

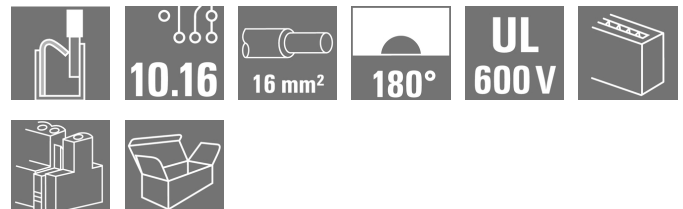
BUF 10.16IT/04/180MSF3SH160 AG BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

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

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
Order No.	2627840000
Type	BUF 10.16IT/04/180MSF3SH160 AG BK BX
GTIN (EAN)	4050118631838
Qty.	20 pc(s).
Product data	IEC: 1000 V / 76 A / 2.5 - 16 mm ² UL: 600 V / 34 A / AWG 12 - AWG 6

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Technical data**Dimensions and weights**

Net weight 0 g

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

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 mm ²	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	Tightening torque for screw flange, min.	0.3 Nm
Tightening torque for screw flange, max.	0.4 Nm	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 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
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
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 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.	
w. plastic collar ferrule, DIN 46228 pt 4, 16 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 16 mm ² max.	

Creation date October 28, 2021 3:35:11 PM CEST

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Technical data

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	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 352 mm

VPE width 162 mm

VPE height 105 mm

Classifications

ETIM 6.0 EC002637

ETIM 7.0 EC002637

ETIM 8.0 EC002637

ECLASS 9.0 27-44-04-02

ECLASS 9.1 27-44-04-02

ECLASS 10.0 27-44-04-02

ECLASS 11.0 27-46-02-01

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

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Catalogue status 22.10.2021 / We reserve the right to make technical changes.

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Technical data

Downloads

Catalogues

[Catalogues in PDF-format](#)

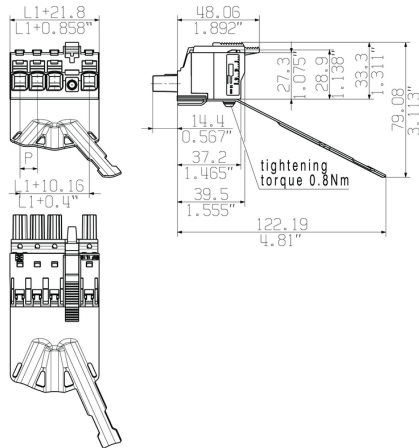
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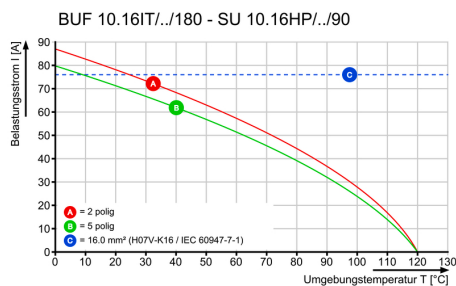
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Drawings

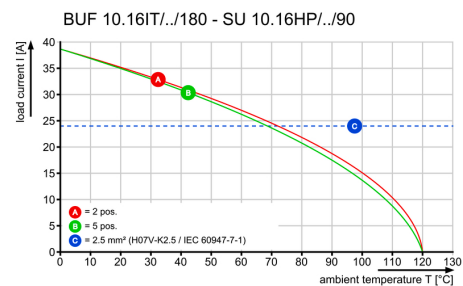
Dimensional drawing



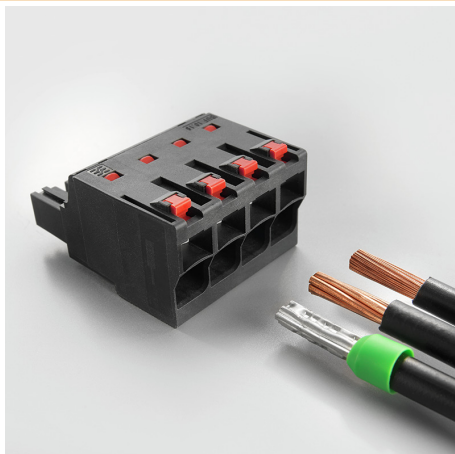
Graph



Graph

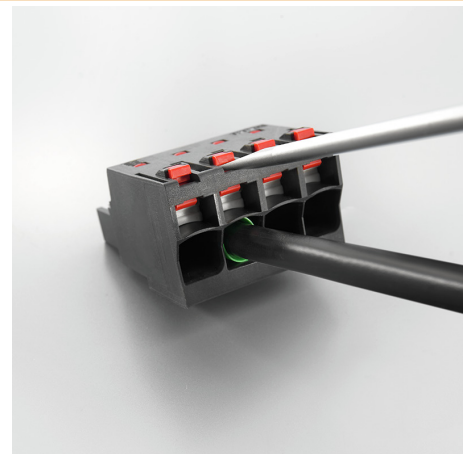


Product benefits



Easy connection of conductors
WIRE READY

Product benefits



Quick wiring

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www.weidmueller.com
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	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).		

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).		

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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	SDS 0.8X4.5X125	Version
Order No.	9009020000	Screwdriver, Screwdriver
GTIN (EAN)	4032248266883	
Qty.	1 pc(s).	

Coding elements


The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers.

OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our Service:

Design your individual connectors simply by using the

General ordering data

Type	KO BU/SU10.16HP WT	Version	Product data	
Order No.	2592600000	PCB plug-in connector, Accessories, Coding element, Natural, Number		
GTIN (EAN)	4050118717389	of poles: 1		
Qty.	50 pc(s).			
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).			

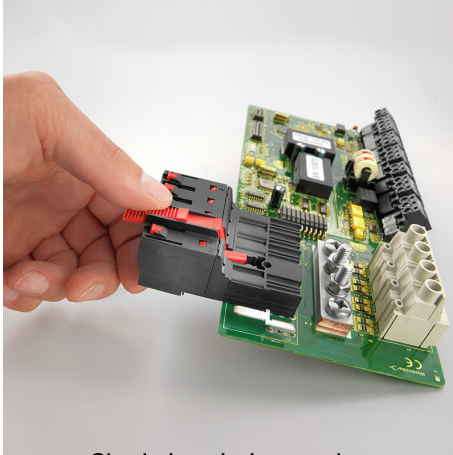
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Drawings

Product benefits



Single-handed operation
Automatic latching