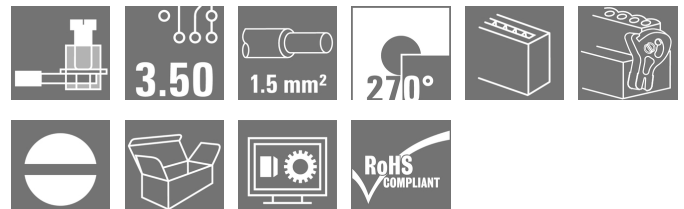


**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/03/270F SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration

Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

General ordering data

Type	BL 3.50/03/270F SN OR BX
Order No.	1639940000
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box
GTIN (EAN)	4008190277499
Qty.	108 pc(s).
Product data	IEC: 320 V / 12 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 28 - AWG 14
Packaging	Box

OMNIMATE Signal - series BL/SL 3.50

BL 3.50/03/270F SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data

Dimensions and weights

Width	17.5 mm	Width (inches)	0.689 inch
Height	12 mm	Height (inches)	0.472 inch
Depth	22.45 mm	Depth (inches)	0.884 inch
Net weight	3.59 g		

system parameters

Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	270°
No. of poles	3	L1 in mm	7 mm
L1 in inches	0.276 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	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Can be coded	Yes	Stripping length	6 mm
Tightening torque for screw flange, min.	0.15 Nm	Tightening torque for screw flange, max.	0.2 Nm
Tightening torque, min.	0.2 Nm	Tightening torque, max.	0.25 Nm
Clamping screw	M 2	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	7 N	Pulling force/pole, max.	5 N

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
CTI	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
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, min.	0.08 mm ²
Clamping range, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 14
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, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min 0.2 mm ²	
w. wire end ferrule, DIN 46228 pt 1, 1.5 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm

Creation date May 27, 2019 3:00:32 PM CEST

OMNIMATE Signal - series BL/SL 3.50
BL 3.50/03/270F SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
Reference text	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.25 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	5 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.34 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	8 mm
	The outside diameter of the plastic collar should not be larger than the pitch (P).			
	Max. clamping range			
	1.5 mm ²			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	12 A
Rated current, max. no. of poles (Tu=20°C)	10 A	Rated current, min. no. of poles (Tu=40°C)	10 A
Rated current, max. no. of poles (Tu=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)	154685-1318353
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/03/270F SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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) 8 A

Rated current (Use group D / UL 1059) 8 A

Wire cross-section, AWG, min. AWG 28

Wire cross-section, AWG, max. AWG 14

Reference to approval values

Specifications are
 maximum values, details -
 see approval certificate.

Packing

Packaging Box

VPE length 70 mm

VPE width 84 mm

VPE height 104 mm

Classifications

ETIM 3.0 EC001284

ETIM 4.0 EC002637

ETIM 5.0 EC002637

ETIM 6.0 EC002638

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 27-44-03-09

eClass 9.1 27-44-03-09

Notes

Notes

- 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
- 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

Creation date May 27, 2019 3:00:32 PM CEST

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/03/270F SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data

Downloads

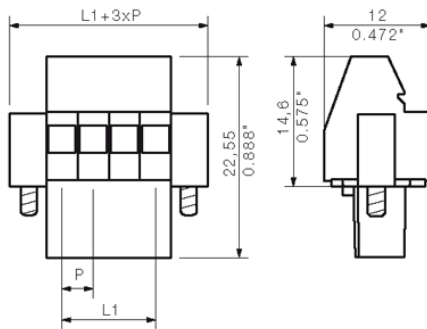
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/03/270F SN OR BX

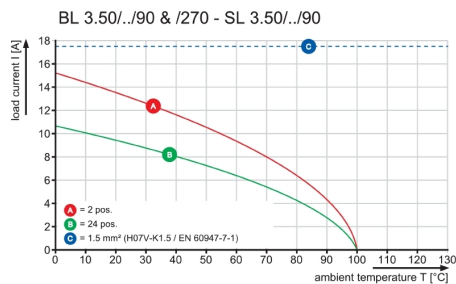
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

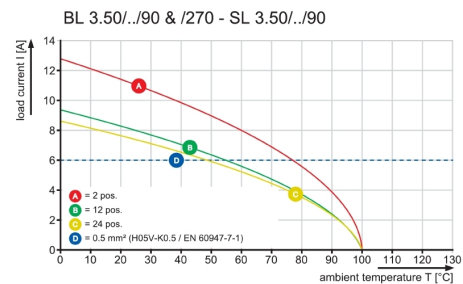
Dimensional drawing



Graph



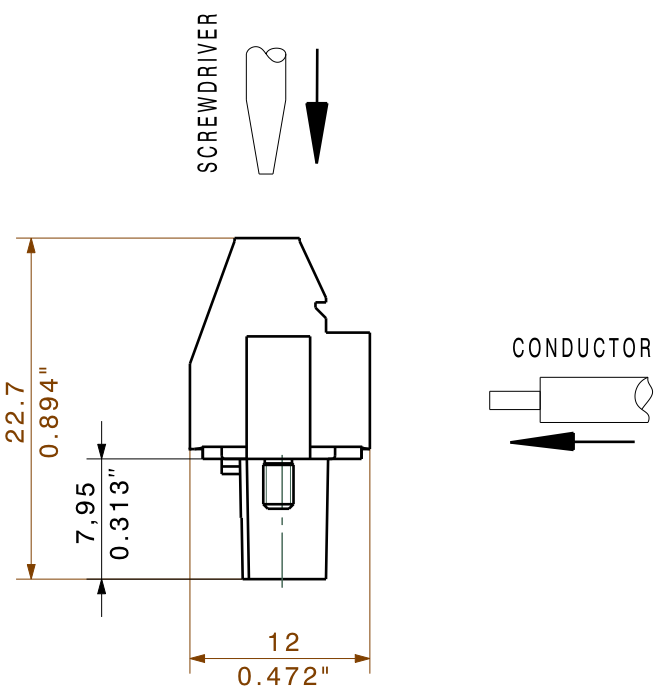
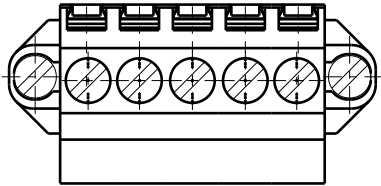
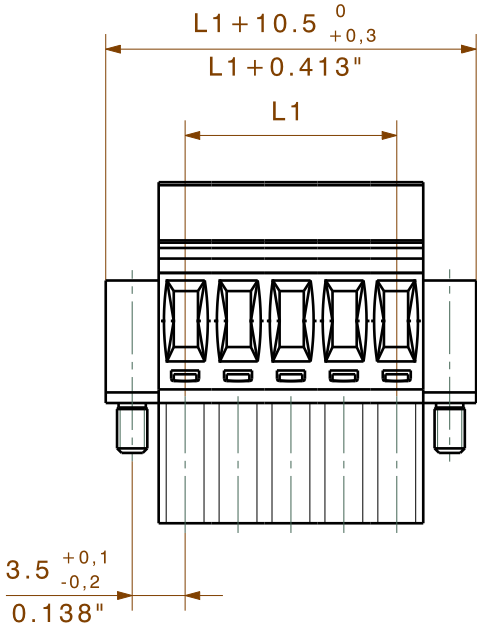
Graph



WEITERGABE SOWIE Vervielfaeltigung dieses Dokuments, Verwertung und MitteiluNG seines Inhalts sind verboten, soweit nicht ausdruEcklich gestattet.
ZuWiderhandlungen verpfl ichten zu Schadenersatz. Alle Rechte fuer den Fall der Patent-, Gebrauchsmuster- oder GeschmaCKsmustereintragung vorbehalten.
THE REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS THE COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPLICIT AUTHORIZATION IS PROHIBITED.
OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. WEIDMUELLER EXCLUSIVELY RESERVES THE RIGHT TO FILE FOR PATENTS, UTILITY MODELS OR DESIGNS.

© WEIDMUELLER INTERFACE GmbH & Co.KG

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING



24	80,50	3,169
23	77,00	3,031
22	73,50	2,894
21	70,00	2,756
20	66,50	2,618
19	63,00	2,480
18	59,50	2,343
17	56,00	2,205
16	52,50	2,067
15	49,00	1,929
14	45,50	1,791
13	42,00	1,654
12	38,50	1,516
11	35,00	1,378
10	31,50	1,240
9	28,00	1,102
8	24,50	0,965
7	21,00	0,827
6	17,50	0,689
5	14,00	0,551
4	10,50	0,413
3	7,00	0,276
2	3,50	0,138
n	L1[mm]	L1 [Inch]

SHOWN:BL3.50/05/270F

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / 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 EN 61984 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

	DIN ISO 2768-m				CAT.NO.: .	
	74368/5 15.04.14 HELIS_MA		01	Weidmüller 		C 21347 09
MODIFICATION				DRAWING NO. SHEET 02 OF 02 SHEETS		ISSUE NO.
		DATE	NAME	BL 3.50/.../270... BUCHSENLEISTE SOCKET BLOCK		
DRAWN		24.07.2003	KOWOLLIK_R			
RESPONSIBLE			LANG_T			
SCALE: 5/1		CHECKED	15.04.2014	THELEN_E	PRODUCT FILE: BL 3.50 90/270	
SUPERSEDES: .		APPROVED		HECKERT_M	7368	