

BLZ 5.08/12/180F SN OR BX

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

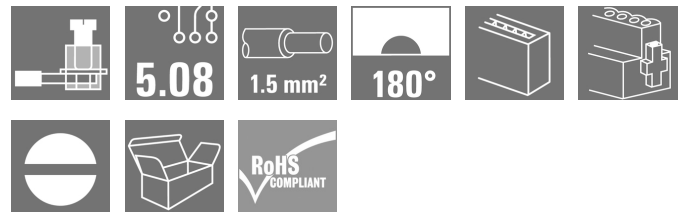
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Product image



Similar to illustration

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Female plugs with clamping-yoke screw connection for wire, with straight wire outlet and screw flange. The female plugs provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12, 180°, Clamping yoke connection, Clamping range, max.: 3.31 mm², Box
Order No.	1802930000
Type	BLZ 5.08/12/180F SN OR BX
GTIN (EAN)	4032248258017
Qty.	24 pc(s).
Product data	IEC: 400 V / 19 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box

Creation date ~~March 12, 2024~~ 5:29:55 PM CET

Available until 2023-07-30

Alternative product [1944190000](#)

~~Catalogue status 09.03.2024 / We reserve the right to make technical changes.~~

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Technical data

Dimensions and weights

Depth	20.1 mm	Depth (inches)	0.791 inch
Height	15.2 mm	Height (inches)	0.598 inch
Width	70.76 mm	Width (inches)	2.786 inch
Net weight	21.6 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 "	Conductor outlet direction	180°
Number of poles	12	L1 in mm	55.88 mm
L1 in inches	2.2 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 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
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	8.5 N	Pulling force/pole, max.	6.5 N

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	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.	3.31 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0.5/6
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm ²
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H1.0/6
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm ²
wire end ferrule		Stripping length	nominal 7 mm
		Recommended wire-end ferrule	H1.5/7
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
wire end ferrule		Stripping length	nominal 7 mm
		Recommended wire-end ferrule	H2.5/7
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
wire end ferrule		Stripping length	nominal 6 mm
		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)	19 A
Rated current, max. number of poles (Tu=20°C)	14.5 A	Rated current, min. number of poles (Tu=40°C)	16 A
Rated current, max. number of poles (Tu=40°C)	12.5 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

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	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.		

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Technical data

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

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) 15 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	350 mm
VPE width	135 mm	VPE height	30 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

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 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

Data sheet

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Technical data

Approvals

Approvals



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

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
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 FLIndustr.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

Data sheet

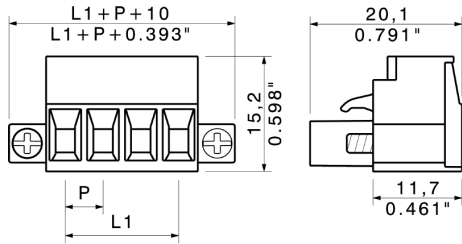
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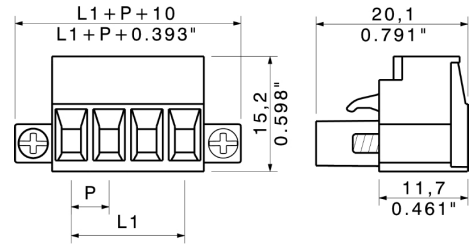
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Drawings

Dimensional drawing



Dimensional drawing



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Accessories

Cover hoods



Effective protection, optimised ergonomics and closed design:

From the strain relief on the connected conductors and the visual/contact protection and the disconnection aid: the optional retrofit hoods perform mechanical, visual and haptic functions.

The two half shells clip together securely, enclose the plug completely and offer the following functions:

- Cable ties or integrated cable clips provide strain relief.
- Marked with dekafix labels or adhesive strips
- Mounting side by side without losing poles or displacing the pitch
- Compatible: suitable for plugs with or without a flange or mounting bracket
- Flexible: 1-3 cable outlets leading in different directions available depending on the size

Weidmüller hoods offer added stability, better identification, complete compatibility and versatility. The result: maximum reliability and user-friendliness in any application.

General ordering data

Type	BLZ AH 12 SW	Version	Product data	Packaging
Order No.	1705300000	PCB plug-in connector, Accessories, Hood, black, Number of poles: 12		Box
GTIN (EAN)	4008190333058			
Qty.	10 pc(s).			

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 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).			

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Accessories

Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 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.

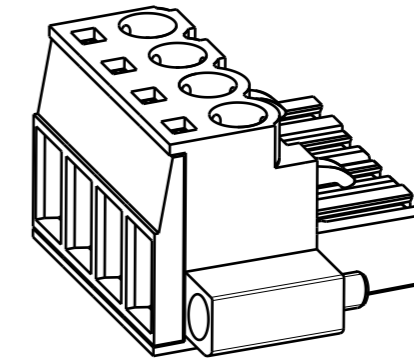
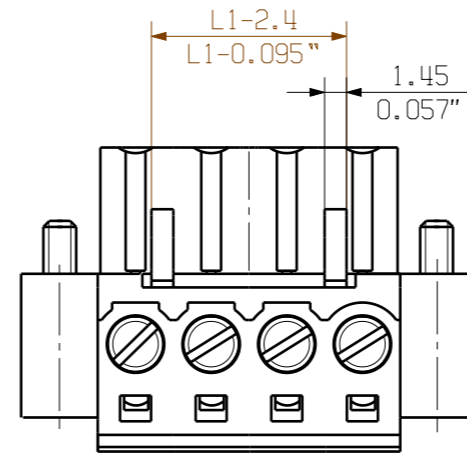
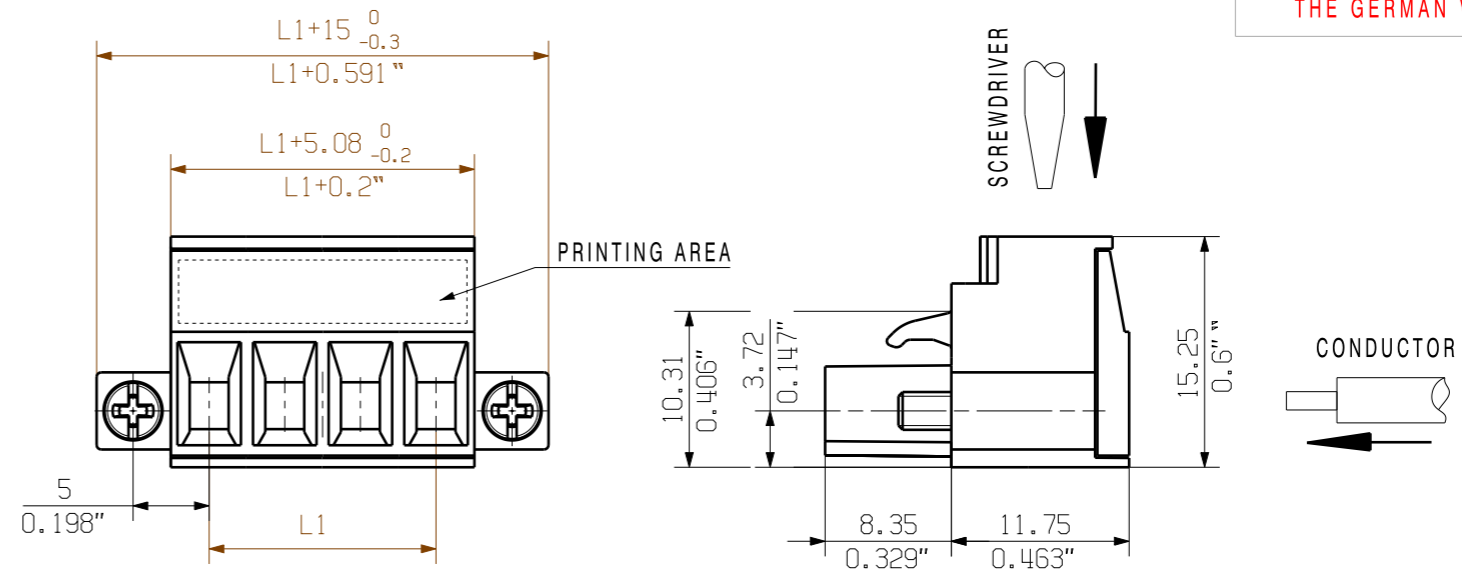
General ordering data

Type	BLZ 5.08 ZE04 OR BX	Version	Product data	Packaging
Order No.	1652110000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401788	poles: 4		
Qty.	50 pc(s).			
Type	BLZ 5.08 ZE08 OR BX	Version	Product data	Packaging
Order No.	1652050000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401726	poles: 8		
Qty.	50 pc(s).			
Type	BLZ 5.08 ZE04 BK BX	Version	Product data	Packaging
Order No.	1652130000	PCB plug-in connector, Accessories, Strain relief, black, Number of		Box
GTIN (EAN)	4008190401801	poles: 4		
Qty.	50 pc(s).			
Type	BLZ 5.08 ZE08 BK BX	Version	Product data	Packaging
Order No.	1652070000	PCB plug-in connector, Accessories, Strain relief, black, Number of		Box
GTIN (EAN)	4008190401740	poles: 8		
Qty.	50 pc(s).			

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

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24	116,84	4,600
23	111,76	4,400
22	106,68	4,200
21	101,60	4,000
20	96,52	3,800
19	91,44	3,600
18	86,36	3,400
17	81,28	3,200
16	76,20	3,000
15	71,12	2,800
14	66,04	2,600
13	60,96	2,400
12	55,88	2,200
11	50,80	2,000
10	45,72	1,800
9	40,64	1,600
8	35,56	1,400
7	30,48	1,200
6	25,40	1,000
5	20,32	0,800
4	15,24	0,600
3	10,16	0,400
2	5,08	0,200
n	L1 [mm]	L1 [Inch]

SHOWN BLZ 5.08/04/180F

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

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.

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05		CAT.NO.:	
	53502/3 22.11.10 HERTEL_S 01		Weidmüller	
MODIFICATION		DRAWING NO. C 16065 63 SHEET 03 OF 03 SHEETS		
		DATE: 11.06.2008 NAME: HELIS_MA	BLZ 5.08/././180... BUCHSENLEISTE SOCKET BLOCK	
SCALE: 2/1		RESPONSIBLE: HERTEL_S		
SUPERSEDES:		CHECKED: 23.11.2010 NAME: HECKERT_M		
APPROVED:		NAME: HECKERT_M	PRODUCT FILE: BLZ 5.08 7147	