

**BUF 10.16IT/03/180MF2 AG BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

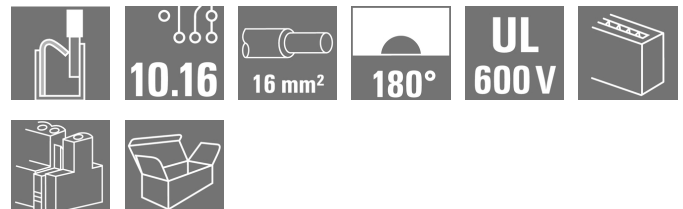
**Product image**

Abbildung ähnlich

Device connectivity | OMNIMATE® Power BUF 10.16  
PUSH IN PCB connector, 16mm<sup>2</sup>, with wire-ready  
function

- PUSH IN technology with settable wire-ready contact point simplifies the connection of stranded wires without wire-end ferrules and wires with particularly rigid insulation
- Direct and tool-free connection of solid wires and wires with crimped wire-end ferrules for fast and safe wiring
- Single-hand operation of the plug-in connector and automatic connection thanks to the middle flange with snap-on mechanism and optionally with additional screw fastening

**General ordering data**

|              |                                                                                                                                               |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 10.16 mm, Number of poles: 3, 180°, PUSH IN with actuator, Clamping range, max.: 16 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">2493180000</a>                                                                                                                    |
| Type         | BUF 10.16IT/03/180MF2 AG BK BX                                                                                                                |
| GTIN (EAN)   | 4050118502763                                                                                                                                 |
| Qty.         | 28 pc(s).                                                                                                                                     |
| Product data | IEC: 1000 V / 76 A / 2.5 - 16 mm <sup>2</sup><br>UL: 600 V / 34 A / AWG 12 - AWG 6                                                            |
| Packaging    | Box                                                                                                                                           |

Creation date March 29, 2021 5:52:25 PM CEST

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**Technical data**
**Dimensions and weights**

|            |         |
|------------|---------|
| Net weight | 42.62 g |
|------------|---------|

**System Parameters**

|                                                 |                                        |                                               |                    |
|-------------------------------------------------|----------------------------------------|-----------------------------------------------|--------------------|
| Product family                                  | OMNIMATE Power - series<br>BU/SU 10.16 | Type of connection                            | Field connection   |
| Wire connection method                          | PUSH IN with actuator                  | Pitch in mm (P)                               | 10.16 mm           |
| Pitch in inches (P)                             | 0.4 inch                               | Conductor outlet direction                    | 180°               |
| Number of poles                                 | 3                                      | L1 in mm                                      | 30.48 mm           |
| L1 in inches                                    | 1.2 inch                               | Number of rows                                | 1                  |
| Pin series quantity                             | 1                                      | Rated cross-section                           | 16 mm <sup>2</sup> |
| Touch-safe protection acc. to DIN VDE<br>57 106 | Safe from finger touch                 | Touch-safe protection acc. to DIN VDE<br>0470 | IP 20              |
| Can be coded                                    | Yes                                    | Stripping length                              | 18 mm              |
| Screwdriver blade                               | 0.8 x 4.0                              | Screwdriver blade standard                    | DIN 5264           |
| Plugging cycles                                 | ≤ 50                                   | Plugging force/pole, max.                     | 15 N               |
| Pulling force/pole, max.                        | 15 N                                   |                                               |                    |

**Material data**

|                                  |               |                                 |                     |
|----------------------------------|---------------|---------------------------------|---------------------|
| Insulating material              | PA GF         | Colour                          | black               |
| Colour chart (similar)           | RAL 9011      | Insulating material group       | II                  |
| Comparative Tracking Index (CTI) | ≥ 400         | Insulation strength             | ≥ 10 <sup>8</sup> Ω |
| UL 94 flammability rating        | V-0           | Contact material                | Copper alloy        |
| Contact surface                  | silver-plated | Layer structure of plug contact | ≥ 3 μm Ag           |
| Storage temperature, min.        | -40 °C        | Storage temperature, max.       | 70 °C               |
| Operating temperature, min.      | -50 °C        | Operating temperature, max.     | 120 °C              |

**Conductors suitable for connection**

|                                                                        |                     |
|------------------------------------------------------------------------|---------------------|
| Clamping range, min.                                                   | 2.5 mm <sup>2</sup> |
| Clamping range, max.                                                   | 16 mm <sup>2</sup>  |
| Wire connection cross section AWG,<br>min.                             | AWG 12              |
| Wire connection cross section AWG,<br>max.                             | AWG 4               |
| Solid, min. H05(07) V-U                                                | 2.5 mm <sup>2</sup> |
| Solid, max. H05(07) V-U                                                | 10 mm <sup>2</sup>  |
| Stranded, min. H07V-R                                                  | 10 mm <sup>2</sup>  |
| Stranded, max. H07V-R                                                  | 16 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                                             | 2.5 mm <sup>2</sup> |
| Flexible, max. H05(07) V-K                                             | 16 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup><br>min. |                     |
| w. plastic collar ferrule, DIN 46228 pt 4, 16 mm <sup>2</sup><br>max.  |                     |
| w. wire end ferrule, DIN 46228 pt 1,<br>min.                           | 2.5 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1,<br>max.                           | 16 mm <sup>2</sup>  |

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|                     |                                        |                              |                             |       |
|---------------------|----------------------------------------|------------------------------|-----------------------------|-------|
| Clampable conductor | Cross-section for conductor connection | Type                         | fine-wired                  |       |
|                     |                                        | nominal                      | 2.5 mm <sup>2</sup>         |       |
|                     | wire end ferrule                       | Stripping length             | nominal                     | 20 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H2.5/25D BL</a> |       |
|                     |                                        | Stripping length             | nominal                     | 18 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H2.5/18</a>     |       |
|                     | Cross-section for conductor connection | Type                         | fine-wired                  |       |
|                     |                                        | nominal                      | 4 mm <sup>2</sup>           |       |
|                     | wire end ferrule                       | Stripping length             | nominal                     | 20 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H4.0/26D GR</a> |       |
|                     |                                        | Stripping length             | nominal                     | 18 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H4.0/18</a>     |       |
|                     | Cross-section for conductor connection | Type                         | fine-wired                  |       |
|                     |                                        | nominal                      | 6 mm <sup>2</sup>           |       |
|                     | wire end ferrule                       | Stripping length             | nominal                     | 20 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H6.0/26 SW</a>  |       |
|                     |                                        | Stripping length             | nominal                     | 18 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H6.0/18</a>     |       |
|                     | Cross-section for conductor connection | Type                         | fine-wired                  |       |
|                     |                                        | nominal                      | 10 mm <sup>2</sup>          |       |
|                     | wire end ferrule                       | Stripping length             | nominal                     | 21 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H10.0/28 EB</a> |       |
|                     |                                        | Stripping length             | nominal                     | 18 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H10.0/18</a>    |       |
|                     | Cross-section for conductor connection | Type                         | fine-wired                  |       |
|                     |                                        | nominal                      | 16 mm <sup>2</sup>          |       |
|                     | wire end ferrule                       | Stripping length             | nominal                     | 21 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H16.0/28 GN</a> |       |
|                     |                                        | Stripping length             | nominal                     | 18 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H16.0/18</a>    |       |

Reference text Length of ferrules is to be chosen depending on the product and the rated voltage.

**Rated data acc. to IEC**

|                                                                       |                  |                                                                           |         |
|-----------------------------------------------------------------------|------------------|---------------------------------------------------------------------------|---------|
| Rated current, min. number of poles (Tu=20°C)                         | 76 A             | Rated current, max. number of poles (Tu=20°C)                             | 71 A    |
| Rated current, min. number of poles (Tu=40°C)                         | 70 A             | Rated current, max. number of poles (Tu=40°C)                             | 62 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 voltage for surge voltage class / pollution degree III/3        | 1,000 V          | Rated impulse voltage for surge voltage class/ pollution degree II/2      | 8 kV    |
| 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    |
| Short-time withstand current resistance                               | 3 x 1s with 800A |                                                                           |         |

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**Technical data**
**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 600 V

Rated voltage (Use group C / UL 1059) 600 V

Rated current (Use group B / UL 1059) 34 A

Rated current (Use group C / UL 1059) 34 A

Wire cross-section, AWG, min. AWG 12

Wire cross-section, AWG, max. AWG 6

 Reference to approval values  
 Specifications are maximum values, details - see approval certificate.

**Packing**

Packaging Box

VPE length 0 m

VPE width 0 m

VPE height 0 m

**Classifications**

ETIM 6.0 EC002638

ETIM 7.0 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

**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

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule with plastic collar to DIN 46228/4
- Wire end ferrule without plastic collar to DIN 46228/1
- 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.
- For all applications with flange we recommend to fix the pin header with the help of the soldering flange or a self-tapping screw on the board.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Approvals**

Approvals



UL File Number Search

E60693

Creation date March 29, 2021 5:52:25 PM CEST

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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## Technical data

### Downloads

Approval/Certificate/Document of  
Conformity

[Declaration of the Manufacturer](#)

Engineering Data

[STEP](#)

User Documentation

[Assembly instructions PUSH IN connector with actuator – BUF 10.16 IT](#)  
[QR-Code product handling video](#)

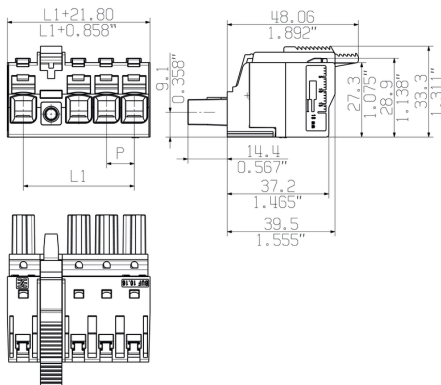
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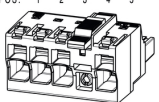
## Drawings

### Dimensional drawing

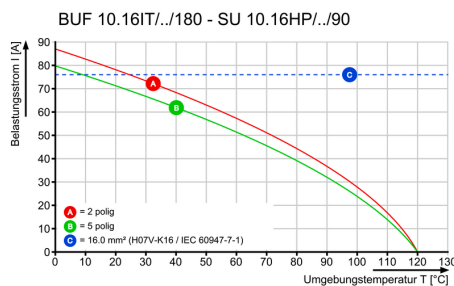


Similar to illustration

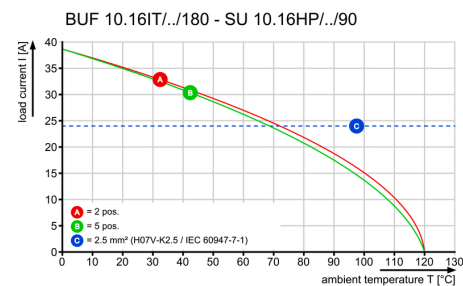
### Connection diagram

|                |                                  |                                                                                                                            |   |   |   |   |
|----------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 4              | M(S)F4                           | o                                                                                                                          | o | o | X | o |
| 4              | M(S)F3                           | o                                                                                                                          | o | X | o | o |
| 4              | M(S)F2                           | o                                                                                                                          | X | o | o | o |
| 3              | M(S)F3                           | o                                                                                                                          | o | X | o | o |
| 3              | M(S)F2                           | o                                                                                                                          | X | o | o | o |
| 2              | M(S)F2                           | o                                                                                                                          | X | o | o | o |
| NO OF<br>POLES | X = MIDDLE<br>FLANGE<br>POSITION | <div> <div>POS. 1 2 3 4 5</div>  </div> |   |   |   |   |
|                |                                  | 1                                                                                                                          | 2 | 3 | 4 | 5 |

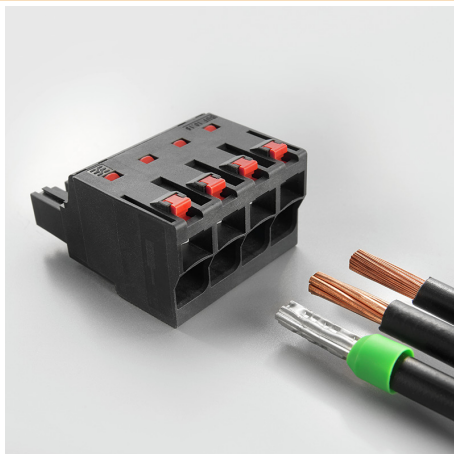
### Graph



### Graph

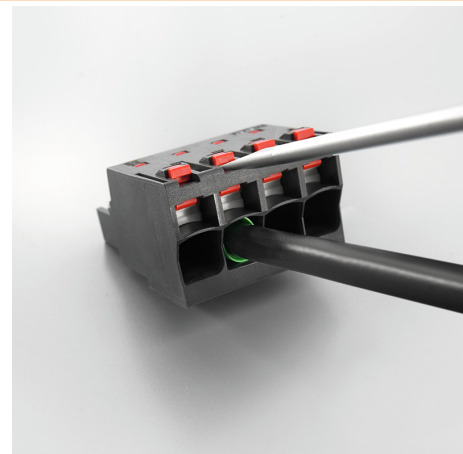


### Product benefits



Easy connection of conductors  
WIRE READY

### Product benefits



Quick wiring

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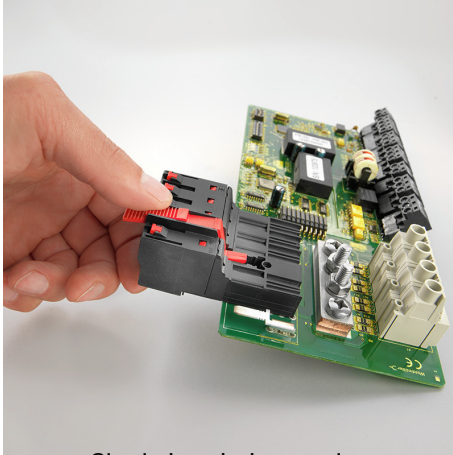
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## Drawings

### Product benefits



Single-handed operation  
Automatic latching