

# YPT

(YAZAKI POWER TERMINAL)

## 9.5 SERIES



# INTRODUCTION

## YPT

The 9.5mm Yazaki Power Terminal (YPT 9.5) connector series is suitable for high power applications in an automotive environment. The special design of the YPT terminals and connectors provides a reliable contact at a comprehensive current range with loads >100 A at 80°C, while at the same time the terminal can be applied in high temperature areas. The 2-in-1 design philosophy allows the use of the same terminal for sealed and unsealed applications.

A whole series of male and female connectors and applicable terminals is available. The male and female terminals are designed for standard unsealed & sealed applications in tin-silver (SnAg) and silver (Ag) plating and in a cross-section range from 4.0mm<sup>2</sup> up to 16.0mm<sup>2</sup>.

The connector portfolio contains sealed and unsealed connectors including hybrid versions from 1P 9.5 up to 9P hybrid connectors. The sealed connectors and terminals come with a 2K single wire seal that provides additional rigidity to prevent water ingress even when the wire is routed in a tight angle. The majority of YPT connectors is available with a Connector Position Assurance (CPA) to give additional mating security.

## Specification

|  |   |
|--|---|
| <b>Validation specification</b>  | USCAR-2, USCAR-21, RND5, PSA            |
| <b>Sealing class (only valid for sealed connectors)</b>                                    | S2, S3/IPX9K with cover                 |
| <b>Vibration class</b>   | V1 (chassis profile / 3G acc. B21 7120) |
| <b>Temperature class (only valid for sealed connectors)</b>                                | T3 (-40 – 125°C)                        |
| <b>Terminal retention force min. (primary locking) / (primary &amp; secondary locking)</b> | Min. 100 N<br>Min. 150 N                |
| <b>Connector to connector mating force max.</b>  | < 75 N                                  |
| <b>Material connectors</b>   | PBT-GF                                  |
| <b>Material Terminals &amp; Seals</b>  | See Table below                         |
| <b>Clip feature</b>  | Acc. USCAR EWCAP-005-11                 |
| <b>Terminal removal tool</b>   | See Handling Manual YPES-15-969E        |
| <b>Terminal Crimping</b>   | See Handling Manual YPES-15-969E        |
| <b>Terminal Derating</b>   | See Product Standard YPES-11-98-148E    |

# YPT 9.5 TERMINALS

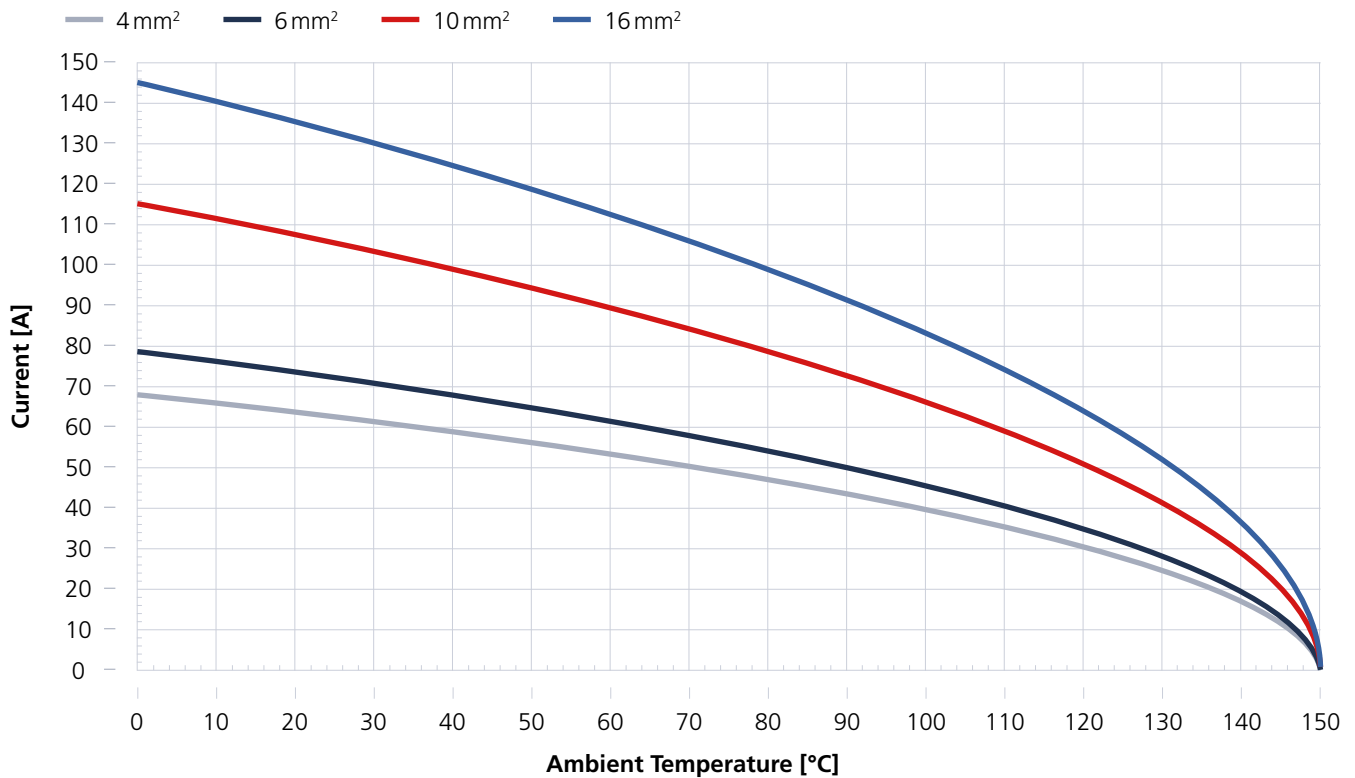
## Highlights

- ▶ Male & female terminals for 4 mm<sup>2</sup> to 16 mm<sup>2</sup> in SnAg or Ag plating
- ▶ High current capabilities in high temperature applications



## Derating Diagram 9.5 YPT Terminal System (Tin-Silver Plating)

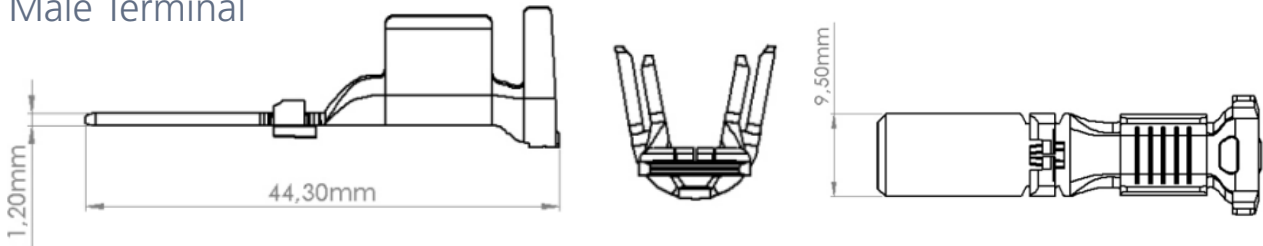
(All curves are for a single circuit in open air, derated to 80 % of base curve) Tested according DIN EN 60512-5-2



For reference only, please see product standard YPES-11-98-148E or datasheet 41104-004 for full details

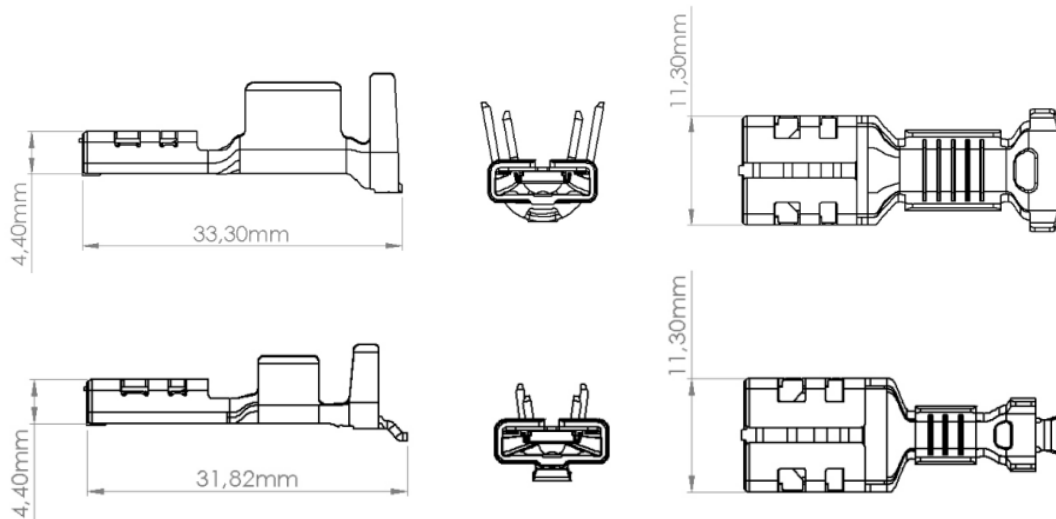
# YPT 9.5 MM TERMINALS

## Male Terminal



| Part Number  | Application       | Tab Size     | Wire Range [mm <sup>2</sup> ] | Material | Plating    |
|--------------|-------------------|--------------|-------------------------------|----------|------------|
| 7114-5623-02 | Sealed / Unsealed | 9.5 x 1.2 mm | 10.0 - 16.0                   | CuSn     | Tin-Silver |
| 7114-7474-02 | Sealed            | 9.5 x 1.2 mm | 4.0 - 6.0                     | CuSn     | Tin-Silver |
| 7114-5623-06 | Sealed            | 9.5 x 1.2 mm | 10.0 - 16.0                   | CuNiSi   | Silver     |
| 7114-7474-06 | Sealed            | 9.5 x 1.2 mm | 4.0 - 6.0                     | CuNiSi   | Silver     |

## Female Terminal












| Part Number     | Application            | Applicable Tab Size | Wire Range [mm <sup>2</sup> ] | Material                  | Plating    |  |
|-----------------|------------------------|---------------------|-------------------------------|---------------------------|------------|--|
|                 | <b>Standard length</b> |                     |                               |                           |            |  |
| 7116-5625-02    | Sealed / Unsealed      | 9.5 x 1.2 mm        | 10.0 - 16.0                   | CuNiSi /<br>Stainl. Steel | Tin-Silver |  |
| 7196-1522-02    | Sealed                 |                     | 8.0                           |                           | Tin-Silver |  |
| 7116-7473-02    | Sealed                 |                     | 4.0 - 6.0                     |                           | Tin-Silver |  |
| 7116-5625-06    | Sealed / Unsealed      |                     | 10.0 - 16.0                   |                           | Silver     |  |
| 7116-7473-06    | Sealed                 |                     | 4.0 - 6.0                     |                           | Silver     |  |
|                 | <b>Short length</b>    |                     |                               |                           |            |  |
| 7116-7570-02    | Unsealed               |                     | 4.0 - 6.0                     |                           | Tin-Silver |  |
| 7116-5626-06    | Sealed                 |                     | 10.0                          |                           | Silver     |  |
| 7116-7570-06    | Unsealed               |                     | 4.0 - 6.0                     |                           | Silver     |  |
| (7116-7068-02)* | Sealed                 |                     | 9.5 x 0.8 mm                  |                           | 4.0 - 6.0  |  |

( ) please check for availability

\* suitable for special application only (fuse holder)

# YPT 9.5 MM SINGLE WIRE SEALS

| Part Number   | Type                      | Color                                    | Applicable Wire Diameter [mm] | Material  | Shape   |
|---------------|---------------------------|--|-------------------------------|---|---|
| 7158-3034-50* | Standard Single Wire Seal | Red                                      | 3.4 - 3.7                     | Silicone Rubber   |    |
| 7158-3035*    |                           | Natural                                  | 4.0 - 4.3                     |   |    |
| 7158-3713-70  | 2K Seal with Support Ring | Yellow                                   | 5.3 - 6.5                     | Silicone Rubber & PBT-GF  |    |
| 7158-3673-90  |                           | Turquoise                                | 7.3 - 8.3                     |   |    |
| 7158-3672-50  |                           | Light Pink                               | 6.2 - 7.3                     |   |    |
| 7172-5643-50  |                           | Red                                      | 4.6 - 5.0                     |   |   |
| 7172-5184     |                           | Natural                                  | 3.4 - 4.3                     |   |  |
| 7158-3268-70  |                           | 2K Seal with Support Ring, Reduced Pitch | Yellow                        |   | 5.3 - 6.0   |
| 7158-3266-50  | Red                       |  | 3.4 - 3.7                     |  |   |
| 7158-3267     | Natural                   |  | 4.0 - 4.4                     |  |   |

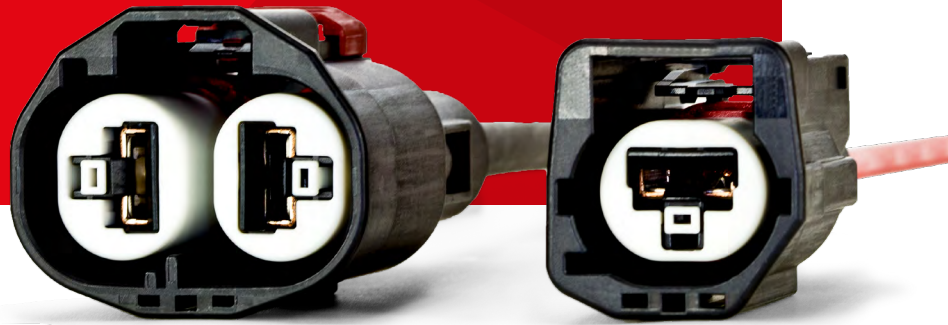
\* applicable for terminal 7116-7068-02 only



# YPT 9.5 CONNECTORS



## Highlights

- ▶ For high power applications such as steering or cooling; suitable for loads > 100 A at 80°C ambient temperature
- ▶ Hybrid connectors available
- ▶ Optional CPA
- ▶ Mechanical and color codes available




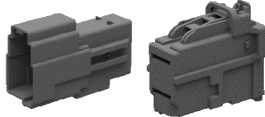
## Sealed Connector Part Numbers

| Code | No. of Poles        | Male connector | Female Connector without CPA | Female Connector with CPA | Image   |
|------|---------------------|----------------|------------------------------|---------------------------|---|
| A    | 1P                  | N/A            | 7287-2914-30                 | N/A                       |  |
| B    | 1P                  |                | 7287-2913-10                 |                           |   |
| A    | 1+1P                | N/A            | N/A                          | 7287-8211-30              |  |
| B    | 1+1P                |                |                              | 7289-7783-40              |   |
| A    | 2P                  | N/A            | 7287-1991-30                 | 7287-1990-30              |  |
| B    | 2P                  |                | 7287-1993-40                 | 7287-1992-40              |   |
| A    | 2P                  | N/A            | 7283-2918-10                 | N/A                       |  |
| A    | 2P                  |                | 7283-2918-30                 |                           |   |
| B    | 2P                  |                | 7298-4790-40                 |                           |   |
| A    | 2P                  | 7286-1399-80   | 7287-1405-80                 | 7289-7639-80              |  |
| B    | 2P                  | 7286-1402-80   | 7287-1408-80                 | 7289-7640-80              |   |
| A    | 3P<br>(2x9.5+1x1.5) | 7286-1398-10   | 7287-1404-10                 | 7289-7641-10              |   |



| Code | No. of Poles         | Male connector     | Female Connector without CPA    | Female Connector with CPA | Image  |
|------|----------------------|--------------------|---------------------------------|---------------------------|--|
| B    | 3P<br>(2x9.5+1x1.5)  | 7286-1401-10       | 7287-1407-10                    | 7289-7642-10              |                     |
| A    | 4P<br>(2x9.5+2x1.5)  | 7286-1397-30       | 7287-1403-30                    | 7289-7643-30              |  |
| B    | 4P<br>(2x9.5+2x1.5)  | 7286-1400-30       | 7287-1406-30                    | 7289-7644-30              |  |
| A    | 9P<br>(3x9.5+6x0.64) | See header section | 7289-9248-30<br>Lever option 2* | N/A                       | <br>Lever option 1* |
| A    | 9P<br>(3x9.5+6x0.64) |                    | 7289-9123-30<br>Lever option 1* |                           |  |
| B    | 9P<br>(3x9.5+6x0.64) |                    | 7289-9249-10<br>Lever option 2* |                           |  |
| B    | 9P<br>(3x9.5+6x0.64) |                    | 7289-9317-10<br>Lever option 1* |                           |  |

\* **Lever option 1:** Left-hand side lever orientation  
**Lever option 2:** Right-hand side lever orientation

## Unsealed Connector Part Numbers

| Code | No. of Poles | Male connector | Female Connector without CPA | Female Connector with CPA | Image   |
|------|--------------|----------------|------------------------------|---------------------------|---|
| A    | 2P           | N/A            | 7287-9042-30                 | N/A                       |  |
| B    | 2P           |                | 7287-9043-60                 |                           |   |
| A    | 2P           | 7288-8751-30   | 7289-8737-30                 | 7289-8732-30              |  |

## Sealed Header Part Numbers

| No. of Poles           | Male connector | Female Connector without CPA   | Female Connector with CPA | Image   |
|------------------------|----------------|--------------------------------|---------------------------|---|
| 18P<br>(6x9.5+12x0.64) | 7288-9125-30   | 7289-9248-30<br>(3x9.5+6x0.64) | N/A                       |                |
|                        |                | 7289-9123-30<br>(3x9.5+6x0.64) |                           |   |
|                        |                | 7289-9249-10<br>(3x9.5+6x0.64) |                           | <br>VSM header |
|                        |                | 7289-9137-10<br>(3x9.5+6x0.64) |                           |   |

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Part numbers, specifications, dimensions, and performance data in this document are for general references only and are subject to change without notice.

To verify product information, please contact Technical Sales Support team.



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Quotation



Sample Order



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