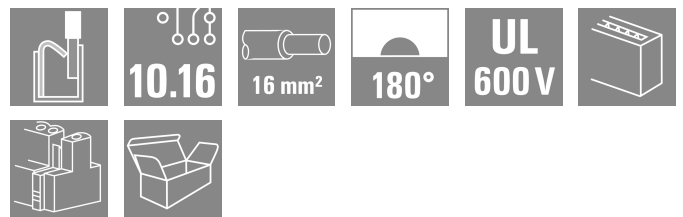
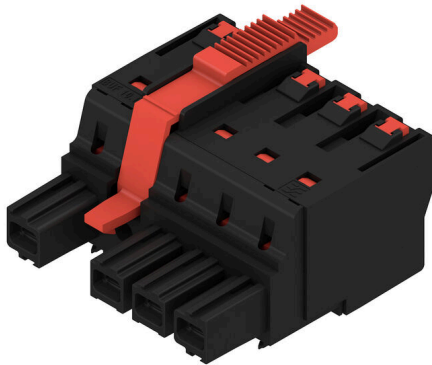


BUF 10.16IT/04/180MF4 AG BK BX SO

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

www.weidmueller.com

Product image


Device connectivity | OMNIMATE® Power BUF 10.16
 PUSH IN PCB connector, 16mm², 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: 4, 180°, PUSH IN with actuator, Clamping range, max. : 16 mm ² , miscellaneous
Order No.	2897310000
Type	BUF 10.16IT/04/180MF4 AG BK BX SO
GTIN (EAN)	4064675901525
Qty.	20 items
Product data	IEC: 1000 V / 76 A / 2.5 - 16 mm ² UL: 600 V / 51 A / AWG 12 - AWG 6
Packaging	miscellaneous

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Technical data

Approvals

Approvals



Dimensions and weights

Depth	39.5 mm	Depth (inches)	1.5551 inch
Height	33.3 mm	Height (inches)	1.311 inch
Width	50.8 mm	Width (inches)	2 inch
Net weight	58.25 g		

Environmental Product Compliance

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

System Parameters

Product family	OMNIMATE Power - series BU/SU 10.16	Wire connection method	PUSH IN with actuator
Pitch in mm (P)	10.16 mm	Pitch in inches (P)	0.400 "
Conductor outlet direction	180°	Number of poles	4
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	Can be coded	Yes
Screwdriver blade	0.8 x 4.0	Screwdriver blade standard	DIN 5264
Plugging cycles	25	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 resistance	≥ 10 ⁸ Ω
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-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 ²
Clamping range, max.	16 mm ²
Solid, min. H05(07) V-U	2.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, min. H07V-R	10 mm ²
Stranded, max. H07V-R	16 mm ²
Flexible, min. H05(07) V-K	2.5 mm ²
Flexible, max. H05(07) V-K	16 mm ²
w. plastic collar ferrule, DIN 46228 pt 4,	2.5 mm ²
min.	

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w. plastic collar ferrule, DIN 46228 pt 4, 16 mm²
 max.

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

w. wire end ferrule, DIN 46228 pt 1, 16 mm²
 max.

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

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	1000 V	Rated voltage for surge voltage class / pollution degree III/2	1000 V
Rated voltage for surge voltage class / pollution degree III/3	1000 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

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)	51 A	Rated current (Use group C / UL 1059)	51 A
Wire cross-section, AWG, min.	AWG 12	Wire cross-section, AWG, max.	AWG 6

Packing

Packaging	miscellaneous	VPE length	348.00 mm
VPE width	131.00 mm	VPE height	187.00 mm

Type tests

Test: Durability of markings	Standard	IEC 60068-2-70 / 12.95		
	Test	mark of origin, type identification, pitch, durability, stripping length		
	Evaluation	available		
Test: Clampable cross section	Standard	IEC 60999-1:1999-11 section 9.1, IEC 60947-1:2011-03 section 8.2.4.5.1		
	Conductor type	Type of conductor and conductor cross-section	stranded 2.5 mm ²	
		Type of conductor and conductor cross-section	solid 2.5 mm ²	
		Type of conductor and conductor cross-section	stranded 16 mm ²	
		Type of conductor and conductor cross-section	solid 10 mm ²	
		Type of conductor and conductor cross-section	AWG 12/1	
		Type of conductor and conductor cross-section	AWG 12/19	
		Type of conductor and conductor cross-section	AWG 4/1	
		Type of conductor and conductor cross-section	AWG 4/19	
	Evaluation	passed		
Test for damage to and accidental loosening of conductors	Standard	IEC 60999-1:1999-11 section 9.4 bzw. section 8.10		
	Requirement	0.7 kg		
	Conductor type	Type of conductor and conductor cross-section	H07V-K2.5	
		Type of conductor and conductor cross-section	H07V-U2.5	
		Type of conductor and conductor cross-section	AWG 14/1	
		Type of conductor and conductor cross-section	AWG 14/19	
	Evaluation	passed		
Requirement	2.9 kg			

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	Conductor type	Type of conductor and conductor cross-section	H07V-K16	
		Type of conductor and conductor cross-section	H07V-U16	
	Evaluation	passed		
	Requirement	4,5 kg		
	Conductor type	Type of conductor and conductor cross-section	AWG 4/7	
		Type of conductor and conductor cross-section	AWG 4/19	
	Pull-out test	Standard	IEC 60999-1:1999-11 section 9.5	
		Requirement	≥50 N	
		Conductor type	Type of conductor and conductor cross-section	AWG 14/1
			Type of conductor and conductor cross-section	AWG 14/19
Type of conductor and conductor cross-section			H07V-K2.5	
Type of conductor and conductor cross-section			H07V-U2.5	
Evaluation		passed		
Requirement		≥100 N		
Conductor type		Type of conductor and conductor cross-section	H07V-K16	
		Type of conductor and conductor cross-section	H07V-U16	
Evaluation	passed			
Requirement	≥ 135 N			
Conductor type	Type of conductor and conductor cross-section	AWG 4/7		
	Type of conductor and conductor cross-section	AWG4/19		
Evaluation	passed			

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 variants 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.
 - 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

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Technical data

- 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		

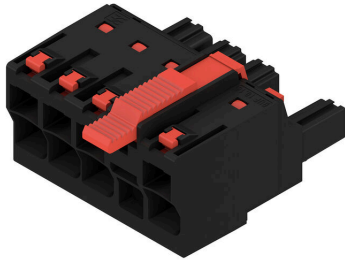
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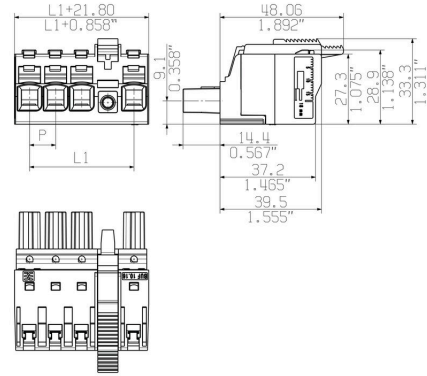
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Drawings

Product image

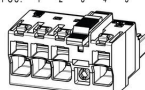


Dimensional drawing

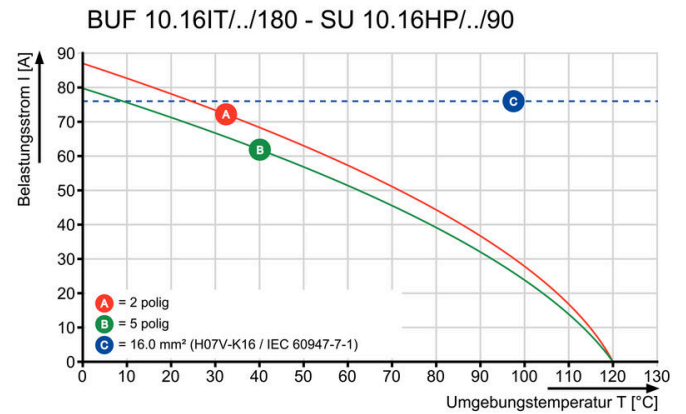


Similar to illustration

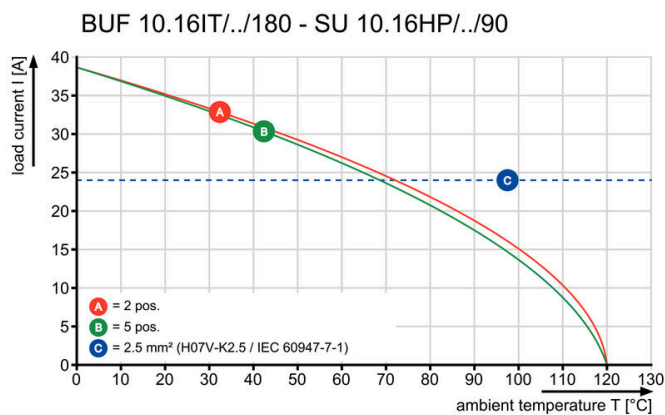
Connection diagram

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	
3	M(S)F2	o	X	o	o	
2	M(S)F2	o	X	o		
NO OF POLES	X = MIDDLE FLANGE POSITION	1	2	3	4	5
						

Graph



Graph



Easy connection of conductors WIRE READY

Product benefits



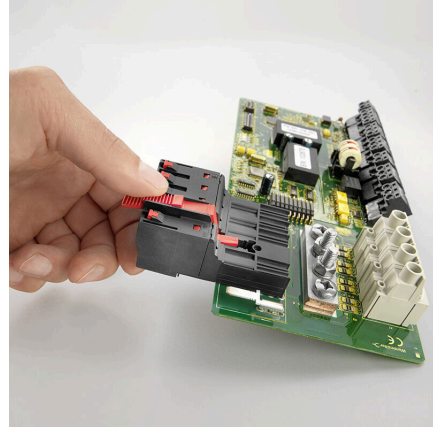
Easy connection of conductors WIRE READY

Product benefits



Quick wiring

Product benefits



Single-handed operation Automatic latching