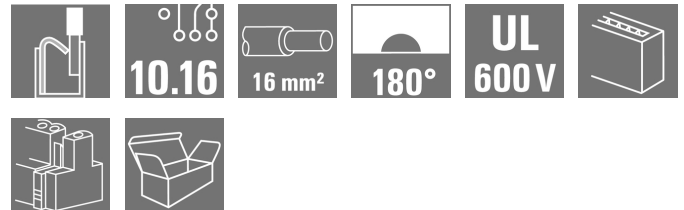


## OMNIMATE Power - series BU/SU 10.16 BUF 10.16IT/04/180MF2SH180 AG BK BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
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Germany  
Fon: +49 5231 14-0  
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www.weidmueller.com

### Product image



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

Including pre-assembled pluggable shield connection for large area shielding in your application.

Directly during the plug-in process itself, the shield connection is attached vibration-proof to the contact area of the metal housing.

### General ordering data

Type	BUF 10.16IT/04/180MF2SH180 AG BK BX
Order No.	<a href="#">2627720000</a>
Version	PCB plug-in connector, female plug, 10.16 mm, No. of poles: 4, 180°, PUSH IN with actuator, Clamping range, max. : 16 mm <sup>2</sup>
GTIN (EAN)	4050118631715
Qty.	20 pc(s).
Product data	IEC: 1000 V / 76 A / 2.5 - 16 mm <sup>2</sup> UL:

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

Net weight 10.2 g

**System parameters**

Product family	OMNIMATE Power - series 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°
No. of poles	4	L1 in mm	40.64 mm
L1 in inches	1.6 inch	Pin series quantity	1
Rated cross-section	16 mm <sup>2</sup>	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Can be coded	Yes
Stripping length	18 mm	Actuating force actuating element, max.	120 N
Screwdriver blade	0.8 x 4.0	Screwdriver blade standard	DIN 5264
Plugging cycles	25		

**Material data**

Insulating material	PA GF	Colour code	black
Colour of operational elements	red, grey	Material of operational elements	PA 66/6, PBT
Colour chart (similar)	RAL 9011	Insulating material group	II
CTI	≥ 400	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Layer structure of plug contact	3- μm Ag
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	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, min.	AWG 12	Wire connection cross section AWG, 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, min.	2.5 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	2.5 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm <sup>2</sup>

**Rated data acc. to IEC**

Rated current, min. no. of poles (Tu=20°C)	76 A	Rated current, max. no. of poles (Tu=20°C)	71 A
Rated current, min. no. of poles (Tu=40°C)	70 A	Rated current, max. no. 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

### Packaging

VPE length	0.37 m	VPE width	0.17 m
VPE height	0.11 m		

### Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
eClass 6.2	27-26-07-04	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

### Notes

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• 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.</li> </ul>
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.

### Downloads

Motion controllers white paper	<a href="#">Download Whitepaper</a>
White Paper UL 600 V	<a href="#">Download Whitepaper</a>

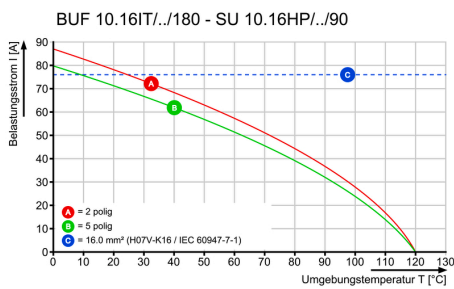
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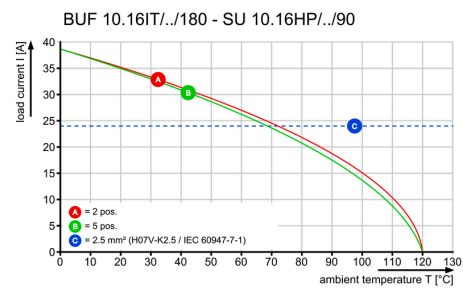
**Drawings**

**Dimensional drawing**

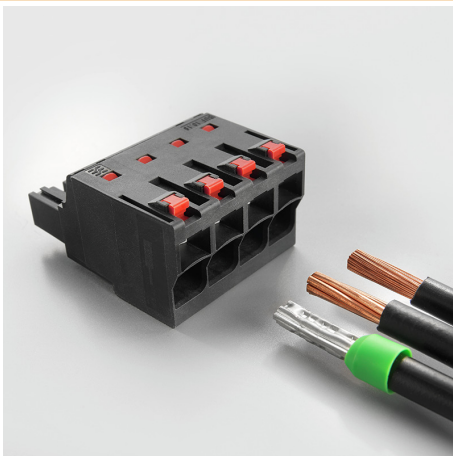
**Graph**



**Graph**

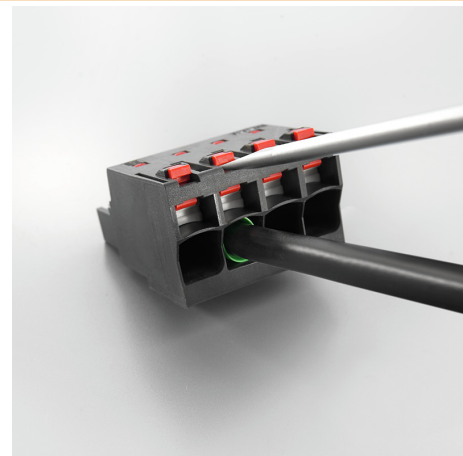


**Product benefits**



- Easy connection of conductors
- **WIRE READY**

**Product benefits**



- Quick wiring

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**Mating connector (fully pluggable)**
**SU 10.16IT 270MSF**


Male header with middle solder flange fastening in 10.16 pitch for 400-V IT systems according to IEC 61800-5-1. UL approval in compliance with UL840 (600 V) when using leading contact. When used together with the BUZ 10.16 IT, they comply with the expanded requirements for 5.5 mm of touch protection with IT systems (400 V relative to earth), according to IEC 61800-5-1. With its isolated pin tips, the mating profile ensures that more than 1 mm of touch safety is present (also without a socket block) with a finger pressure of 20 N.

The middle-flange interlock feature decreases the space required by one pitch width when compared to other standard solutions.

Available on request with screw flange or without flange.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data
SU	<a href="#">2630220000</a>	PCB plug-in connector, male	4050118633894	36 pc(s).	IEC: / 78.3 A
10.16IT/04/270MSF2		header, 10.16 mm, No. of			UL:
3.5AG BK BX		poles: 4, Solder pin length			
		(l): 3.5 mm, black			

**SU 10.16IT 90MSF**


Male header with middle solder flange fastening in 10.16 pitch for 400-V IT systems according to IEC 61800-5-1. UL approval in compliance with UL840 (600 V) when using leading contact. When used together with the BUZ 10.16 IT, they comply with the expanded requirements for 5.5 mm of touch protection with IT systems (400 V relative to earth), according to IEC 61800-5-1. With its isolated pin tips, the mating profile ensures that more than 1 mm of touch safety is present (also without a socket block) with a finger pressure of 20 N.

The middle-flange interlock feature decreases the space required by one pitch width when compared to other standard solutions.

Available on request with screw flange or without flange.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data
SU	<a href="#">2630150000</a>	PCB plug-in connector, male	4050118633825	36 pc(s).	IEC: / 78.3 A
10.16IT/04/90MSF2		header, 10.16 mm, No. of			UL:
3.5AG BK BX		poles: 4, Solder pin length			
		(l): 3.5 mm, black			

## OMNIMATE Power - series BU/SU 10.16 BUF 10.16IT/04/180MF2SH180 AG BK BX

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# Accessories

### Slotted screwdriver

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDS 0.8X4.5X125	<a href="#">9009020000</a>	Screwdriver, Blade width (B): 4.5 mm, Blade length: 125 mm, Blade thickness (A): 0.8 mm	4032248266883	1 pc(s).

### Coding elements



**Only connects what is supposed to be connected: the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

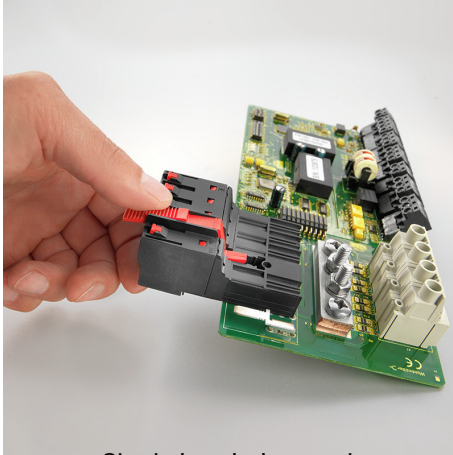
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
KO BU/ SU10.16HP / BV/SV7.62	<a href="#">1824410000</a>	PCB plug-in connector, Accessories, Coding element, black, No. of poles: 1	4032248326716	50 pc(s).	UL:	Box

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**Product benefits**

- Single-handed operation
- Automatic latching