

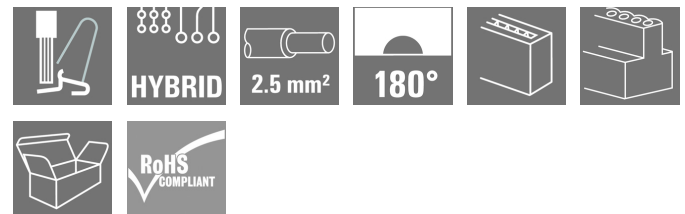
MPS 7S/03-5/02 D11 S TN B B**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image**SNAP IN** **OMNIMATE® 4.0 - the next evolution step**

OMNIMATE® 4.0 follows the trend of One Cable Technology (OCT). The modular concept enables the fast configuration of hybrid interfaces, which transmit data, signals and energy in a single connector. As a result, you can reduce the cabling effort in a wide variety of applications, simplify maintenance and accelerate automation processes. The unique SNAP IN connection is the backbone and speeds up the wiring process.

The fastest connection yet

- Fast, safe, and tool-free wiring due to unique SNAP IN connection
- Ready for Robot through "wire ready" delivery with open clamping point
- Optical and acoustic feedback indicates proper wiring

Create your own configuration

- Flexible configuration and ordering via the Weidmüller Configurator (WMC)
- Dispatch within three days – even for individually configured products
- Automatic offer preparation for the configured product

Simply configuration of modular hybrid connectors

- Flexible combination options for power, signal and data transmission
- Future-proof Single-Pair Ethernet technology

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, female plug, Pitch in mm (P): 7.50 mm, Number of poles: 5, Box |
| Order No. | 8000085268 |
| Type | MPS 7S/03-5/02 D11 S TN B B |
| GTIN (EAN) | 4064675622345 |
| Qty. | 42 pc(s). |
| Product data | IEC: 1000 V / 34.6 A / 0.5 - 4 mm ² UL: / 18.5 A / AWG 20 - AWG 12 |
| Packaging | Box |

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Technical data

Dimensions and weights

| | | | |
|------------|----------|-----------------|------------|
| Depth | 34.95 mm | Depth (inches) | 1.376 inch |
| Height | 15.5 mm | Height (inches) | 0.61 inch |
| Net weight | 23.85 g | | |

System Parameters

| | |
|--|-------------------------|
| Product family | OMNIMATE 4.0 |
| Type of connection | Field connection |
| Wire connection method | SNAP IN |
| Pitch in mm (P) | 7.5 mm |
| Conductor outlet direction | 180° |
| Number of poles | 5 |
| L1 in mm | 15 mm |
| L1 in inches | 0.591 " |
| L2 in mm | 5 mm |
| L2 in inch | 0.197 " |
| Number of rows | 1 |
| Pin series quantity | 1 |
| Rated cross-section | 2.5 mm ² |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20 |
| Stripping length | 9 mm |
| Stripping length tolerance | min. 8 mm max. 10 mm |
| Plugging cycles | ≥ 25 |
| Plugging force/pole, max. | 9 N |
| Pulling force/pole, max. | 8 N |

Material data

| | | | |
|----------------------------------|----------|-----------------------------|--------|
| Insulating material | PBT GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | I |
| Comparative Tracking Index (CTI) | ≥ 600 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Storage temperature, min. | -25 °C | Storage temperature, max. | 55 °C |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 85 °C |

Conductors suitable for connection

| | |
|--|----------------------|
| Clamping range, min. | 0.34 mm ² |
| Clamping range, max. | 4 mm ² |
| Wire connection cross section AWG, min. | AWG 20 |
| Wire connection cross section AWG, max. | AWG 12 |
| Solid, min. H05(07) V-U | 0.5 mm ² |
| Solid, max. H05(07) V-U | 2.5 mm ² |
| Flexible, min. H05(07) V-K | 0.5 mm ² |
| Flexible, max. H05(07) V-K | 4 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.34 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max. | |

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Technical data

w. wire end ferrule, DIN 46228 pt 1, min. 0.34 mm²w. wire end ferrule, DIN 46228 pt 1, max. 2.5 mm²

Outer diameter of insulation, max. 4 mm

| | | | |
|---------------------|--|------------------------------|-----------------------------|
| Clampable conductor | Cross-section for conductor connection | nominal | 0.34 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0.34/12 TK |
| | Cross-section for conductor connection | nominal | 0.5 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H0.5/16 OR |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0.5/10 |
| | Cross-section for conductor connection | nominal | 0.75 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H0.75/16 W |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0.75/10 |
| | Cross-section for conductor connection | nominal | 1 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1.0/16 GE |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H1.0/10 |
| | Cross-section for conductor connection | nominal | 1.5 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1.5/16 R |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H1.5/10 |
| | Cross-section for conductor connection | nominal | 2.5 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H2.5/15D BL |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H2.5/10 |

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P)

Rated data acc. to IEC

| | | | |
|---|------------------------|--|---------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 34.6 A |
| Rated current, max. number of poles (Tu=20°C) | 29.1 A | Rated current, min. number of poles (Tu=40°C) | 30.7 A |
| Rated current, max. number of poles (Tu=40°C) | 25.9 A | Rated voltage for surge voltage class / pollution degree II/2 | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 1,000 V | Rated impulse voltage for surge voltage class/ pollution degree II/2 | 6 kV |
| Rated impulse voltage for surge voltage class/ pollution degree III/2 | 8 kV | | |

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Technical data

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|---------|---------------------------------------|--------|
| Rated voltage (Use group F / UL 1059) | 1,000 V | Rated current (Use group B / UL 1059) | 18.5 A |
| Rated current (Use group C / UL 1059) | 18.5 A | Rated current (Use group D / UL 1059) | 10 A |
| Rated current (Use group F / UL 1059) | 18.5 A | Wire cross-section, AWG, min. | AWG 20 |
| Wire cross-section, AWG, max. | AWG 12 | | |

Technical data - hybrid (data)

| | | | |
|--|--|---|--|
| Connection technology (Data) | Insulation displacement connection (IDC) | Connector Standard (Data) | IEC 63171-2 |
| Contact material (Data) | Bronze tin-plated | Housing main material (Data) | zinc diecast nickel-plated |
| Material locking lever (Data) | Stainless steel | Shielding material (Data) | bronze tin-plated |
| Material insulator (Data) | PC UL94 V0 | Sheath diameter, min. (Data) | 3.6 mm |
| Sheath diameter, max. (Data) | 5.7 mm | Insulation cross-section, min. (Data) | 0.85 |
| Insulation cross-section, max. (Data) | 1.6 | Dielectric strength, contact / contact (Data) | ≥ 1000 V DC |
| Dielectric strength, contact / shield (Data) | ≤ 1500 V DC | Current-carrying capacity (Data) | 1.4 A |
| Contact resistance (Data) | ≤ 20 mΩ | Insulation strength (Data) | ≥ 500 MΩ |
| Network standard (Data) | IEEE 802.3bw (100 BaseT1), IEEE 802.3cg (10BaseT1), IEEE 802.3bp (1000 BaseT1) | PoE / PoE+ (Data) | PoDL acc. to IEEE 802.3bu / cg |
| Application-specific communication cable facilities (Data) | ISO/IEC 11801-1 Amd.1, ISO/IEC 11801-3 Amd.1, ISO/IEC 11801-6 Amd.1 | Ability to reconnect (Data) | ≤ 4 cycles (with the same cross-section) |

Technical data - hybrid (power)

| | | | |
|---|---------------------|--|---------------------|
| Number of poles (Power) | 3 | Number of rows (Power) | 1 |
| Pitch in mm (Power) | 7.5 mm | Pitch in inches (Power) | 0.295 " |
| Contact material (Power) | CuSn | Contact surface (Power) | tinned |
| Clamping range, min. (Power) | 0.5 mm ² | Clamping range, max. (Power) | 4 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, min. (Power) | 0.5 mm ² | w. wire end ferrule, DIN 46228 pt 1, max. (Power) | 2.5 mm ² |
| Wire cross-section, AWG, min. (Power) | AWG 20 | Wire cross-section, AWG, max. (Power) | AWG 12 |
| w. plastic collar ferrule, DIN 46228 pt 4, min. (Power) | 2.5 mm ² | w. plastic collar ferrule, DIN 46228 pt 4, max. (Power) | 0.5 mm ² |
| Flexible, min. H05(07) V-K (Power) | 0.5 mm ² | Flexible, max. H05(07) V-K (Power) | 4 mm ² |
| Solid, min. H05(07) V-U (Power) | 0.5 mm ² | Solid, max. H05(07) V-U (Power) | 2.5 mm ² |
| Outside diameter of the insulation, max. (Power) | 4 mm | Stripping length (Power) | 9 mm |
| Rated current (Use group B / UL 1059) (Power) | 18.5 A | Rated current (Use group C / UL 1059) (Power) | 18.5 A |
| Rated current (Use group D / UL 1059) (Power) | 10 A | Rated current, min. number of poles (Tu=20°C) (Power) | 34.6 A |
| Rated current, max. number of poles (Tu=20°C) (Power) | 29.1 A | Rated current, min. number of poles (Tu=40°C) (Power) | 30.7 A |
| Rated current, max. number of poles (Tu=40°C) (Power) | 25.9 A | Rated impulse voltage for surge voltage class/ pollution degree II/2 (Power) | 4 kV |
| Rated impulse voltage for surge voltage class/ pollution degree III/2 (Power) | 4 kV | Rated voltage (Use group B / UL 1059) (Power) | 600 V |
| Rated voltage (Use group C / UL 1059) (Power) | 600 V | Rated voltage (Use group D / UL 1059) (Power) | 600 V |
| Rated voltage for surge voltage class / pollution degree II/2 (Power) | 1,000 V | Rated voltage for surge voltage class / pollution degree III/2 (Power) | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/3 (Power) | 630 V | Clearance distance, min. (Power) | 9.96 mm |

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Technical data

Technical data - hybrid (signal)

| | | | |
|--|---------------------|--|---------------------|
| Number of poles (Signal) | 5 | Pitch in mm (Signal) | 5 mm |
| Pitch in inches (Signal) | 0.197 " | Contact material (Signal) | CuSn |
| Contact surface (Signal) | tinned | Clamping range, min. (Signal) | 0.5 mm ² |
| Clamping range, max. (Signal) | 4 mm ² | Wire cross-section, AWG, min. (Signal) | AWG 20 |
| Wire cross-section, AWG, max. (Signal) | AWG 12 | w. plastic collar ferrule, DIN 46228 pt 4, min. (Signal) | 0.5 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, max. (Signal) | 2.5 mm ² | w. wire end ferrule, DIN 46228 pt 1, min. (Signal) | 0.5 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, max. (Signal) | 2.5 mm ² | Flexible, min. H05(07) V-K (Signal) | 0.5 mm ² |
| Flexible, max. H05(07) V-K (Signal) | 4 mm ² | Solid, min. H05(07) V-U (Signal) | 0.5 mm ² |
| Solid, max. H05(07) V-U (Signal) | 2.5 mm ² | Outside diameter of the insulation, max. (Signal) | 4 mm |
| Stripping length (Signal) | 9 mm | Rated current (Use group B / UL 1059) (Signal) | 18.5 A |
| Rated current (Use group C / UL 1059) (Signal) | 18.5 A | Rated current (Use group D / UL 1059) (Signal) | 10 A |
| Rated current, min. number of poles (Tu=20°C) (Signal) | 26.8 A | Rated current, max. number of poles (Tu=20°C) (Signal) | 19.7 A |
| Rated current, min. number of poles (Tu=40°C) (Signal) | 23.1 A | Rated current, max. number of poles (Tu=40°C) (Signal) | 16.9 A |
| Rated impulse voltage for surge voltage class/ pollution degree II/2 (Signal) | 4 kV | Rated impulse voltage for surge voltage class/ pollution degree III/2 (Signal) | 4 kV |
| Rated impulse voltage for surge voltage class/ pollution degree III/3 (Signal) | 4 kV | Rated voltage (Use group B / UL 1059) (Signal) | 600 V |
| Rated voltage (Use group C / UL 1059) (Signal) | 600 V | Rated voltage (Use group D / UL 1059) (Signal) | 600 V |
| Rated voltage for surge voltage class / pollution degree II/2 (Signal) | 400 V | Rated voltage for surge voltage class / pollution degree III/2 (Signal) | 320 V |
| Rated voltage for surge voltage class / pollution degree III/3 (Signal) | 250 V | Clearance distance, min. (Signal) | 7.5 mm |
| Creepage distance, min. (Signal) | 7.5 mm | | |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ECLASS 9.0 | 27-44-03-09 | ECLASS 9.1 | 27-44-03-09 |
| ECLASS 10.0 | 27-44-03-09 | ECLASS 11.0 | 27-46-02-02 |
| ECLASS 12.0 | 27-46-03-02 | ECLASS 13.0 | 27-46-03-02 |

Environmental Product Compliance

| | |
|------------------------|-----------------------------|
| REACH SVHC | / |
| RoHS Compliance Status | Compliant without exemption |

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www.weidmueller.com**Technical data****Important note**

| | |
|----------------|--|
| IPC conformity | Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request. |
| Notes | <ul style="list-style-type: none">• Rated current related to rated cross-section & min. No. of poles.• P on drawing = pitch• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.• Wire end ferrule without plastic collar to DIN 46228/1• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

Approvals

| | |
|------|---------|
| ROHS | Conform |
|------|---------|

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| User Documentation | Assembly instructions MPS 5 D11 and MPS 7S-5 D11 EN DE |
| Catalogues | Catalogues in PDF-format |

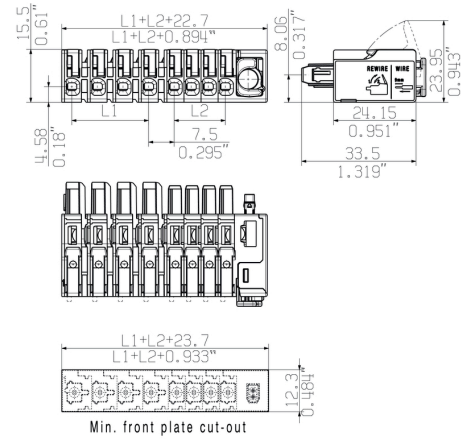
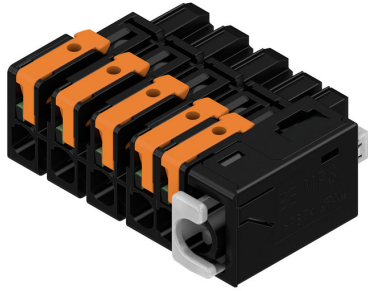
MPS 7S/03-5/02 D11 S TN B B

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Drawings

Product image



Product benefits

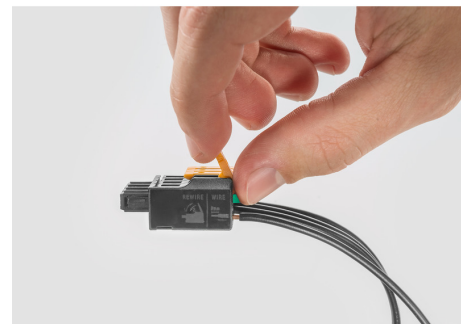


Fastest connection technology SNAP IN

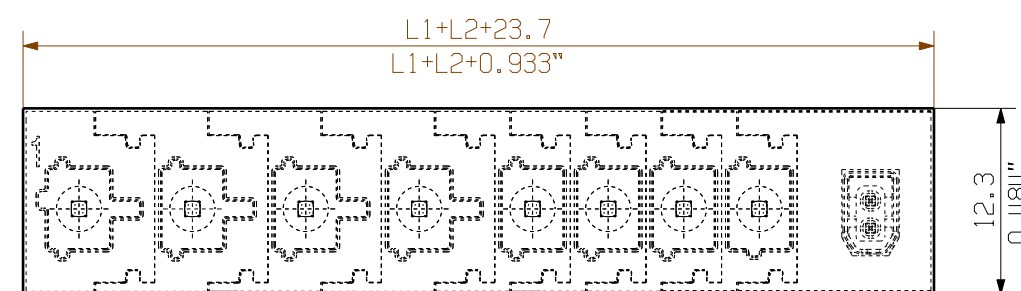
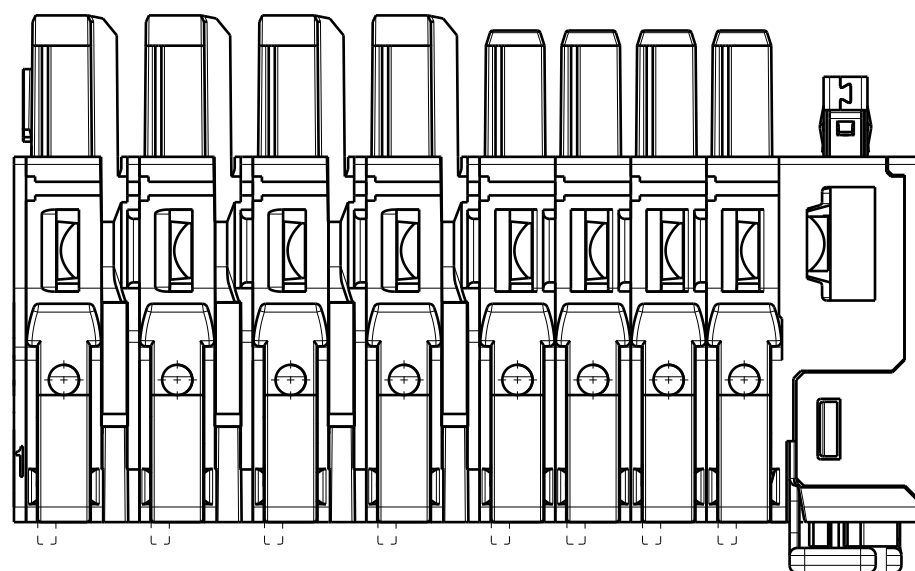
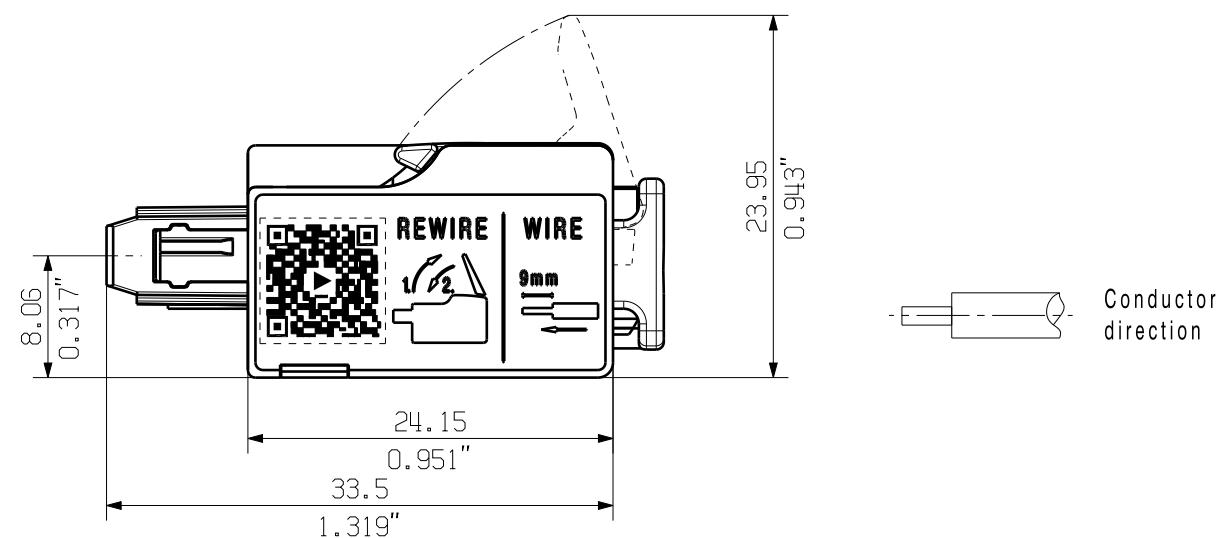
Product benefits



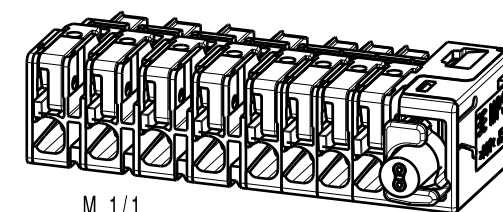
Acoustic and visual feedback



Technical drawing of a 10-pin D-sub connector. The drawing shows the side profile of the connector with dimensions in inches. The overall length is labeled as $L1 + L2 + 22.7$ and $L1 + L2 + 0.894$. The height of the connector body is labeled as 4.58 and 0.18 . The distance from the front flange to the center of the first pin is labeled $L1$. The distance between the centers of two adjacent pins is labeled 7.5 and 0.295 . The distance from the center of the last pin to the back flange is labeled $L2$. The drawing includes a cross-section view of the connector body on the right side.



Min. front plate cut-out



The dimensions and tolerances specified on the customer drawing reflect the geometry in dry condition and do not consider humidity and temperature effects.
A specific agreement / specification between manufacturer and customer is required if certain dimensions including tolerances must be guaranteed under environmental conditions in the storage phase or the application (e.g. high humidity and / or temperature).

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

| | | | | | | |
|--------------------|------------------|------------|--------------|----------------|------------|--------------|
| MPS 7S/03-5/02 D11 | 3 | 15.00 | 0.591 | 2 | 5.00 | 0.197 |
| MPS 7S/04-5/02 D11 | 4 | 22.50 | 0.886 | 2 | 5.00 | 0.197 |
| MPS 7S/03-5/04 D11 | 3 | 15.00 | 0.591 | 4 | 15.00 | 0.394 |
| MPS 7S/04-5/04 D11 | 4 | 22.50 | 0.886 | 4 | 15.00 | 0.394 |
| Name | n Poles P=7.5 | L1 [mm] | L1 [inch] | n Poles P=5 | L2 [mm] | L2 [inch] |



General Tolerances: ☐ WN700144-W.. ☐ WN 212010 ☐ ISO 2768-mK Tolerances ISO 8015

| | | | |
|----------|---|--|--|
| Changes: | . | | |
|----------|---|--|--|

Mat. No. (SAP) . **Weidmüller** 

| | | |
|-------------------|---|-----------------------------|
| Drawings Assembly | Weidmüller | Drawing no. _____ Ind _____ |
| | | Scale: 3:1 Sheet 2 / 2 |

| | | | |
|-------|--------------|---|---------------------|
| Drawn | Huck, Lauren |  | MPS 7S/ 5/ D11 S TN |
|-------|--------------|---|---------------------|

| | | | |
|-------------|---------------|---|---|
| Responsible | Schmitz, Till | | MPS 7S/...S/... D11 S TN ... MPS 7S/04-5/04 D11 S TN B R |
|-------------|---------------|---|---|

| | | |
|----------|--|--|
| Approved | | MPS 7S/04-5/04 D11 S TN B B MPS 7S/04-5/04 D11 S TN B B |
|----------|--|--|

Weidmüller 

MPS 7S/...-5/... D11 S TN ...
MPS 7S/04-5/04 D11 S TN B B
MPS 7S/04-5/04 D11 S TN B B