OMNIMATE Power - series BU/SU 10.16
BUF 10.16IT/04/180MF3SH180 AG BK BX

Weidmüller Interface GmbH & Co. KG
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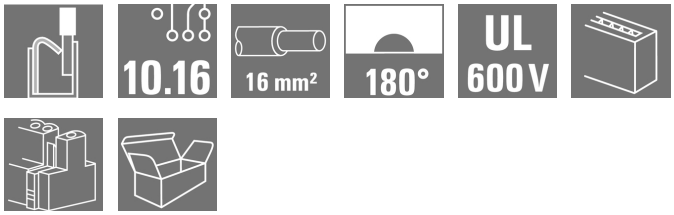
Product image



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

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/04/180MF3SH180 AG BK BX
Order No.	2627740000
Version	PCB plug-in connector, female plug, 10.16 mm, Number of poles: 4, 180°, PUSH IN with actuator, Clamping range, max. : 16 mm²
GTIN (EAN)	4050118631739
Qty.	20 pc(s).
Product data	IEC: 1000 V / 76 A / 2.5 - 16 mm² UL: 600 V / 34 A / AWG 12 - AWG 6

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Technical data

Dimensions and weights

Net weight	0 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°
Number of poles	4	L1 in mm	40.64 mm
L1 in inches	1.6 inch	Pin series quantity	1
Rated cross-section	16 mm²	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	≤ 50	Plugging force/pole, max.	15 N
Pulling force/pole, max.	15 N		

Material data

Insulating material	PA GF	Colour	black
Colour of operational elements	red, grey	Material of operational elements	PA 66/6, PBT
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 400	Insulation strength	≥ 10^8 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.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C		

Conductors suitable for connection

Clamping range, min.	2.5 mm²
Clamping range, max.	16 mm²
Wire connection cross section AWG, min.	AWG 12
Wire connection cross section AWG, max.	AWG 4
Solid, min. H05(07) V-U	2.5 mm²
Solid, max. H05(07) V-U	10 mm²
Stranded, min. H07V-R	10 mm²
Stranded, max. H07V-R	16 mm²
Flexible, min. H05(07) V-K	2.5 mm²
Flexible, max. H05(07) V-K	16 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	2.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	2.5 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	16 mm²

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm²	
	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 mm²	
	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 mm²	
	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 mm²	
	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 mm²	
	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.			
Max. clamping range	16 mm²			

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

VPE length	0	VPE width	0
VPE height	0		

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02		

Notes

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.
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.

Approvals

Approvals	

Downloads

White paper power electronics connected correctly	Download Whitepaper
White paper UL 600 V	Download Whitepaper

Creation date May 1, 2020 9:31:05 PM CEST

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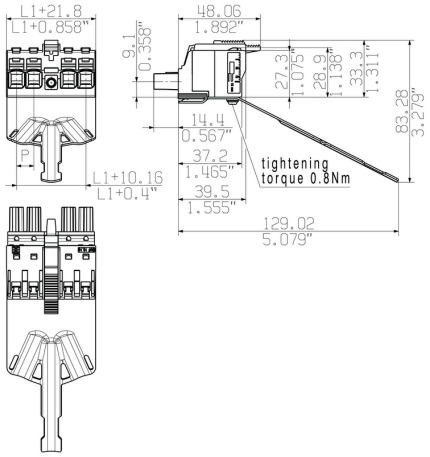
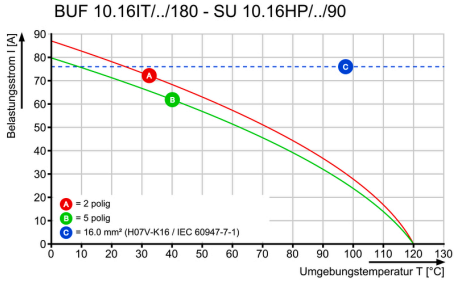
Drawings

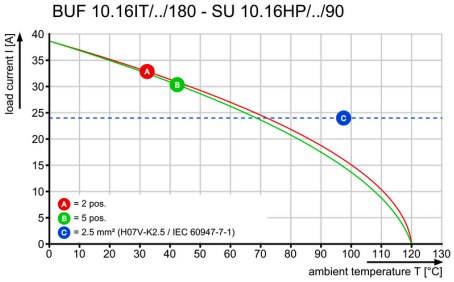
Dimensional drawing



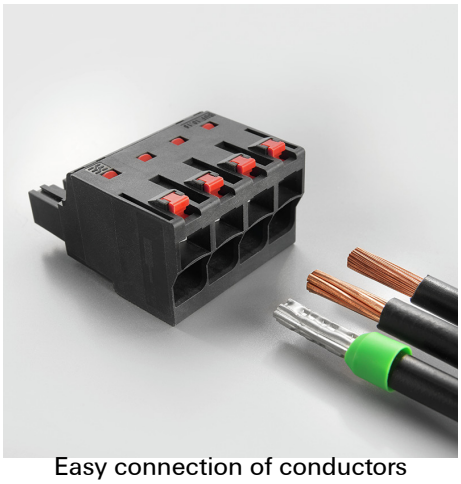
Graph



Graph

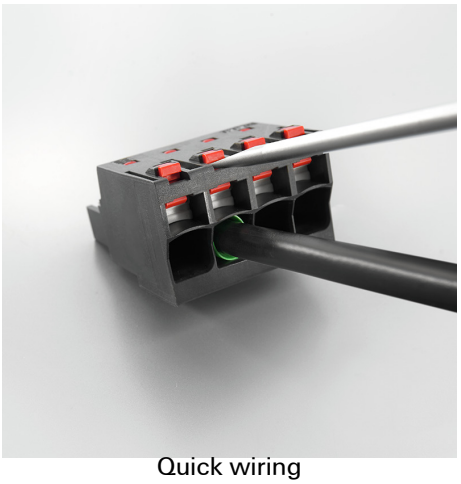


Product benefits



Easy connection of conductors
WIRE READY

Product benefits



Quick wiring

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Mating connector (fully pluggable)

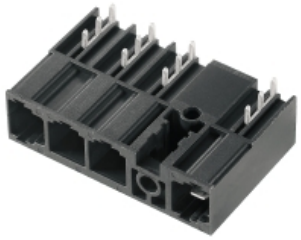
SU 10.16IT 90MSF

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	SU 10.16IT/04/90MSF3 3. ...	Version	Product data
Order No.	2630170000	PCB plug-in connector, male header, 10.16 mm, Number of poles: 4,	IEC: / 78.3 A
GTIN (EAN)	4050118633849	Solder pin length (l): 3.5 mm, black	UL:
Qty.	36 pc(s).		

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	SU 10.16IT/04/270MSF3 3 ...	Version	Product data
Order No.	2630240000	PCB plug-in connector, male header, 10.16 mm, Number of poles: 4,	IEC: / 78.3 A
GTIN (EAN)	4050118633917	Solder pin length (l): 3.5 mm, black	UL:
Qty.	36 pc(s).		

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Accessories

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	KO BU/SU10.16HP BK	Version	Product data	Packaging
Order No.	1824410000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248326716	of poles: 1		
Qty.	50 pc(s).			

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	SDS 0.8X4.5X125	Version
Order No.	9009020000	Screwdriver, Blade width (B): 4.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4032248266883	thickness (A): 0.8 mm
Qty.	1 pc(s).	

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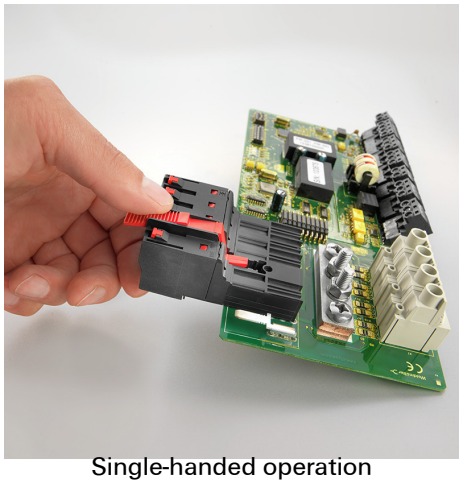
Drawings

Product benefits



Single-handed operation
Automatic latching