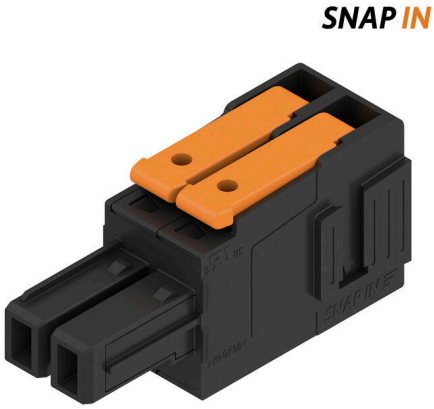
# Data sheet

## MPS 6/02 S TN B B

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

### Product image






### General ordering data

| | |
|---|---|
| Version | PCB plug-in connector, female plug, Pitch in mm (P): 6.35 mm, Number of poles: 2, 180°, Box |
| Order No. | 3106830000 |
| Type | MPS 6/02 S TN B B |
| GTIN (EAN) | 4099987171106 |
| Qty. | 128 items |
| Product data | IEC: 1000 V / 47.2 A / 0.75 - 6 mm²<br>UL: 600 V / 30 A / AWG 20 - AWG 10 |
| Packaging | Box |

# Data sheet

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# Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 43 mm | Depth (inches) | 1.6929 inch |
| Height | 20.5 mm | Height (inches) | 0.8071 inch |
| Width | 15.5 mm | Width (inches) | 0.6102 inch |
| Net weight | 10 g | | |

### Environmental Product Compliance

| | |
|---|---|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC | No SVHC above 0.1 wt% |

### System Parameters

| | | | |
|---|---|---|---|
| Product family | OMNIMATE 4.0 | Type of connection | Field connection |
| Wire connection method | SNAP IN with lever | Pitch in mm (P) | 6.35 mm |
| Pitch in inches (P) | 0.250 " | Conductor outlet direction | 180° |
| Number of poles | 2 | L1 in mm | 6.35 mm |
| L1 in inches | 0.250 " | Number of rows | 1 |
| Pin series quantity | 1 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20 | Protection degree | IP20 |
| Volume resistance | ≤5 mΩ | Stripping length | 11 mm |
| Plugging cycles | ≥ 25 | Plugging force per pole, max. | 11.25 N |
| Pulling force per pole, max. | 10 N | | |

### Material data

| | | | |
|---|---|---|---|
| Insulating material | PA 9T | Colour | black |
| Colour of operational elements | orange | Colour chart (similar) | RAL 9011 |
| Insulating material group | I | Comparative Tracking Index (CTI) | ≥ 600 |
| Moisture Level (MSL) | 1 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| Operating temperature, min. | -50 °C | Operating temperature, max. | 125 °C |

### Conductors suitable for connection

| | | | | |
|---|---|---|---|---|
| Conductor cross-section (rated connection), min. | 0.5 mm² | | | |
| Conductor cross-section (rated connection), max. | 6 mm² | | | |
| Solid, min. H05(07) V-U | 0.75 mm² | | | |
| Solid, max. H05(07) V-U | 4 mm² | | | |
| Flexible, min. H05(07) V-K | 0.75 mm² | | | |
| Flexible, max. H05(07) V-K | 6 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.5 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, max. | 4 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.75 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, max. | 4 mm² | | | |
| Clampable conductor | Cross-section for conductor connection | nominal | 0.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 12 mm |

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## Technical data

| | | | |
|---|---|---|---|
| | | Recommended wire-end ferrule | H0,5/16 OR |
| | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0,5/18 OR |
| Cross-section for conductor connection | | nominal | 0.75 mm² |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0,75/18 W |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H0,75/16 W |
| Cross-section for conductor connection | | nominal | 1 mm² |
| wire end ferrule | | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1,0/18 GE |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1,0/16 GE |
| Cross-section for conductor connection | | nominal | 1.5 mm² |
| wire end ferrule | | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1,5/18D SW |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1,5/16 R |
| Cross-section for conductor connection | | nominal | 2.5 mm² |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H2,5/19T GR |
| | | Stripping length | nominal 13 mm |
| | | Recommended wire-end ferrule | H2,5/16DS BL |
| Cross-section for conductor connection | | nominal | 4 mm² |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H4,0/20T OR |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H4,0/18T OR |

### Rated data acc. to IEC

| | | | |
|---|---|---|---|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current at min. number of poles (Tu = 20 °C) | 47.2 A |
| Rated current, max. number of poles (Tu=20°C) | 41 A | Rated current, min. number of poles (Tu=40°C) | 42.5 A |
| Rated current at max. number of poles (Tu = 40 °C) | 36.8 A | Rated voltage for surge voltage class (pollution degree II/2) | 1000 V |
| Rated voltage for surge voltage class (pollution degree III/2) | 1000 V | Rated voltage for surge voltage class (pollution degree III/3) | 800 V |
| Rated impulse voltage for surge voltage class (pollution degree II/2) | 8 V | Rated impulse voltage for surge voltage class (pollution degree III/2) | 8 kV |
| Rated impulse voltage for surge voltage class (contamination degree III/3) | 8 kV | Creepage distance, min. | 11.2 mm |
| Clearance, min. | 11.2 mm | | |

### Rated data acc. to UL 1059

| | | | |
|---|---|---|---|
| Rated voltage (Use group B / UL 1059) | 600 V | Rated voltage (Use group C / UL 1059) | 600 V |
| Rated voltage (Use group D / UL 1059) | 600 V | Rated voltage (Use group F / UL 1059) | 1000 V |

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## Technical data

| | | | |
|---|---|---|---|
| Rated current (Use group B / UL 1059) | 30 A | Rated current (Use group C / UL 1059) | 30 A |
| Rated current (Use group D / UL 1059) | 5 A | Wire cross-section, AWG, min. | AWG 20 |
| Wire cross-section, AWG, max. | AWG 10 | | |

### Important note

| | |
|---|---|
| Notes | • Rated current related to rated cross-section & min. No. of poles.<br>• P on drawing = pitch<br>• 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.<br>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 | | |

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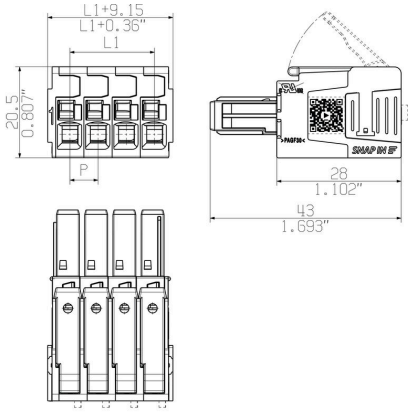
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# Drawings

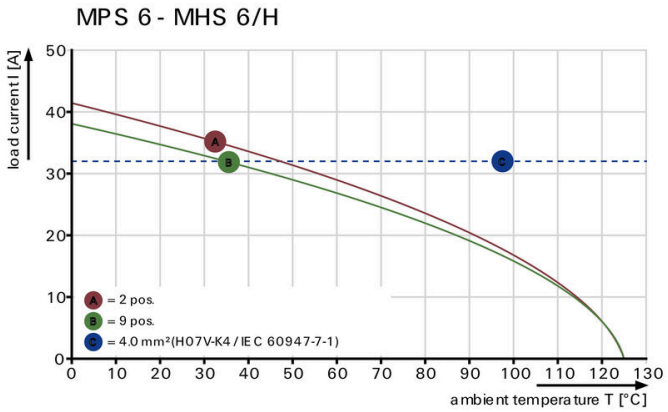
### Product image




### Dimensional drawing




### Derating curve




### Derating curve

