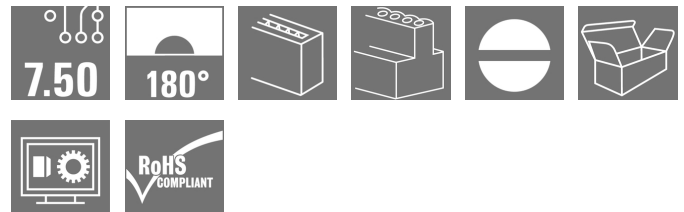


OMNIMATE Signal - series BL/SL 7.50 BLZ 7.50/12/180 SN OR BX

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Product image



Similar to illustration

Female plugs with clamping-yoke screw wire-connect system. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZ 7.50/12/180 SN OR BX
Order No.	1628020000
Version	PCB plug-in connector, female plug, 7.50 mm, Number of poles: 12, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² , Box
GTIN (EAN)	4008 190200824
Qty.	20 pc(s).
Product data	IEC: 800 V / 18.5 A / 0.2 - 2.5 mm ² UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box

Creation date May 3, 2020 7:58:46 PM CEST

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BLZ 7.50/12/180 SN OR BX**

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Technical data
Dimensions and weights

Height	15.2 mm	Height (inches)	0.598 inch
Depth	20.1 mm	Depth (inches)	0.791 inch
Net weight	22.88 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 7.50	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.5 mm
Pitch in inches (P)	0.295 inch	Conductor outlet direction	180°
Number of poles	12	L1 in mm	82.5 mm
L1 in inches	3.248 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	4.50 mΩ	Can be coded	Yes
Stripping length	7 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Clamping screw	M 2.5
Screwdriver blade	0.6 x 3.5	Screwdriver blade standard	DIN 5264
Plugging force/pole, max.	9 N	Pulling force/pole, max.	8.5 N

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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, 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, 0.2 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

Creation date May 3, 2020 7:58:46 PM CEST

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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
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
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
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
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.		
Max. clamping range	3.31 mm ²		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	18.5 A
Rated current, max. number of poles (Tu=20°C)	17 A	Rated current, min. number of poles (Tu=40°C)	15 A
Rated current, max. number of poles (Tu=40°C)	14.5 A	Rated voltage for surge voltage class / pollution degree II/2	800 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	500 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	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 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.		


Data sheet

**OMNIMATE Signal - series BL/SL 7.50
BLZ 7.50/12/180 SN OR BX**

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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	20 mm
VPE width	175 mm	VPE height	240 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09	UNSPSC	30-21-18-10

Notes

Notes	<ul style="list-style-type: none"> • Additional colours 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.
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.

Approvals

Approvals	
ROHS	Conform

**OMNIMATE Signal - series BL/SL 7.50
BLZ 7.50/12/180 SN OR BX**

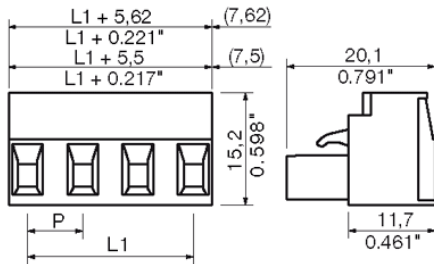
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Technical data**Downloads**

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	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
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP

Data sheet**OMNIMATE Signal - series BL/SL 7.50
BLZ 7.50/12/180 SN OR BX**

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Drawings**Dimensional drawing**

**OMNIMATE Signal - series BL/SL 7.50
BLZ 7.50/12/180 SN OR BX**

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Mating connector (conditionally pluggable)
SL 7.50/90B


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.50/12/90B 3.2SN OR ...	Version	Product data	Packaging
Order No.	1628570000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 800 V / 18.5 A	Box
GTIN (EAN)	4008190201371	solder connection, 7.50 mm, Number of poles: 12, 90°, Solder pin	UL: 300 V / 15 A	
Qty.	50 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

SL 7.50/180B


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.50/12/180B 3.2SN O ...	Version	Product data	Packaging
Order No.	1629230000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 800 V / 18.5 A	Box
GTIN (EAN)	4008190202033	solder connection, 7.50 mm, Number of poles: 12, 180°, Solder pin	UL: 300 V / 15 A	
Qty.	50 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 7.50
BLZ 7.50/12/180 SN OR BX**

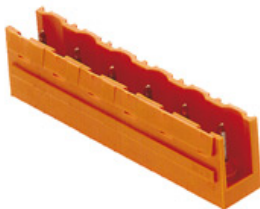
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Mating connector (fully pluggable)
SL 7.50/90


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.50/12/90 3.2SN OR ...	Version	Product data	Packaging
Order No.	1628460000	PCB plug-in connector, male header, open side, THT solder connection, 7.50 mm, Number of poles: 12, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 800 V / 18.5 A UL: 300 V / 15 A	Box
GTIN (EAN)	4008190201265			
Qty.	50 pc(s).			

SL 7.50/180


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.50/12/180 3.2SN OR ...	Version	Product data	Packaging
Order No.	1629120000	PCB plug-in connector, male header, open side, THT solder connection, 7.50 mm, Number of poles: 12, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 800 V / 18.5 A UL: 300 V / 15 A	Box
GTIN (EAN)	4008190201920			
Qty.	50 pc(s).			

OMNIMATE Signal - series BL/SL 7.50 BLZ 7.50/12/180 SN OR BX

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Accessories

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 7.50 ZE06 BK BX	Version	Product data	Packaging
Order No.	1652180000	PCB plug-in connector, Accessories, Strain relief, black, Number of		Box
GTIN (EAN)	4008190401856	poles: 6		
Qty.	50 pc(s).			
Type	BLZ 7.50 ZE03 BK BX	Version	Product data	Packaging
Order No.	1652200000	PCB plug-in connector, Accessories, Strain relief, black, Number of		Box
GTIN (EAN)	4008190401870	poles: 3		
Qty.	50 pc(s).			
Type	BLZ 7.50 ZE03 OR BX	Version	Product data	Packaging
Order No.	1652140000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401818	poles: 3		
Qty.	50 pc(s).			
Type	BLZ 7.50 ZE06 OR BX	Version	Product data	Packaging
Order No.	1652160000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401832	poles: 6		
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.

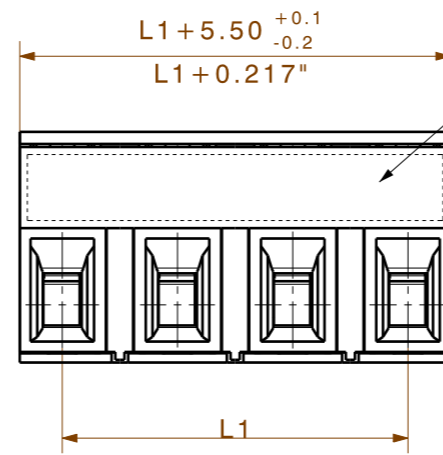
General ordering data

Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
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).			

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

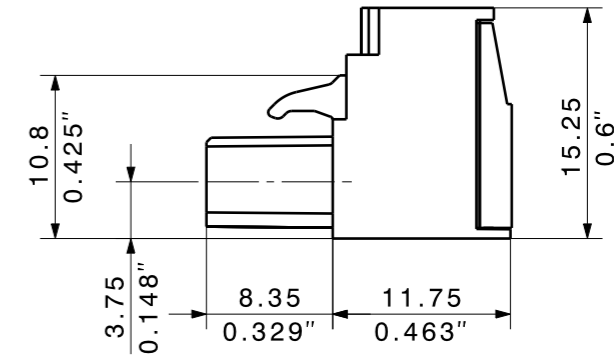
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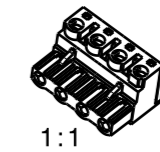
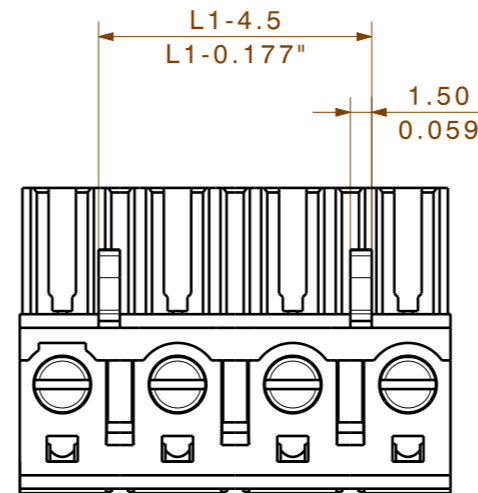


DRUCKBEREICH
 PRINTING AREA

SCHRAUBENDREHER
 SCREWDRIVER



LEITER
 CONDUCTOR



12	82,50	3,248
11	75,00	2,953
10	67,50	2,657
9	60,00	2,362
8	52,50	2,067
7	45,00	1,772
6	37,50	1,476
5	30,00	1,181
4	22,50	0,886
3	15,00	0,591
2	7,50	0,295
n	L1 [mm]	L1 [Inch]

SHOWN: BLZ 7.50/04/180

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 PCB components are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the components 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		60233/5 09.11.11 HELIS_MA 01		CAT.NO.:	
	MODIFICATION				C 21326 08 DRAWING NO. ISSUE NO. SHEET 01 OF 02 SHEETS	
		DATE 16.08.2010	NAME HOHLBEIN_K	BLZ 7.50/././180... BUCHSENLEISTE SOCKET BLOCK		
SCALE: 2:1		RESPONSIBLE LANG_T	CHECKED 11.11.2011 HECKERT_M			
SUPERSEDES: 21326/06		APPROVED HECKERT_M	PRODUCT FILE: BLZ/SL 7.50			