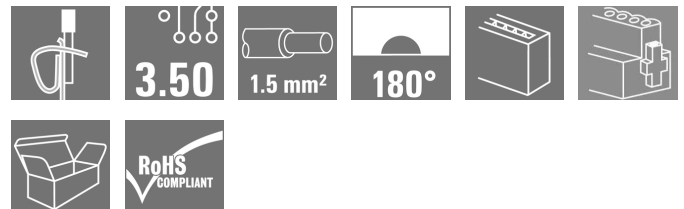


OMNIMATE Signal - series BL/SL 3.50 BLZF 3.50/12/180F SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com



Female connectors with tension clamp system for connecting cables in 3.50 pitch. They provide space for labelling and can be coded.

General ordering data

Type	BLZF 3.50/12/180F SN OR BX
Order No.	1690980000
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 12, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1.5 mm², Box
GTIN (EAN)	4008190329495
Qty.	50 pc(s).
Product data	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 26 - AWG 14
Packaging	Box

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Technical data**Dimensions and weights**

Net weight	12 g
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System parameters

Product family		Type of connection	
OMNIMATE Signal - series BL/SL 3.50		Field connection	
Wire connection method	Tension clamp connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	180°
No. of poles	12	L1 in mm	38.5 mm
L1 in inches	1.516 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106		Touch-safe protection acc. to DIN VDE 0470	
Safe from finger touch		IP 20	
Volume resistance	5.00 mΩ	Can be coded	Yes
Stripping length	10 mm	Tightening torque for screw flange, min.	0.2 Nm
Tightening torque for screw flange, max.	0.25 Nm	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264-A	Plugging cycles	25
push-in force/pole	8 N	Withdrawal force per pole	4 N
Packaging	Box		

Material data

Insulating material	PBT	Colour	Orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
CTI	≥ 200	Insulation resistance	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	4-8 μm Sn hot-dip tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

Conductors suitable for connection

Clamping range, rated connection, min.	0.13 mm ²	Clamping range, rated connection, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm ²	Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²	Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	1 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
Outer diameter of insulation, max.	2.9 mm	Plug gauge acc. to EN 60999 a x b; Ø	2.4 mm x 1.5 mm


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Technical data**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Ta = 20°C)	14.5 A
Rated current, max. no. of poles (Ta = 20°C)	10 A	Rated current, min. no. of poles (Ta = 40°C)	12 A
Rated current, max. no. of poles (Ta = 40°C)	8 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 100 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	154685-1461395
Rated voltage (Use group B)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
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)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

Data sheet

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Technical data

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.
 • Max. outer diameter of the conductor: 2.9 mm
 • Wire end ferrule without plastic collar to DIN 46228/1
 • Wire end ferrule with plastic collar to DIN 46228/4
 • Crimp shape A for wire-end ferrules with crimping tools PZ 1,5 (order no. 9005990000) or PZ 6/5 (order no. 9011460000) for larger wire cross-sections recommended.
 • 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	The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.
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Approvals

Approvals



ROHS	Conform
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Downloads

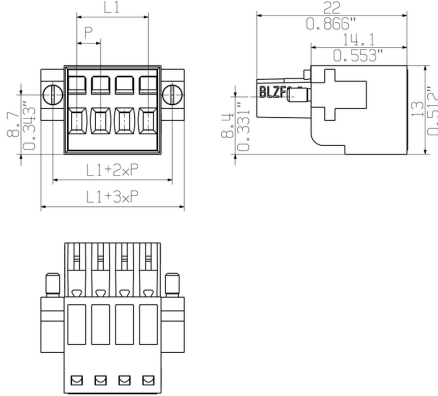
- | | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN
MB DEVICE MANUF. EN
FL DRIVES DE
CAT 2 PORTFOLIOGUIDE EN
FL BUILDING SAFETY EN
FL APPL LED LIGHTING EN
FLIndustr.CONTROLS EN
FL MACHINE SAFETY EN
FL HEATING ELECTR EN
FL APPL INVERTER EN
FL_BASE_STATION_EN
FL ELEVATOR EN
FL POWER SUPPLY EN
FL 72H SAMPLE SER EN
PO OMNIMATE EN |

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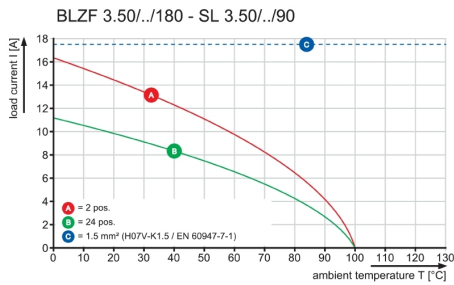
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Drawings

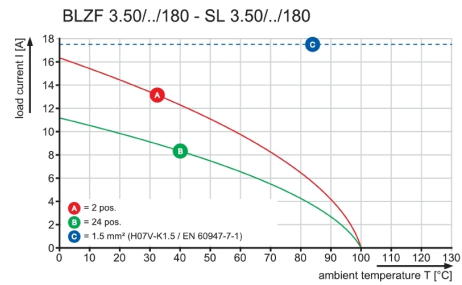
Dimensional drawing



Graph



Graph



Graph

