

## SUZ 10.16HP/02/180G AG BK BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

### Product image

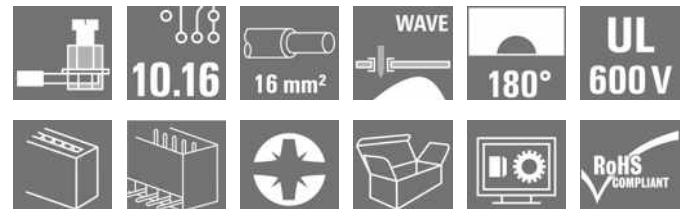


Similar to illustration

### OMNIMATE Power BU / SU 10.16HP - the 50 kVA power class

#### More current for higher performance.

Top of the class in today's connector systems – the OMNIMATE Power SU / BUZ 10.16HP. They feature a very durable contact system which makes it a pluggable power transmission solution with maximum load reserves. HP stands for High Performance – performance exemplified by a long-term usage temperature of 120°C. This custom, pluggable solution is suitable for all applications that must meet 600 V UL or 1,000 V (IEC) with up to 76 A (IEC) and 54 A (UL).



### General ordering data

Version	PCB plug-in connector, male plug, 10.16 mm, Number of poles: 2, 180°, Clamping yoke connection, Clamping range, max. : 16 mm², Box
Order No.	<a href="#">1947480000</a>
Type	SUZ 10.16HP/02/180G AG BK BX
GTIN (EAN)	4032248623761
Qty.	64 pc(s).
Product data	IEC: 1000 V / 78 A / 0.2 - 16 mm² UL: 600 V / 57 A / AWG 24 - AWG 6
Packaging	Box

**SUZ 10.16HP/02/180G AG BK BX**

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

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

Net weight	24.094 g	www.weidmueller.com
------------	----------	---------------------

**Temperatures**

Operating temperature, min.	-50 °C	Operating temperature, max.	130 °C
-----------------------------	--------	-----------------------------	--------

**System Parameters**

Product family	OMNIMATE Power - series BU/SU 10.16HP	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	10.16 mm
Pitch in inches (P)	0.4 inch	Conductor outlet direction	180°
Number of poles	2	L1 in mm	10.16 mm
L1 in inches	0.4 inch	Number of rows	1
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
Volume resistance	4.50 mΩ	Can be coded	Yes
Stripping length	12 mm	Tightening torque, min.	1.2 Nm
Tightening torque, max.	1.5 Nm	Clamping screw	M 4
Screwdriver blade	1.0 x 5.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25		

**Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact material	Copper 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.	130 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	130 °C		

**Conductors suitable for connection**

Clamping range, min.	0.2 mm <sup>2</sup>
Clamping range, max.	16 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 22
Wire connection cross section AWG, max.	AWG 6
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	16 mm <sup>2</sup>
Stranded, min. H07V-R	6 mm <sup>2</sup>
Stranded, max. H07V-R	16 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	16 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 10 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, 0.25 mm <sup>2</sup> min.	
w. wire end ferrule, DIN 46228 pt 1, 16 mm <sup>2</sup> max.	

Creation date May 3, 2023 8:14:09 AM CEST

**Data sheet**

**SUZ 10.16HP/02/180G AG BK BX**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

[info@weidmueller.com](mailto:info@weidmueller.com)

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

**Technical data**

Plug gauge in accordance with EN 60999 a x b; ø

5.3mm (B6)

**SUZ 10.16HP/02/180G AG BK BX**

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	0.5 mm <sup>2</sup>
	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	<a href="#">H0.5/18 OR</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	1 mm <sup>2</sup>
	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	<a href="#">H1.0/18 GE</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	1.5 mm <sup>2</sup>
	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	<a href="#">H1.5/18D SW</a>	
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H1.5/12</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	0.75 mm <sup>2</sup>
	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	<a href="#">H0.75/18 W</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	2.5 mm <sup>2</sup>
	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	<a href="#">H2.5/19D BL</a>	
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H2.5/12</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	4 mm <sup>2</sup>
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H4.0/12</a>	
	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	<a href="#">H4.0/20D GR</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	6 mm <sup>2</sup>
	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	<a href="#">H6.0/20 SW</a>	
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H6.0/12</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	10 mm <sup>2</sup>
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H10.0/12</a>	
	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	<a href="#">H10.0/22 EB</a>	
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	16 mm <sup>2</sup>
	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	<a href="#">H16.0/12</a>	

## SUZ 10.16HP/02/180G AG BK BX

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

Length of ferrules is to be chosen depending on the product and the rated voltage.

info@weidmueller.com


## Technical data

Reference text


## Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	78 A
Rated current, max. number of poles (Tu=20°C)	68 A	Rated current, min. number of poles (Tu=40°C)	72 A
Rated current, max. number of poles (Tu=40°C)	61 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	6 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
Clearance, min.	14.8 mm	Creepage distance, min.	14.8 mm

## Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	57 A
Rated current (Use group C / CSA)	57 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 6
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	57 A
Rated current (Use group C / UL 1059)	57 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 6
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	50 mm
VPE width	90 mm	VPE height	300 mm

## Type tests

Test: Durability of markings	Standard	taking pattern from DIN EN 60068-2-70 / 07.96
	Test	date clock, mark of origin, type identification, type of material
	Evaluation	available
	Test	durability
	Evaluation	passed

Creation date May 3, 2023 8:14:09 AM CEST

Catalogue status 28.04.2023 / We reserve the right to make technical changes.

**SUZ 10.16HP/02/180G AG BK BX**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

DIN EN 61984 section 6.3 and 6.9.1 / 09.02,  
DIN IEC 60512 article 5 / 05.94

info@weidmueller.com

www.weidmueller.com

**Technical data**

Test: Misengagement (Non-interchangeability)

Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 60512 article 5 / 05.94
Test	180° turned with coding elements
Evaluation	passed
Test	180° turned without coding elements
Evaluation	passed

Test: Clampable cross section

Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm <sup>2</sup>
	Type of conductor and conductor cross-section	stranded 0.2 mm <sup>2</sup>
	Type of conductor and conductor cross-section	solid 16 mm <sup>2</sup>
	Type of conductor and conductor cross-section	stranded 16 mm <sup>2</sup>
	Type of conductor and conductor cross-section	AWG 24/1
	Type of conductor and conductor cross-section	AWG 24/19
	Type of conductor and conductor cross-section	AWG 6/19
Evaluation	passed	

Test for damage to and accidental loosening of conductors

Standard	DIN EN 60999-1 section 9.4 / 12.00	
Requirement	0.2 kg	
Conductor type	Type of conductor and conductor cross-section	AWG 24/1
	Type of conductor and conductor cross-section	AWG 24/19
Evaluation	passed	
Requirement	0.3 kg	
Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm <sup>2</sup>
	Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>
Evaluation	passed	
Requirement	2.9 kg	
Conductor type	Type of conductor and conductor cross-section	solid 16 mm <sup>2</sup>
	Type of conductor and conductor cross-section	stranded 16 mm <sup>2</sup>
Evaluation	passed	

## SUZ 10.16HP/02/180G AG BK BX

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

DIN EN 60999-1 section 9.5 / 12.00

≥10 N info@weidmueller.com

## Technical data

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥10 N info@weidmueller.com		
	Conductor type	Type of conductor and conductor cross-section	AWG 24/1	and conductor cross-section
		Type of conductor and conductor cross-section	AWG 24/19	
	Evaluation	passed		
	Requirement	≥20 N		
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm <sup>2</sup>	
		Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>	
	Evaluation	passed		
	Requirement	≥100 N		
	Conductor type	Type of conductor and conductor cross-section	solid 16 mm <sup>2</sup>	
		Type of conductor and conductor cross-section	stranded 16 mm <sup>2</sup>	
		Type of conductor and conductor cross-section	AWG 6/7	
		Type of conductor and conductor cross-section	AWG 6/19	
Evaluation	passed			

## Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ECLASS 9.0	27-44-03-09
ECLASS 9.1	27-44-03-09	ECLASS 10.0	27-44-03-09
ECLASS 11.0	27-46-02-02	ECLASS 12.0	27-46-02-02

## 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	<ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</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>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>
-------	---

**Data sheet**

**SUZ 10.16HP/02/180G AG BK BX**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

[info@weidmueller.com](mailto:info@weidmueller.com)

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

**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">WSCAD</a>
User Documentation	<a href="#">QR-Code product handling video</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a>
	<a href="#">MB DEVICE MANUF. EN</a>
	<a href="#">FL DRIVES DE</a>
	<a href="#">FL HEATING ELECTR EN</a>
	<a href="#">FL APPL_INVERTER EN</a>
	<a href="#">FL_BASE_STATION EN</a>
	<a href="#">FL ELEVATOR EN</a>
	<a href="#">FL POWER SUPPLY EN</a>
<a href="#">FL 72H SAMPLE SER EN</a>	
<a href="#">PO OMNIMATE EN</a>	
<a href="#">PO OMNIMATE EN</a>	

**SUZ 10.16HP/02/180G AG BK BX**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

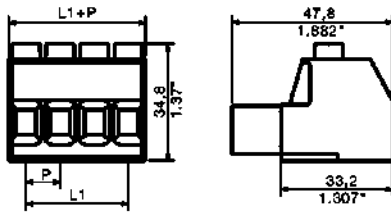
Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

**Drawings**

**Dimensional drawing**



**Graph**

