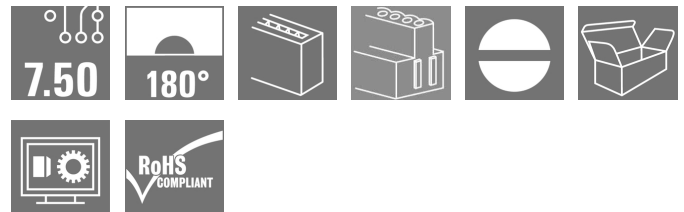


OMNIMATE Signal - series BL/SL 7.50 BLZ 7.50/04/180B SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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 7.50/04/180B SN OR BX
Order No.	1628 160000
Version	PCB plug-in connector, female plug, 7.50 mm, Number of poles: 4, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² , Box
GTIN (EAN)	4008 19020096 1
Qty.	100 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 August 21, 2020 11:18:19 PM CEST

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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	7.28 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	4	L1 in mm	22.5 mm
L1 in inches	0.886 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	IIIa
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.	-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 28
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

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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.		

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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 current (Use group B / UL 1059)	15 A
Wire cross-section, AWG, min.	AWG 26
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, max.	AWG 12

Packing

Packaging	Box	VPE length	72 mm
VPE width	148 mm	VPE height	167 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96		
	Test	mark of origin, type identification, rated cross-section, rated voltage, pitch, type of material, approval marking UL, approval marking CSA		
	Evaluation	available		
	Test	durability		
Test: Misengagement (Non-interchangeability)	Evaluation	passed		
	Standard	draft DIN VDE 0627 section 5.9.1 / 09.91, DIN IEC 60512-7 section 5 / 05.94		
	Test	180° turned with coding elements		
Test: Clampable cross section	Evaluation	passed		
	Standard	DIN EN 60999 section 6 and 8.1 / 04.94, DIN EN 60947-1 section 8.2.4.5.1 / 07.98		
	Conductor type	Type of conductor and conductor cross-section	solid 0.08 mm ²	
		Type of conductor and conductor cross-section	stranded 0.08 mm ²	
		Type of conductor and conductor cross-section	solid 2.5 mm ²	
		Type of conductor and conductor cross-section	stranded 2.5 mm ²	
		Type of conductor and conductor cross-section	AWG 28/1	
		Type of conductor and conductor cross-section	AWG 28/19	
		Type of conductor and conductor cross-section	AWG 12/1	
		Type of conductor and conductor cross-section	AWG 12/19	
Evaluation	passed			

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Technical data

Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999 section 8.4 / 04.94		
	Requirement	0.2 kg		
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1	
		Type of conductor and conductor cross-section	AWG 28/7	
	Evaluation	passed		
	Requirement	0.3 kg		
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²	
		Type of conductor and conductor cross-section	stranded 0.5 mm ²	
	Evaluation	passed		
	Requirement	0.7 kg		
	Conductor type	Type of conductor and conductor cross-section	solid 2.5 mm ²	
		Type of conductor and conductor cross-section	stranded 2.5 mm ²	
	Evaluation	passed		
	Requirement	0.9 kg		
	Conductor type	Type of conductor and conductor cross-section	AWG 12/1	
Type of conductor and conductor cross-section		AWG 12/19		
Evaluation	passed			
Pull-out test	Standard	DIN EN 60999 section 8.5 / 04.94		
	Requirement	≥5 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1	
		Type of conductor and conductor cross-section	AWG 28/7	
	Evaluation	passed		
	Requirement	≥50 N		
	Conductor type	Type of conductor and conductor cross-section	H05V-U2.5	
		Type of conductor and conductor cross-section	H05V-K2.5	
	Evaluation	passed		
	Requirement	≥60 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 12/1	
		Type of conductor and conductor cross-section	AWG 12/19	
	Evaluation	passed		

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Technical data**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. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months
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

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

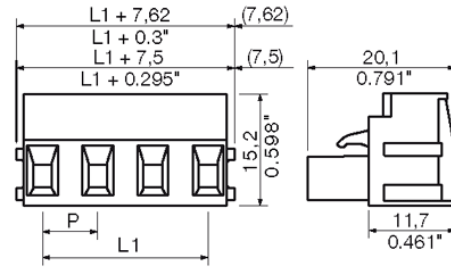
Creation date August 21, 2020 11:18:19 PM CEST

Catalogue status 14.08.2020 / We reserve the right to make technical changes.

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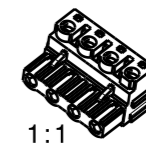
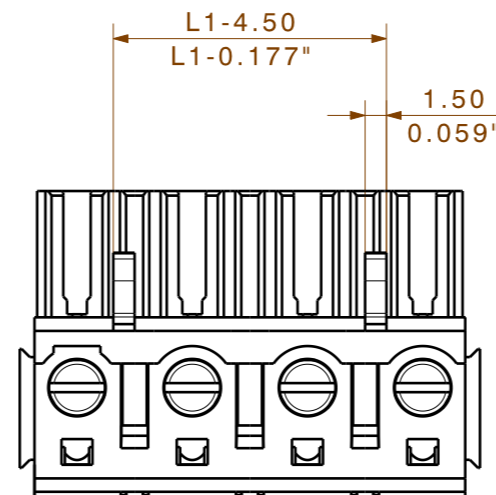
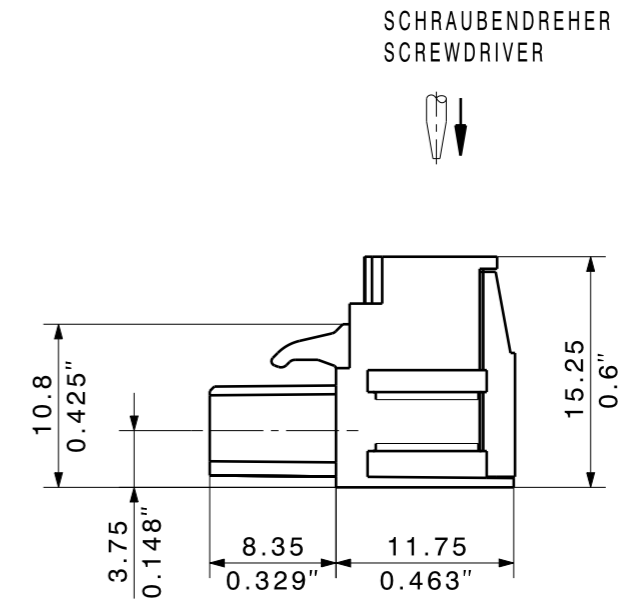
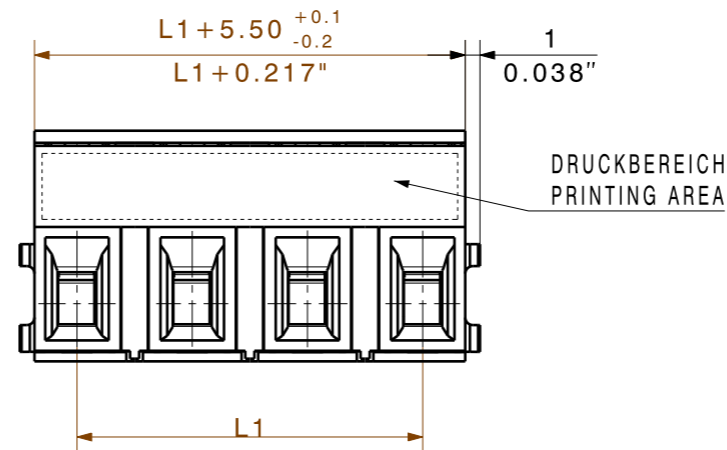
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Dimensional drawing

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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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]

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		CAT.NO.: C 21326 08	
	60233/5 09.11.11 HELIS_MA 01		DRAWING NO. OF 02 SHEETS	
MODIFICATION				BLZ 7.50/.. /180... BUCHSENLEISTE SOCKET BLOCK
		DATE	NAME	
SCALE: 2:1 SUPERSEDES: 21326/06		DRAWN	HECKERT_M	
		CHECKED	HECKERT_M	
		APPROVED	HECKERT_M	PRODUCT FILE: BLZ/SL 7.50 7152

