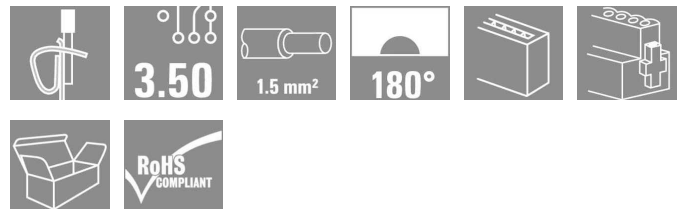


**OMNIMATE Signal - series BL/SL 3.50  
BLZF 3.50/12/180F SN BK BX**

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



Female connectors with tension clamp system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 26 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 14.5 A (IEC) / 10 A (UL)

**General ordering data**

Type	BLZF 3.50/12/180F SN BK BX
Order No.	<a href="#">1691210000</a>
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 mm <sup>2</sup> , Box
GTIN (EAN)	4008190329754
Qty.	50 pc(s).
Product data	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 26 - AWG 14
Packaging	Box

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**Technical data****Dimensions and weights**

Net weight	13.1 g
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**System parameters**

Product family	OMNIMATE Signal - series BL/SL 3.50	Wire connection method	Tension clamp connection
Conductor outlet direction	180°	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	No. of poles	12
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264-A
Stripping length	10 mm	L1 in mm	38.5 mm
L1 in inches	1.516 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		

**Material data**

Insulating material	PBT	Colour	Black
Colour chart (similar)	RAL 9011	UL 94 flammability rating	V-0
CTI	≥ 200	Contact material	Cu-Leg
Contact surface	tinned	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

**Connectable conductors**

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

**DIN IEC rating data**

Rated current, min. no. of poles (Tu=20°C)	14.5 A	Rated current, max. no. of poles (Tu=20°C)	10 A
Rated current, number of poles (Tu=40°C), min	12 A	Rated current, number of poles (Tu=40°C), max.	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		

**Data sheet**

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

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**Technical data**

**CSA rating data**

Institute (CSA)



Rated voltage (Use group B)

300 V

Rated current (use group B)	10 A
Rated current (use group D)	10 A
Wire cross-section, AWG, max.	AWG 14

Rated voltage (use group D)	300 V
Wire cross-section, AWG, min.	AWG 26

**UL 1059 rating data**

Institute (UR)



Rated voltage (use group B)

300 V

Rated current (use group B)	10 A
Rated current (use group D)	10 A
Wire cross-section, AWG, max.	AWG 14

Rated voltage (use group D)	300 V
Wire cross-section, AWG, min.	AWG 26

**Classifications**

ETIM 3.0	EC001284	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		

**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
- 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.

**Approvals**

Approvals



ROHS

Conform

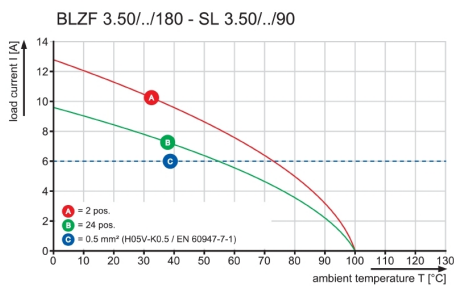
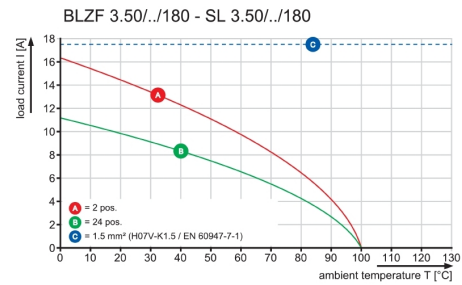
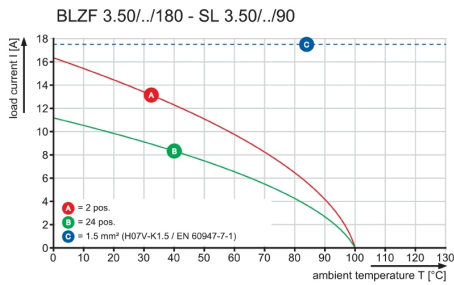
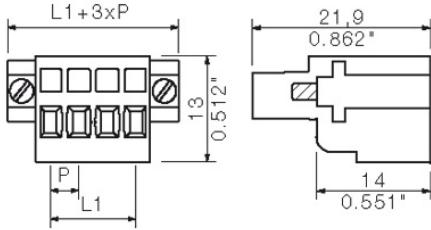
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**Data sheet**

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

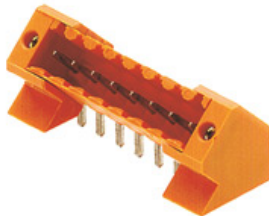
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**Drawings**



**OMNIMATE Signal - series BL/SL 3.50  
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**Mating connector (fully pluggable)**
**SL 3.50/135F**


Male header with 3.50 mm pitch for wave soldering

- Plugging direction angled to the PCB (135°)
- Housing variant: screw flange (F)
- Packaged in cardboard box (BX)
- Male header can be coded

250 V (IEC) / 300 V (UL)  
 17 A (IEC) / 10 A (UL)

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1643430000</a>	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 12, 135°, Solder pin length (l): 3.2 mm, tinned, Orange, Box	4008190282196	50 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

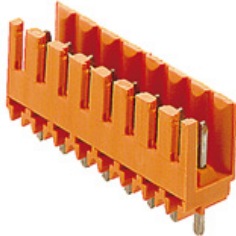
## Data sheet

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

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## Mating connector (conditionally pluggable)

### SL 3.50/180



Male header with 3.50 mm pitch for wave soldering

- Plugging direction angled to the PCB (135°)
- Housing variant: screw flange (F)
- Packaged in cardboard box (BX)
- Male header can be coded

250 V (IEC) / 300 V (UL)  
 17 A (IEC) / 10 A (UL)

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1604870000</a>	PCB plug-in connector, male header, open side, Solder connection, 3.50 mm, No. of poles: 12, 180°, Solder pin length (l): 3.2 mm, tinned, Orange, Box	4008190111427	50 pc(s).	IEC: 320 V / 17 A UL: 300 V / 10 A	Box

