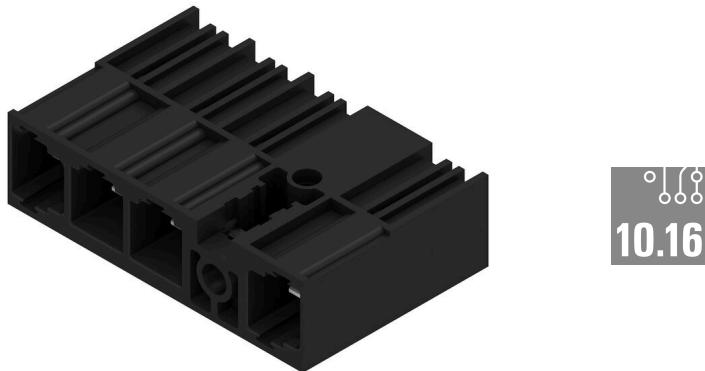


**SU 10.16IT/04/90MSF4 3.5AG BK BX**

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

[www.weidmueller.com](http://www.weidmueller.com)

**Product image**

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. 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**

Version	PCB plug-in connector, male header, THT solder connection, 10.16 mm, Number of poles: 4, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	<a href="#">2630180000</a>
Type	SU 10.16IT/04/90MSF4 3.5AG BK BX
GTIN (EAN)	4050118633856
Qty.	36 items
Product data	IEC: 1000 V / 78.3 A UL:
Packaging	Box

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**Technical data****Approvals**

RoHS	Conform
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**Dimensions and weights**

Net weight	19.65 g
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**Environmental Product Compliance**

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

**System specifications**

Product family	OMNIMATE Power - series BU/SU 10.16IT
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Type of connection	Board connection
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Mounting onto the PCB	THT solder connection
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Pitch in mm (P)	10.16 mm
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Pitch in inches (P)	0.400 "
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Outgoing elbow	90°
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Number of poles	4
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Solder pin length (l)	3.5 mm
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Solder pin length tolerance	+0.1 / -0.3 mm
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Solder pin dimensions	1.2 x 1.1 mm
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Solder pin dimensions = d tolerance	+0.1 / -0.1 mm
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L1 in mm	40.64 mm
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L1 in inches	1.600 "
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Pin series quantity	1
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Tightening torque for screw flange, min.	0.3 Nm
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Tightening torque for screw flange, max.	0.4 Nm
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Tightening torque	Torque type	Mounting screw, PCB	
		Thickness	Part number
	Usage information	Thickness	min. 1.44 mm max. 1.76 mm
		Tightening torque	min. 0.25 Nm max. 0.3 Nm
		Recommended screw	SU 10.16 BFSC P 35X 14
		Thickness	min. 2.88 mm max. 3.52 mm
		Tightening torque	min. 0.2 Nm max. 0.25 Nm
		Recommended screw	SU 10.16 BFSC P 35X 14
		Thickness	min. 1.44 mm max. 3.52 mm
		Tightening torque	min. 0.8 Nm max. 0.9 Nm
		Recommended screw	SU 10.16 BFSC S 35X12

**Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Moisture Level (MSL)	

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**Technical data**

UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	$\geq 3 \mu\text{m}$ Ag
Layer structure of plug contact	$\geq 3 \mu\text{m}$ Ag	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

**Rated data acc. to IEC**

Rated current, min. number of poles (Tu=20°C)	78.3 A	Rated current, max. number of poles (Tu=20°C)	67.9 A
Rated current, min. number of poles (Tu=40°C)	70.6 A	Rated current, max. number of poles (Tu=40°C)	61.3 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 impulse voltage for surge voltage class/ pollution degree II/2	6000 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Creepage distance, min.	10.5 mm	Clearance, min.	8.9 mm

**Rated data acc. to UL 1059**

Creepage distance, min.	10.5 mm	Clearance distance, min.	8.9 mm
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**Packing**

Packaging	Box	VPE length	338.00 mm
VPE width	130.00 mm	VPE height	44.00 mm

**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.
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## Notes

- Additional variants on request
- Rated current related to rated cross-section & min. No. of poles.
- 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
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

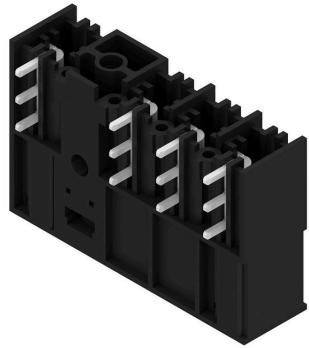
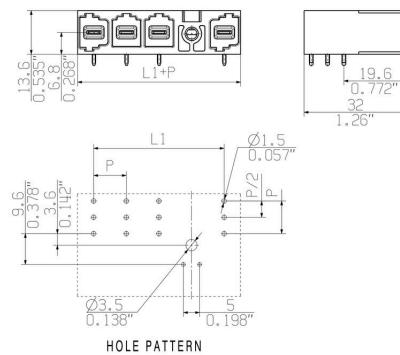
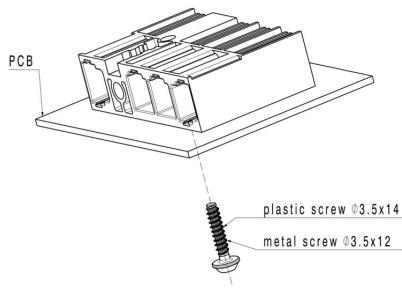
**Classifications**

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

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**Drawings****Product image****Dimensional drawing****Example of use**

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**Accessories****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 mm<sup>2</sup> connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm<sup>2</sup> 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 product configurator.

**General ordering data**

Type	KO BU/SU10.16HP BK	Version
Order No.	<a href="#">1824410000</a>	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4032248326716	of poles: 1
Qty.	50 ST	
Type	KO BU/SU10.16HP WT	Version
Order No.	<a href="#">2592600000</a>	PCB plug-in connector, Accessories, Coding element, Natural, Number
GTIN (EAN)	4050118717389	of poles: 1
Qty.	50 ST	

**Mounting screw****General ordering data**

Type	SU 10.16 BFSC P 35X 14	Version
Order No.	<a href="#">2812340000</a>	PCB plug-in connector, Mounting screw
GTIN (EAN)	4064675295495	
Qty.	50 ST	
Type	SU 10.16 BFSC S 35X12	Version
Order No.	<a href="#">2812290000</a>	PCB plug-in connector, Mounting screw
GTIN (EAN)	4064675294955	
Qty.	50 ST	