

BLZP 5.00HC/18/180LR SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Version	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 18, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box
Order No.	1956210000
Type	BLZP 5.00HC/18/180LR SN OR BX
GTIN (EAN)	4032248634903
Qty.	18 pc(s).
Product data	IEC: 400 V / 23 A / 0.2 - 4 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

Creation date June 23, 2024 5:18:02 AM CEST

Catalogue status 14.06.2024 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

Depth	29.6 mm	Depth (inches)	1.165 inch
Height	16.9 mm	Height (inches)	0.665 inch
Width	99.8 mm	Width (inches)	3.929 inch
Net weight	30.85 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.00		
Type of connection	Field connection		
Wire connection method	Clamping yoke connection		
Pitch in mm (P)	5 mm		
Pitch in inches (P)	0.197 "		
Conductor outlet direction	180°		
Number of poles	18		
L1 in mm	85 mm		
L1 in inches	3.349 "		
Number of rows	1		
Pin series quantity	1		
Rated cross-section	4 mm ²		
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged		
Protection degree	IP20		
Volume resistance	≤5 mΩ		
Can be coded	Yes		
Stripping length	7 mm		
Clamping screw	M 2.5		
Screwdriver blade	0.6 x 3.5, PH 1, PZ 1		
Screwdriver blade standard	DIN 5264, ISO 8764/2-PH, ISO 8764/2-PZ		
Plugging cycles	25		
Plugging force/pole, max.	10 N		
Pulling force/pole, max.	9 N		
Tightening torque	Torque type	Wire connection	
	Usage information	Tightening torque	<div>min. 0.4 Nm</div> <div>max. 0.5 Nm</div>

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ^{<sup>8</sup>} Ω
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of plug contact	4...8 µm Sn hot-dip tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Conductors suitable for connection

Clamping range, min.	0.13 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 30

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Wire connection cross section AWG, max.	AWG 12			
Solid, min. H05(07) V-U	0.2 mm ²			
Solid, max. H05(07) V-U	4 mm ²			
Flexible, min. H05(07) V-K	0.2 mm ²			
Flexible, max. H05(07) V-K	4 mm ²			
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.				
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.				
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²			
w. wire end ferrule, DIN 46228 pt 1, max.	4 mm ²			
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm			
Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H0.5/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H1.0/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H1.5/7	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H2.5/7	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H0.75/6	
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	23 A
Rated current, max. number of poles (Tu=20°C)	18 A	Rated current, min. number of poles (Tu=40°C)	21 A
Rated current, max. number of poles (Tu=40°C)	16 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

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Technical data**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA) 300 V

Rated voltage (Use group C / CSA) 50 V

Rated voltage (Use group D / CSA) 300 V

Rated current (Use group B / CSA) 20 A

Rated current (Use group D / CSA) 20 A

Wire cross-section, AWG, min. AWG 30

Wire cross-section, AWG, max.

Reference to approval values

Specifications are maximum values, details - see approval certificate.

AWG 12

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group B / UL 1059) 20 A

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, min. AWG 26

Wire cross-section, AWG, max. AWG 12

Reference to approval values Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Box	VPE length	349 mm
VPE width	137 mm	VPE height	31 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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	ECLASS 13.0	27-46-02-02

Environmental Product Compliance

REACH SVHC

/

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Technical data**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"> • Additional variants on request • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • 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. • 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

Approvals

Approvals



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

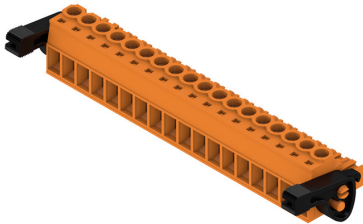
Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

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Drawings
Product image

Dimensional drawing

Graph


Self-locking
 Immediately on plugging in

Product benefits
Product benefits


Self-locking
 Immediately on plugging in



Gentle unlocking
 Low mechanical stress

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Accessories

Crosshead screwdriver Pozidriv



Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PZ1 X 80	Version
Order No.	2749440000	Screwdriver, Blade width (B): 80 mm, Blade thickness (A):
GTIN (EAN)	4050118895667	
Qty.	1 pc(s).	

Strain reliefs

**For frequent load changes: the "trailer coupling" for plug-in connectors.**

The strain relief can do more than just relieve the strain on conductors:

Simply clip onto the plug and

- bundle conductors
- guide cables
- use as a connection and disconnection aid

No damage to the connecting points, clear, tidy wiring and easy to handle.

User advantages: permanent heavy-duty connections for harsh industrial environments and convenient operation ensure improved system availability.

General ordering data

Type	BLZ 5.00 ZE08 OR BX	Version	Product data	Packaging
Order No.	1652040000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401719	poles: 8		
Qty.	50 pc(s).			
Type	BLZ 5.00 ZE04 OR BX	Version	Product data	Packaging
Order No.	1652100000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401771	poles: 4		
Qty.	50 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	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number of poles: 1		Box
GTIN (EAN)	4008190087142			
Qty.	50 pc(s).			
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number of poles: 1		Box
GTIN (EAN)	4008190048396			
Qty.	100 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 0.6X3.5X100	Version
Order No.	2749340000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118895568	
Qty.	1 pc(s).	

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www.weidmueller.com**Accessories****Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PH1 X 80	Version
Order No.	2749410000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A):
GTIN (EAN)	4050118895636	
Qty.	1 pc(s).	

Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

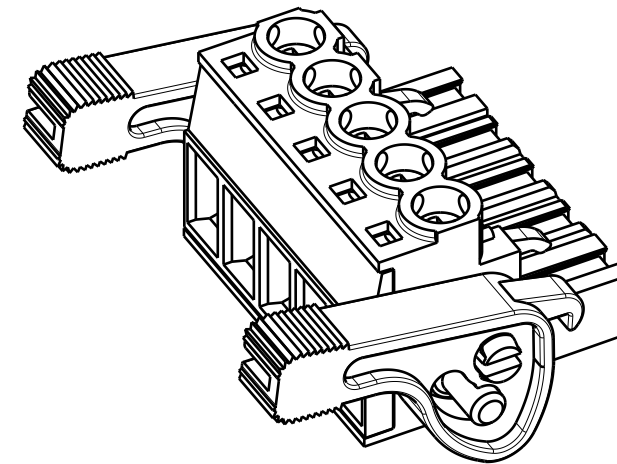
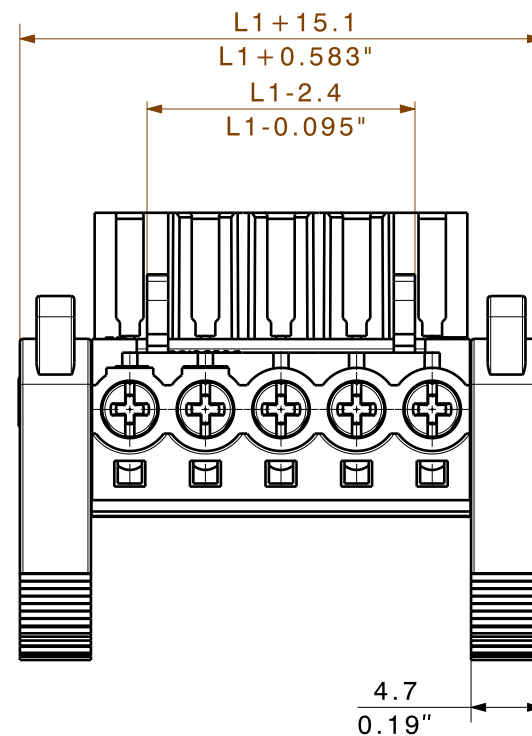
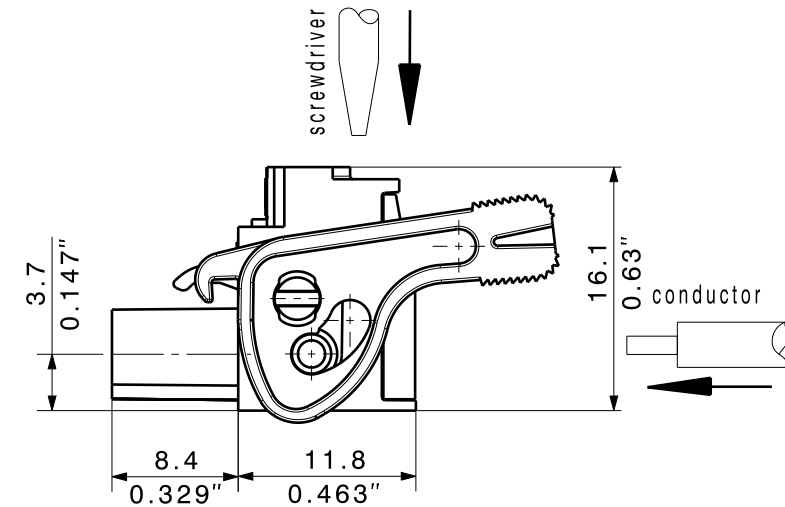
General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897012	thickness (A): 0.6 mm
Qty.	1 pc(s).	

WEITERGABE SOWIE VIELFACHKOPPIERUNG DIESER DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET.
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 WEIDMUELLER INTERFACE GmbH & Co. KG

Technical drawing of the top view of the device. The drawing shows a rectangular layout with a central area labeled "PRINTING AREA" indicated by an arrow. Dimensions are provided for the overall width and the width of the central area. The overall width is labeled as $L1 + 5.00^{+0}_{-0.2}$ and $L1 + 0.1968"$. The width of the central area is labeled as $L1$.







24	115,00	4,530	130,100
23	110,00	4,333	125,100
22	105,00	4,136	120,100
21	100,00	3,939	115,100
20	95,00	3,742	110,100
19	90,00	3,545	105,100
18	85,00	3,348	100,100
17	80,00	3,151	95,100
16	75,00	2,954	90,100
15	70,00	2,757	85,100
14	65,00	2,560	80,100
13	60,00	2,363	75,100
12	55,00	2,166	70,100
11	50,00	1,969	65,100
10	45,00	1,772	60,100
9	40,00	1,575	55,100
8	35,00	1,378	50,100
7	30,00	1,181	45,100
6	25,00	0,984	40,100
5	20,00	0,787	35,100
4	15,00	0,590	30,100
3	10,00	0,393	25,100
2	5,00	0,196	20,100
n	L1 [mm]	L1 [Inch]	L4[m m]

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

$$n = \text{POLZAHL/NO OF POLES}$$

SHOWN: BLZP 5.00HC/05/180LR

GENERAL TOLERANCE: DIN ISO 2768-m		78305/4 10.06.15 HERTEL_S		01		Weidmüller 		CAT.NO.: C 42480 	
		MODIFICATION				DRAWING NO. SHEET 02		ISSUE NO. OF 03 SHEETS	
		DATE		NAME		BLZP 5.00HC/.. /180.. BUCHSENLEISTE SOCKET BLOCK			
DRAWN		10.06.2015		HERTEL_S					
RESPONSIBLE				KRUG_M					
SCALE: 2:1		CHECKED 15.06.2015		HELIS_MA					
SUPERSEDES: .		APPROVED		LANG_T		PRODUCT FILE: BLZP 5.0X WG 180			
						7157			