

M23 Industrial

Connector Series L & S



M23 Signal and Power Connectors in favour of motor drive applications. For the installation, crimp contacts are used which guarantee high quality of the connection, reducing the installation costs at the same time.

Hand-operated and fully automatic crimping tools can be used to assemble the crimp contacts. There are two different Hypertac® hyperboloid contact types available: Machined and stamped. These two types of contacts have different characteristics in terms of how the termination is made.

Machined contacts: With this popular type of contact, the suitable contact size is matched to the wire gauge of the cable. **Stamped contacts:** The crimping sleeve allows a wider range of wire gauges to be crimped. Furthermore, the insertion and extraction force is usually lower by using stamped round pins and HCS™ sockets. Stamped contacts are supplied on reels for use with automatic feed crimping tools.

Hypertac® hyperboloid contact: Hypertac® is a superior performing hyperboloid contact technology designed for use in harsh and demanding environments where high reliability and safety are critical. The inherent electrical and mechanical characteristics of the Hypertac hyperboloid contact ensures unrivalled performance in terms of reliability, number of mating cycles, low contact force and minimal contact resistance. These performance characteristics provide a real commercial benefit in terms of the total installed cost of ownership.

In addition our M23 connectors offer outstanding electromagnetic compatibility protection through a 360° screen connection.

Robust
technology for
use in harsh
environments

Features & Benefits

Superior performance

- Hypertac® contact technology ensures immunity to shock and vibration and minimal contact resistance
- Outstanding protection against electromagnetic interference through a full 360° screen shielding
- O-rings for protection against vibration

Variety of contacts

- Crimp contacts for all current cable cross sections available
- Signal connectors with crimp and solder contacts

Stamped hyperboloid contacts on reels

- Favourable price and reduced processing costs
- Fully automatic workable and reduced assembly time
- High reliability wire B-crimp and additional insulation O-crimp

Wide cable clamp range

- Can accept cable diameter from 5 to 18.5 mm

UL certified

- UL/CSA approval file No. 178462

Technical Characteristics

Material & Finishes

Shell	CuZn, zinc diecast, plastics
Shell plating	nickel plated, chromium plated
Inserts	PA, PBT
Contacts	CuZn
Contact plating	gold plated
Sealing	FKM, NBR
Storage conditions	-40°C to 70°C / humidity 40%

Electrical

Signal

Power

Max. nominal current	9 A @ 20°C (Ø 1 mm) 22 A @ 20°C (Ø 2 mm)	9 A @ 20°C (Ø 1 mm) up to 30 A @ 20°C (Ø 2 mm)
Max. operating voltage	50 VAC / 120 VDC	630 Vrms
Contact resistance	<5 mΩ	<5 mΩ (Ø 1 mm), <3 mΩ (Ø 2 mm)
Overvoltage category	III	III

Physical & Environmental

Signal

Power

Operating temperature range	-40°C to 125°C	-40°C to 125°C
Environmental level	IP67 (mated)	IP67 (mated)
Contamination level	3	2
Installation altitude	up to 2000 m	up to 2000 m
Fire & Smoke	UL94 V0	UL94 V0
RoHS	Compliant	Compliant