 A	**1125-1-G**
VG 95343 T06 F 006 A	**1126-1-G**

Date of issue: September 2022

Standards for HellermannTyton Heat Shrinkable Tubing and Heat Shrinkable Moulded Shapes according to VG Norm 95343

Designation as per VG-Norm	Type
VG 95343 T06 F 007 A	**1127-1-G**
VG 95343 T06 F 008 A	**1128-1-G**
VG 95343 T06 F 009 A	**1129-1-G**
VG 95343 T06 F 011 A	**1133-1-G**
VG 95343 T06 F 012 A	**1134-1-G**
VG 95343 T06 F 013 A	**1135-1-G**
VG 95343 T06 F 014 A	**1136-1-G**
VG 95343 T08 A 001 A	**1203-1-G**
VG 95343 T08 A 002 A	**1209-1-G**
VG 95343 T08 A 007 A	**1201-1-G**
VG 95343 T08 A 009 A	**1206-1-G**
VG 95343 T08 A 010 A	**1202-1-G**
VG 95343 T08 A 011 A	**1207-1-G**
VG 95343 T08 A 016 A	**1204-1-G**
VG 95343 T08 A 017 A	**1216-1-G**
VG 95343 T08 B 001 A	**1301-1-G**
VG 95343 T08 B 002 A	**1303-1-G**
VG 95343 T08 B 003 A	**1311-1-G**
VG 95343 T08 B 004 A	**1302-1-G**
VG 95343 T08 C 001 A	**206-1-G**
VG 95343 T08 C 002 A	**203-1-G**
VG 95343 T08 C 003 A	**204-1-G**
VG 95343 T08 C 005 A	**212-1-G**
VG 95343 T08 D 001 A	**306-1-G**

Designation as per VG-Norm	Type
VG 95343 T08 D 002 A	**304-1-G**
VG 95343 T08 D 003 A	**310-1-G**
VG 95343 T08 D 004 A	**311-1-G**
VG 95343 T08 E 002 A	**411-1-G**
VG 95343 T08 E 004 A	**403-1-G**
VG 95343 T08 E 005 A	**413-1-G**
VG 95343 T15 A001 A	**V9500 Epoxy Kit**
VG 95343 T15 A 002 B	
VG 95343 T15 D 002 B	**V9500 Epoxy Cartridge**
VG 95343 T15 DA	**V9500 Applicator Gun**
VG 95343 T15 MA	**V9500 Applicator Nozzle**
VG 95343 T18 C 003 A	**159-43-G**

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Standards for HellermannTyton Cable Protection

Type	Specifications	UL File Number
HG-SW Standard Weight PA6	ANSI/UL 1696, BS EN 61386-23, CSA-C22.2 No.227.3, IEC 61386	E325250
HG-LW Light Weight PA6	ANSI/UL 1695, ANSI/UL 1696, CSA-C22.2 No.227.3, IEC 61386	
HG-FR Flame Retardant PA6	ANSI/UL 1696, BS EN 45545-2, BS EN 61386-23, EN 45545-2	
HG-S Straight, IP66	ANSI/UL 1695, CSA-C22.2 No.227.3	
HG-90 90° Elbow, IP66	ANSI/UL 1696, CSA-C22.2 No.227.3	
LTS Galv. Steel Conduit, PVC Cover	BS EN 61386-23	
PSR-S Straight PA6 Fitting, Ext. Thread	ANSI/UL 1696, CSA-C22.2 No.227.3	E325250
PSR Smooth Bore PVC Spiral Reinforced Conduit		
PSR-90 90° Elbow PA6 Fitting, Ext. Thread		
Helawrap HWPP 25 m + 20 m	ECE R 118-03 Abschnitt 6, ECE R-118-03 Abschnitt 6 / Annex 6	
Helawrap HWPA6-V0	EN 45545-2, UL 1441	E341700
SBPAV0	EN 45545-2, UNI EN 45545-2	
Helawrap HWPP 2 m	ECE R 118-03 Abschnitt 6, ECE R-118-03 Abschnitt 6 / Annex 6	
Braided Sleeving Helagaine HEGP	ECE R-118-03 Abschnitt 6 / Annex 6, ECE R-118-03 Abschnitt 8 / Annex 8, EN 45545-2	
Braided Sleeving Helagaine HEGPX	ANSI/NFPA 70, EN 45545-2	E197993
Braided Sleeving Helagaine HEGPV0X	ANSI/NFPA 70, UL 1441	
Braided Sleeving Helagaine HEGPA66	ECE R-118-03 Abschnitt 6 / Annex 6, ECE R-118-03 Abschnitt 8 / Annex 8, EN 45545-2	
Braided Sleeving HEGMAN	DIN EN 6049	
Braided Sleeving HEGMANWO		
Twist-In Standard	ANSI/NFPA 70, UL 1441	E197993
Twist-In Distripack		
Self-Closing Sleeving Helagaine Twist-In-FR	ANSI/NFPA 70, ECE R-118-03 Abschnitt 8 / Annex 8, EN 45545-2	
Braided Sleeving Helagaine HEGEMIP-VG	VG 96936-10	
Grommet Strip Flexiform G51N	NASM21266	
HelaDuct HTWD-PW Wide Finger PVC Wiring Ducts	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B	
HelaDuct HTWD-PN Narrow Finger PVC Wiring ducts		E357929
HelaDuct HTWD-PD DIN PVC Wiring Ducts	ANSI/UL 1565, ANSI/UL 746B, CAN/CSA-C22.2 no. 18.5	
HelaDuct HTWD-HF Halogen-Free Wiring Ducts (metric sizes)	ANSI/UL 1565, ANSI/UL 62275, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275, DIN EN 45545-2	

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Standards for HellermannTyton Wire Connectors and Electrical Tapes

Product Family	Type	Specifications
HelaCon Lux	HECL-1/1, HECL-2/1	CEBEC, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:1993, ENEC, FIMKO
	HECL-2/1-Blister	CEBEC, cULus, EN 60998-2-2:1993, ENEC, FIMKO, VDE
HelaCon Plus Mini	HCPM-2	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, EN 60998-2-2:201, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-2-Blister	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-3	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, EN 60998-2-2:201, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-3-Blister	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-4	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, EN 60998-2-2:201, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-4-Blister	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-5	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, EN 60998-2-2:201, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-5-Blister	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-6	2006/65/EC, ANSI/UL 486-A, ANSI/UL 486-B, ANSI/UL 486-C, cULus, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, EN 60998-2-2:201, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
	HCPM-8	
	HCPM Variobox 350	2006/65/EC, DIN EN 60998-2-2:2005-03, EN 60998-2-2:2004, ENEC, NF EN 60695-2-10, NF EN 60695-2-11
HelaCon Plus Releasable	HCRN-2	EN 60998-2-2:2004, EN 60998-2-2:201
	HCRN-2-Blister	EN 60998-1:2004, EN 60998-2-2:2004
	HCRN-3, HCRN-3-Blister	
	HCRN-5, HCRN-5-Blister	
HelaTape Allround 1500	HTAPE-ALLROUND1500	VDE
HelaTape Flex 1000+	HTAPE-FLEX1000+ 19x20	IEC 60454-3-1-7/F-PVCP/90, UL 510
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	HTAPE-FLEX1000+ 19x33	
	HTAPE-FLEX1000+ 19x6	
	HTAPE-FLEX1000+ 50x33	
	HTAPE-FLEX1000+ C 19x20	
HelaTape Flex 15	HTAPE-FLEX15-15x10	IEC 60454-3-1-6/F-PVCP/90
	HTAPE-FLEX15-15x25	IEC 60454-3-1-7/F-PVCP/90
	HTAPE-FLEX15-19x20	
	HTAPE-FLEX15-19x25	
	HTAPE-FLEX15-25x25	
HelaTape Flex 20	HTAPE-FLEX20-19x20	VDE
HelaTape Flex 2000+	HTAPE-FLEX2000+19x20	UL 510
	HTAPE-FLEX2000+38x20	
HelaTape Flex 25	HTAPE-FLEX25-19x33	
	HTAPE-FLEX25-38x33	
HelaTape Power 600	HTAPE-POWER600-19x6.7	
	HTAPE-POWER600-38x6.7	
HelaTape Wrap 25	HTAPE-WRAP25-100x30	VDE
	HTAPE-WRAP25-25x30	
	HTAPE-WRAP25-50x30	

Standards for HellermannTyton Identification Systems

Type	Specifications
2:1 TLFD DS	DIN EN 45545-2, DIN EN 50343:2014 Appendix H
2:1 TLFX	DIN EN 45545-2
2:1 TLFX DS	ASTM 1354, ASTM E 162, ASTM E 662, DIN EN 45545-2, NFPA130: 2017
3:1 TCGT	C22.2 no. 198.1-99
3:1 TULT	ANSI/UL 224, C22.2 no. 198.1-99, CSA
3:1 TULT DS	ANSI/UL 224, MIL-STD-202G Method 215K
Helagrip, reel chevron cut	BS-2782-540B, BS-6746C, IEC 757
HGDC1-3, HGDC2-5, HGDC4-9	
HODS50, HODS85	BS-2782-540B, BS-6746C, IEC 304, IEC 757
IT Ties	ANSI/UL 1565, ANSI/UL 62275, ANSI/UL 746B, CAGE Code 53421, CAN/CSA-C22.2 no. 18.5, CAN/CSA-C22.2 no. 62275
M-BOSS Compact	2006/42/EG, EN 60204-1:2006, EN ISO 12100:2010
M-BOSS Compact Organiser	
MCTRFID PA66MP blank cable ties RFID	Article 41 of Directive 2014/34/EU, EN 50303:2000, EN 60079-0:2012, EN 60079-11:2012
Ovalgrip, reel straight cut	BS-2782-540B, BS-6746C, IEC 304, IEC 757
Plain Labels - 1203	CSA
Plain Labels - 323	FTM 6 (according to DIN EN ISO 4892-2)
TAGLF	ASTM 1354, ASTM E 162, ASTM E 662, DIN EN 45545-2, MIL-STD-202G Method 215K, SAE - AS81531
TAGPU	MIL-STD-202G Method 215K, SAE - AS81531
Thermal Transfer Ribbons Adhesive Labels	ANSI/UL 969
TIPTAG HF	DIN EN 45545-2, EN 45545-2
TrakMark Assecories	CEN
TrakMark DS	2004/108/EG, 2014/35/EU, ANSI/UL 60950-1, ANSI/UL 60950-21, ANSI/UL 60950-22, ANSI/UL 60950-23, EN 55022:2011-12, EN 55024:2011-09, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, FCC
TT4030 Printer	2011/65/EU, 2014/35/EU, CE 2014/35/EU, DIN EN 55032:2012-12, DIN EN 55032:2016-02, DIN EN 55032 rectification 1:2013-04, DIN EN 61000-6-2:2006-03, DIN EN 61000-6-2 rectification 1:2011-06, EN 61000-3-2, EN 61000-6-2, IEC 60950-1 (ed.2), IEC 60950-1 (ed.2), am1, IEC 60950-1 (ed.2), am²
TT430/TT431_Accessories	CEN
TT431 Printer	2014/35/EU, DIN EN 55024:2011-09, DIN EN 55024:2016-05, DIN EN 55032:2012-12, DIN EN 55032:2016-02, DIN EN 55032 rectification 1:2013-04, DIN EN 61000-6-2:2006-03, DIN EN 61000-6-2 rectification 1:2011-06, EN 55024:2011-09, EN 61000-6-2, FCC eCFR 47 FCC part 15 - subpart B, limit class A
WIC Accessories	EN 60062, IEC 304
WIC Family	

Specifications apply to limited article numbers. Please contact our sales desk for further information.

Standards for HellermannTyton Application Tooling

Type	Specifications	UL-File Number
ATS3080	EN 60745-1	
KR8PNSE	EN ISO 11148-2:2011	
MK3PNSP2		
T18RA3500	ANSI/UL 62275	E65344
T18RA50		

Specifications apply to limited article numbers. Please contact our sales desk for further information.

June 2022. We have carefully checked all the information on our catalogue pages. Nevertheless, data and facts may have changed in the meantime. Consequently, we do not guarantee that the information is current, complete and correct in every case. Please consult our Internet site for further details and the most current status.

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Date of issue: September 2022

1. Interpretation

1.1 In these Conditions:

„ACKNOWLEDGEMENT OF ORDER" shall mean the document by which the Seller or its authorised representative accepts the Order. „BUYER" shall mean the purchaser of the Goods from the Seller. "BUYER'S SPECIFICATION" means any variation, modification or amendment to Seller's specification as requested by Buyer and agreed between the parties in accordance with clause 2.3 and/ or as identified in the Acknowledgement of Order. „CONDITIONS" means the terms and conditions of sale set out herein and includes any special terms and conditions included in the Acknowledgement of Order. „CONTRACT" shall mean the contract for the sale and purchase of the Goods made pursuant to these Conditions. „DELIVERY" shall mean delivery of the Goods or any part of them in accordance with clause 6.1 of these Conditions. „DELIVERY DATE" shall mean the date or period for Delivery set out in an Acknowledgement of Order or which is otherwise agreed by the Seller and the Buyer. „FORCE MAJEURE" shall mean any circumstances beyond the reasonable control of the Seller. „GOODS" shall mean the goods which the Seller has agreed to supply to the Buyer pursuant to these Conditions. „INFORMATION" shall mean any and all IPR, technical or commercial data, know-how, show-how, formulae, processes, designs, photographs, drawings, specifications, details of customers and suppliers, pricing information, samples, prototypes and other sensitive business information and any other information of a confidential nature together with any experimental or test data and results produced by the Seller as a result of it carrying out necessary tests for the purposes of performing the Contract which either directly or indirectly is disclosed by or on behalf of the Seller to the Buyer or to any person on behalf of the Buyer orally, in writing, by physical embodiment, by data transmission or in any other way. „INTELLECTUAL PROPERTY RIGHTS" („IPR") shall mean all patents, trade marks, service marks, design rights (whether patentable, registrable or otherwise), applications for any of the foregoing copyright, know-how, trade or business names, rights in databases, topography rights and other similar rights or obligations whether registrable or not in any country (including, but not limited to the United Kingdom).

„LOSS" shall mean all actions, claims, demands, losses (direct, indirect, consequential or otherwise), expenses, costs, actions and proceedings. „ORDER" shall mean the Buyer's order for Goods. „SELLER" shall mean HellermannTyton Ltd, a company registered in England and Wales under company number 05652018 and having its registered office at Griffin House, 135 High Street, Crawley, West Sussex, RH10 1DQ. „SPECIFICATION" shall mean the description of the Goods set out in the Acknowledgement of Order pursuant to clause 3.4 including any variation, modification or amendment to specification as a consequence of Buyer's Specification and "Specification" and "Buyer's Specification" shall be construed accordingly.

1.2 Any reference in these Conditions to any provision of a statute shall be construed as a reference to that provision as amended re-enacted or extended at the relevant time.

1.3 The headings in these Conditions are for convenience only and shall not affect their interpretation.

1.4 In these Conditions "Incoterms" means the international rules for the interpretation of trade terms of the International Chamber of Commerce 2010 as amended or republished from time to time (Incoterms® 2010). Unless the Contract otherwise requires any terms or expression which is defined in or given a particular meaning by the provisions of Incoterms shall have the same meaning in these Conditions, but if there is any conflict between the provisions of Incoterms and these Conditions the latter shall prevail.

2. Basis of Sale

2.1 These Conditions together with the Seller's Acknowledgement of Order apply to all Contracts between the Seller and the Buyer and shall prevail and be effective notwithstanding any variations or additions whether contained or referred to in the Buyer's order, or other document submitted by the Buyer including without limitation any standard conditions of purchase of the Buyer, acceptance of quotation or in correspondence or elsewhere, or implied by trade, custom, practice or course of dealing, and shall supersede all other and any prior promises, representations or undertakings.

2.2 Where the Buyer purchases Goods from the Seller which include electrical and electronic equipment (as defined by the Waste Electrical and Electronic Equipment Regulations 2006 as amended or re-enacted from time to time ("WEEE")), he does so on the understanding that he will, at his own expense, properly collect, treat, recover and dispose of it in an environmentally sound manner, or arrange for the proper collection, treatment, recovery and environmentally sound disposal of such electrical or electronic equipment in accordance with the requirements of WEEE. Further, the Buyer agrees that where the electrical and electronic equipment referred to above is intended to replace electrical or electronic equipment that was supplied to the Buyer prior to the 13 August 2005, it will be responsible for the environmentally sound collection, treatment, recovery and disposal of that electrical and electronic equipment being replaced and shall not ask the Seller to take it back in order to arrange the same.

2.3 No variation to these Conditions shall be binding unless agreed in writing by an authorised representative of the Seller.

2.4 The Seller's employees or agents are not authorised to make any representations or recommendations concerning the Goods unless confirmed by a duly authorised representative of the Seller in writing. In entering into the Contract the Buyer acknowledges that it does not rely on and waives any claim for breach of any such representations which are not so confirmed. For the avoidance of doubt, nothing herein contained shall be deemed to exclude the Seller's liability due to fraud or fraudulent misrepresentation.

2.5 Any typographical clerical or other error or omission in any sales literature quotation price list Acknowledgement of Order invoice or other documentation or information issued by the Seller shall be subject to correction without any liability on the part of the Seller.

3. Orders and Specifications

3.1 Every acceptance by the Buyer of any quotation given by the Seller shall be deemed an offer by the Buyer to purchase Goods from the Seller and will not be deemed to be accepted by the Seller until a duly authorised representative of the Seller has provided an Acknowledgement of Order in relation to such offer by the Buyer.

3.2 No Order submitted by the Buyer shall be deemed to be accepted by the Seller unless and until confirmed by an Acknowledgement of Order.

3.3 The Buyer shall be responsible to the Seller for ensuring the accuracy of the terms of any Order (including any applicable Specification or Buyer's Specification) submitted by the Buyer and for giving the Seller any necessary information relating to the Goods within a sufficient time to enable the Seller to perform the Contract in accordance with its terms.

3.4 The quantity quality and description of and any Specification for the Goods shall be those set out in the Seller's Acknowledgement of Order.

3.5 If the Goods are to be manufactured by the Seller in accordance with the Buyer's Specification:

3.5.1 the Buyer shall indemnify the Seller against all Loss suffered by the Seller in connection with any claim by a third party that the manufacture and/or supply of the Goods to such Buyer Specification or instructions infringes the rights of any third party; and

3.5.2 the Buyer shall be responsible for supplying reliable and accurate information to the Seller (including, without limitation, drawings, plans and designs) to enable the Seller to manufacture the Goods to the Buyer's Specification. The Seller shall be entitled to assume that all information supplied by the Buyer is true, accurate, complete and fit for the purpose for which it is supplied and that the Seller can rely on the same. The Seller shall not be liable for any Loss or delay in Delivery of the Goods which directly or indirectly arises from the Buyer's failure to supply accurate information at all or on time.

3.6 The Seller reserves the right to make any changes in the Specification of the Goods which are required to conform with any applicable safety or other statutory requirements and/or where such changes do not materially affect the quality or performance of the Goods. For the avoidance of doubt and subject to clause 10.1, the Seller provides no implied warranties in relation to Goods supplied to the Buyer's Specification.

3.7 No Order which has been accepted by the Seller by an Acknowledgement of Order may be cancelled by the Buyer except with the agreement in writing of the Seller and on terms that the Buyer shall indemnify the Seller in full against all Loss incurred by the Seller as a result of cancellation.

4. Price of the Goods

4.1 The price shall be the price in the Acknowledgement of Order („Price").

4.2 The Seller reserves the right by giving notice to the Buyer at any time before Delivery to increase the Price to reflect any increase in the cost to the Seller which is due to any factor beyond the control of the Seller (such as without limitation any foreign exchange fluctuation, currency regulation alteration of duties significant increase in the costs of labour materials or other costs of manufacture), any change in Delivery Dates quantities or Specifications for the Goods which is requested by the Buyer or any delay caused by any instructions of the Buyer or failure of the Buyer to give the Seller adequate information or instructions.

4.3 Except as otherwise stated in an Acknowledgement of Order all prices are given by the Seller for Delivery as defined in clause 6.1. Where the Seller agrees to deliver the Goods otherwise than as defined in clause 6.1 the Buyer shall be liable to pay the Seller's charges for transport packaging and insurance where requested.

4.4 The price is exclusive of any applicable value added tax (which will be applied in accordance with the legislation in force at the tax point date) and which the Buyer shall be additionally liable to pay to the Seller.

5. Terms of Payment

5.1 Subject to any special terms agreed in an Acknowledgement of Order the Seller shall be entitled to invoice the Buyer for the Price on Delivery immediately the Goods have been despatched, when they are ready for despatch but are

prevented or delayed from being despatched due to Force Majeure or the day the Goods are put out ready for collection (whichever event occurs the earliest).

5.2 The Buyer shall pay the Price without deduction within 30 days of the date of the Seller's invoice notwithstanding that Delivery may not have taken place and the property in the Goods has not passed to the Buyer. The time of payment of the Price shall be of the essence of the Contract. Receipts for payment will be issued only upon request.

5.3 If the Buyer fails to make any payment in accordance with clause 5.2 then without prejudice to any other right or remedy available to the Seller the Seller shall be entitled to:-

5.3.1 cancel the contract or suspend any Deliveries to the Buyer;

5.3.2 appropriate any payment made by the Buyer to such of the Goods (or the goods supplied under any other contract between the Buyer and the Seller) as the Seller may think fit (notwithstanding any purported appropriation by the Buyer);

5.3.3 charge the Buyer interest on the amount unpaid at the rate of 3 percent per annum above HSBC Bank base rate from time to time until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest); and

5.3.4 demand payment of all outstanding balances from the Buyer whether due or not and/or cancel all outstanding Orders and/or decline to make further Deliveries (under this or any other contract between the Buyer and the Seller) or provision of services.

5.4 Except where insolvency laws provide otherwise the Buyer shall not be entitled to withhold or set off payment for Goods for any reason whatsoever. All Goods for which payment has not been made in accordance with clause **5.2** and which are held by the Seller at its premises are so held at the Buyer's risk.

6. Delivery

6.1 Except as otherwise stated in an Acknowledgement of Order delivery shall take place when the Seller places the Goods at the disposal of the Buyer at the Seller's premises and not loaded on any collecting vehicle.

6.2 Any Delivery Date is approximate only. The Seller shall not be liable for any Loss arising from any failure to deliver the Goods on the Delivery Date howsoever caused. Time for delivery shall not be of the essence unless previously agreed by the Seller in writing. The Goods may be delivered by the Seller in advance of the quoted delivery date upon giving reasonable notice to the Buyer.

6.3 The Buyer shall not be entitled to change the Delivery Date without the prior written consent of a duly authorised representative of the Seller.

6.4 Where delivery of the Goods is to be made by the Seller, the Seller reserves the right to deliver up to 10 per cent more or 10 per cent less than the quantity ordered provided that there is a pro rata adjustment to the Price to reflect the Goods actually delivered and the quantity so delivered shall be deemed to be the quantity ordered. Goods delivered in excess of such tolerance may be rejected by the Buyer provided that it serves notice of rejection within 10 working days of Delivery.

6.5 Where the Goods are to be delivered in installments each delivery shall constitute a separate contract and failure by the Seller to deliver any one or more of the installments in accordance with these Conditions or any claim by the Buyer in respect of any one or more installments shall not entitle the Buyer to treat the Contract as a whole as repudiated.

6.6 Subject to clause 10.6 if the Seller fails to deliver the Goods for any reason other than Force Majeure or due to Buyer's fault and the Seller is accordingly liable to the Buyer, the Seller's only liability shall be limited to the excess (if any) of the cost to the Buyer (having used its best endeavours to replace the Goods by purchasing them in the cheapest available market) of purchasing similar goods to replace those not delivered.

6.7 If the Buyer fails to take Delivery on the Delivery Date then without prejudice to any other right or remedy available to the Seller the Seller may:

6.7.1 store the Goods until actual delivery and charge the Buyer for the costs (including insurance) of storage; or

6.7.2 treat the Contract as repudiated by the Buyer and without prejudice to any other right it may have against the Buyer the Seller shall be entitled to resell the Goods and be indemnified by the Buyer for any Loss which it suffers.

7. Risk and Property

7.1 Risk of damage to or loss of the Goods shall pass to the Buyer on Delivery of the Goods;

7.2 Notwithstanding Delivery and the passing of risk in the Goods or any other provision of these Conditions the property in the Goods shall remain with the Seller until the Seller has received in cash or cleared funds payment in full of the Price and any other monies due to the Seller in respect of the Goods and all other goods agreed to be sold by the Seller to the Buyer for which payment is then due under the Contract or any other contract between the Seller and the Buyer (including without limitation costs of Delivery).

7.3 Until such time as the property in the Goods passes to the Buyer the Buyer shall hold the goods as the Seller's fiduciary agent and bailee and shall keep the Goods separate from those of the Buyer and third parties and properly stored protected and insured and identified as the Seller's property.

7.4 Until such time as the property in the Goods passes to the Buyer the Buyer shall be entitled to resell or use the Goods in the ordinary course of its business but shall account to the Seller for the proceeds of sale or otherwise of the Goods whether tangible or intangible including insurance proceeds and shall keep all such proceeds separate from any monies or property of the Buyer and third parties and in the case of tangible proceeds properly stored protected and insured.

7.5 If the Goods are prior to sale by the Buyer made up or incorporated in or mixed with other goods, then if they remain separately identifiable the Seller shall retain property and title thereof and if they do not remain separately identifiable the Seller shall become a joint owner of the goods in or which the Goods are incorporated or mixed in such proportion as the value of the Goods bears to the value of the Goods in which the Goods are so incorporated or mixed.

7.6 If the Buyer sells the Goods or the goods in which the Goods have been incorporated or mixed the sale shall be on behalf of the Seller as the joint owner thereof as the case may be and the proceeds of any such sale for the Seller's share thereof if the sale is of jointly owned property shall be held on trust for the Seller and in a separate identified account.

7.7 Until such time as the property in the Goods passes to the Buyer (and provided the Goods are still in existence and have not been resold) the Seller shall be entitled at any time to require the Buyer to deliver up the Goods to the Seller and if the Buyer fails to do so forthwith to enter the premises of the Buyer or any third party where the Goods are stored and take possession of any Goods in which property remains in the Seller and remove and dispose of them as the Seller thinks fit. The Seller shall apply the proceeds of disposal (after deduction of all expenses) in discharge of the amount unpaid by the Buyer.

7.8 The Buyer shall not be entitled to pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller without the Seller's consent but if the Buyer does so all moneys owing by the Buyer to the Seller shall (without prejudice to any other right or remedy of the Seller) forthwith become due and payable.

8. Confidentiality and IPR

8.1 The Buyer agrees and undertakes that it will keep confidential and will not disclose or use for any purpose (other than to perform its obligations under the Contract) any Information. Any Information supplied to the Buyer by the Seller shall at all times remain the property of the Seller. The Buyer shall not acquire any rights in the Information, which shall be returned to the Seller immediately upon request.

8.2 Unless otherwise agreed in writing all IPR in relation to the Goods including without limitation their method of manufacture shall vest in the Seller and remain the property of the Seller notwithstanding the purchase of the Goods by the Buyer and the Buyer undertakes to do all acts and/or enter into such agreements or deeds as the Seller shall require to vest any such IPR in the Seller.

8.3 Unless otherwise agreed in writing and notwithstanding that the Buyer may have contributed towards the costs of such items all tooling (and all IPR in relation to such tooling) produced or acquired by the Seller in relation to the manufacture of the Goods shall be and remain the property of the Seller.

9. Lien

9.1 In addition to any other right or lien to which the Seller may by law or pursuant to these Conditions be entitled, the Seller shall be entitled to a general lien on all the goods and the property of the Buyer in the Seller's possession and a right of sale of such goods and property at the Seller's sole discretion for any unpaid money due under the terms of the same or any other Contract between the Seller and the Buyer.

9.2 In addition and without prejudice to its other rights, the Seller shall have the right on fourteen days notice to the Buyer to put any goods or property over which it has a lien into a saleable state by any means whatsoever and (without prior notice to the Buyer) to sell such goods and shall be deemed the Buyer's agent for the purposes of effecting such sale. Out of the proceeds of the sale the Seller shall be entitled to retain a sum equivalent to all unpaid monies due to it from the Buyer as aforesaid together with the cost of putting the goods into a saleable state and the expenses of sale without prejudice to the Seller's right to recover the balance thereof from the Buyer.

10. Warranties and Liability

10.1 The Seller warrants that at Delivery the Goods will be free from defect in materials, workmanship and design (where designed by the Seller) provided that subject as aforesaid and expressly provided in these Conditions, and except where the Goods are sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977) all warranties conditions or other terms implied by statute and/or common law are excluded to the fullest extent permitted by law.

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10.2 Where the Goods are sold under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory rights of the Buyer are not affected by these Conditions.

10.3 Any specification or sample supplied by the Seller in any brochure, catalogue, estimate or quotation provided by Seller shall be approximate only and for information and guidance only and shall not form part of the Contract.

10.4 Any claim based upon the quality or condition of the Goods or any failure of the Goods to meet the Specification („Claim") by the Buyer shall (whether or not delivery is refused by the Buyer) be notified to the Seller in writing within 7 days from the date of delivery or (where the defect or failure was not apparent on reasonable inspection) within one month after discovery of the defect or failure. If delivery is not refused and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Goods and the Seller shall have no liability in respect of such a Claim and the Buyer shall be bound to pay the Price as if the Goods had been delivered in accordance with the Contract. The Buyer shall not be entitled to make any Claim after the expiration of six months from the date of Delivery of the Goods.

10.5 Where any valid Claim in respect of any of the Goods is notified to the Seller in accordance with clause 10.4 the Seller shall be entitled to replace the Goods (or the part in question) free of charge or at the Seller's sole discretion refund to the Buyer the Price (or a proportionate part of the Price) but the Seller shall have no further liability to the Buyer and the Buyer shall have no other remedy.

10.6 The Seller shall have no liability to the Buyer in relation to non-delivery or short delivery of the Goods unless such non-delivery or short delivery is notified to the Seller in writing within fourteen days of the Delivery Date.

10.7 Where any valid Claim in respect of the Goods is notified to the Seller in accordance with clause 10.6 the Seller shall be entitled to deliver the Goods or the shortfall of the Goods, but the Buyer shall have no other remedy

10.8 Except in respect of death or personal injury caused by the Seller's negligence the Seller's total liability to the Buyer under these Conditions shall not exceed the total price of all Goods supplied hereunder.

10.9 The Seller shall have no liability to the Buyer under or arising out of or otherwise in connection with the Contract or the supply of Goods by the Seller to the Buyer and/or their use or resale by the Buyer in contract tort (including negligence or breach of statutory duty) or otherwise for loss of profit, business, contracts, revenues or anticipated savings or for any special indirect or consequential damage or loss of any nature or for the costs of recall of any Goods except as may otherwise be expressly provided for in these Conditions.

10.10 Notwithstanding any provision of these Conditions the Seller shall have no liability to the Buyer in respect of any defect in the quality of the Goods or the failure of the Goods to meet Specification where the defect or failure has arisen as a result of improper use, installation or storage of Goods or as a result of any act or omission of the Buyer (including but not limited to requiring Goods to be supplied to Buyer's Specification).

10.11 For the avoidance of doubt nothing herein contained shall be deemed to exclude or restrict the Seller's liability for death or personal injury arising due to the Seller's negligence.

10.12 Where any Claim is made under this clause 10 the Buyer grants the Seller or its agents the right to enter upon the Buyer's premises to inspect the Goods. Unless and until the Seller has been afforded an opportunity to examine the Goods no Claim will be accepted.

10.13 The Seller shall not be liable to the Buyer or be deemed to be in breach of the Contract by reason of any delay in performing or any failure to perform any of the Seller's obligations in relation to the Goods if the delay or failure was due to Buyer's fault or Force Majeure.

10.14 The Buyer shall indemnify the Seller against all Loss suffered by the Seller which arises as a result of the breach by the Buyer of any provision of the Contract or the negligence of the Buyer or any of its employees, agents or representatives.

11. Insolvency of Buyer

11.1 In the event that:

11.1.1 the Buyer makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction);

11.1.2 an encumbrancer takes possession or a receiver or administrator is appointed of any of the property or assets of the Buyer;

11.1.3 the Buyer ceases or threatens to cease to carry on business;

11.1.4 the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly; or

11.1.5 if the Buyer's jurisdiction is not in England and Wales any events similar to those described in clauses 11.1.1 to 11.1.4 occur then without prejudice to any other right or remedy available to the Seller the Seller shall be entitled to suspend further performance of the Contract for such time as it shall in its absolute discretion see fit or treat the Contract as wrongfully repudiated by the Buyer and forthwith terminate the Contract (either with or without notice to the Buyer) without any liability to the Buyer and if the Goods have been delivered but not paid for the Price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

12. Export Terms

12.1 Where the Goods are supplied for export from the United Kingdom the provision of this clause 12 shall (subject to any special terms in the Acknowledgement of Order or otherwise agreed in writing between the Buyer and the Seller) apply notwithstanding any other provision of these Conditions.

12.2 The Buyer shall be responsible for complying with any legislation or regulations governing the importation of the Goods into the country of destination and for the payment of any duties thereon. In particular, if any licence or consent of any government or other authority shall be required for the acquisition, carriage or use of the Goods by the Buyer the Buyer shall obtain the same at its own expense and if necessary produce evidence of the same to the Seller on demand. Failure to do so shall not entitle the Buyer to withhold or delay payment of the Price. Any additional expenses or charges incurred by the Seller resulting from such failure shall be for the Buyer's account.

12.3 Unless otherwise agreed in writing between the Buyer and the Seller the Goods shall be delivered ex-works (Incoterms® 2010) and the Seller shall be under no obligation to give the Buyer notice under section 32(3) of the Sale of Goods Act 1979.

12.4 Notwithstanding clause 5.2 payment of all amounts due to the Seller shall be made by irrevocable letter of credit opened by the Buyer in favour of the Seller and confirmed by a bank in the United Kingdom acceptable to the Seller or if the Seller has agreed in writing on or before acceptance of the Buyer's order to waive this requirement for any other agreed method of payment

13. General

13.1 The Seller shall be entitled to assign or subcontract all or any of its rights and obligations hereunder. The Buyer shall not be entitled to assign, transfer, subcontract or otherwise delegate any of its rights or obligations hereunder.

13.2 Any notice required or permitted to be given by either party to the other under these Conditions shall be given in writing at its registered office or principal place of business or such other address as may be notified for such purpose to the party giving notice.

13.3 No waiver by the Seller of any breach of Contract or any provision herein by the Buyer shall be considered as a waiver of any subsequent breach of the same or any other provision.

13.4 If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected thereby.

13.5 The parties hereto intend that no term of the Contract may be enforced by any person, entity or body that is not a party to the Contract.

13.6 The Contract shall be governed by the laws of England and Wales and the Buyer and the Seller hereby submit to the exclusive jurisdiction of the English Courts save with respect to enforcement where their jurisdiction shall be non-exclusive.

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