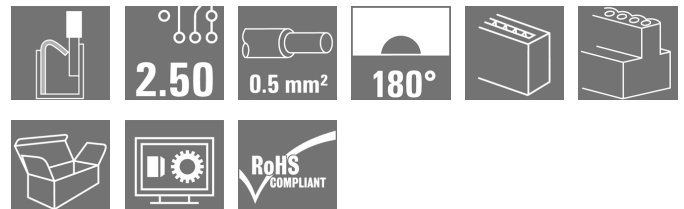


OMNIMATE Signal - series BL/SL 2.50 BLF 2.50/07/180 SN BK BX

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

PUSH IN - Weidmüller's innovative connection system simplifies the wire connection process.

The benefits for users and applications:

- High component density because of small pitch. Simply insert the prepared wire - and you're done
- Simplified processing, thanks to integrated push buttons for opening the terminal point
- Intuitive handling – since the conductor entry and handling areas are clearly separated

General ordering data

Type	BLF 2.50/07/180 SN BK BX
Order No.	2439700000
Version	PCB plug-in connector, female plug, Pitch in mm (P): 2.50 mm, Number of poles: 7, Box
GTIN (EAN)	4050118454772
Qty.	125 pc(s).
Product data	IEC: 320 V / 6 A / 0.08 - 0.5 mm ² UL: 150 V / 5 A / AWG 28 - AWG 20
Packaging	Box

Creation date May 2, 2020 4:02:56 PM CEST

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Technical data**Dimensions and weights**

Width	18.1 mm	Width (inches)	0.713 inch
Height	11.75 mm	Height (inches)	0.463 inch
Depth	19.2 mm	Depth (inches)	0.756 inch
Net weight	9.2 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 2.50	Type of connection	Field connection
Wire connection method	PUSH IN, Spring connection	Pitch in mm (P)	2.5 mm
Pitch in inches (P)	0.984 inch	Conductor outlet direction	180°
Number of poles	7	L1 in mm	15 mm
L1 in inches	5.904 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	< 10 mΩ
Stripping length	8 mm	Screwdriver blade standard	DIN 5264
Plugging cycles	25		

Material data

Insulating material	PA	Colour	black
Colour chart (similar)	RAL 9011	Comparative Tracking Index (CTI)	≥ 600
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Operating temperature, min.	-40 °C
Operating temperature, max.	105 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	105 °C		

Conductors suitable for connection

Clamping range, min.	0.08 mm ²	Clamping range, max.	0.5 mm ²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 20
Solid, min. H05(07) V-U	0.08 mm ²	Solid, max. H05(07) V-U	0.5 mm ²
Stranded, min. H07V-R	0.08 mm ²	Stranded, max. H07V-R	0.5 mm ²
Flexible, min. H05(07) V-K	0.08 mm ²	Flexible, max. H05(07) V-K	0.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	0.34 mm ²
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	0.5 mm ²

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

tested acc. to standard	IEC 61984	Rated current, min. number of poles (Tu=20°C)	6 A
Rated current, max. number of poles (Tu=20°C)	6 A	Rated current, min. number of poles (Tu=40°C)	6 A
Rated current, max. number of poles (Tu=40°C)	6 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	80 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		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	150 V	Rated current (Use group B / CSA)	5 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 20

Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	150 V	Rated current (Use group B / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 20
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	0 m
VPE width	0 m	VPE height	0 m

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		

Notes

Notes	<ul style="list-style-type: none"> Rated current related to rated cross-section & min. No. of poles. P on drawing = pitch 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. 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.

Data sheet

**OMNIMATE Signal - series BL/SL 2.50
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Technical data

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](#)

White paper PUSH IN wire connection

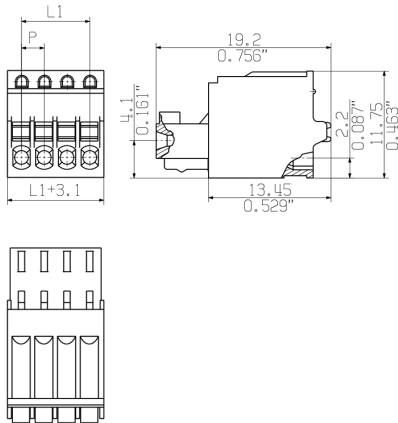
[Download Whitepaper](#)

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Drawings

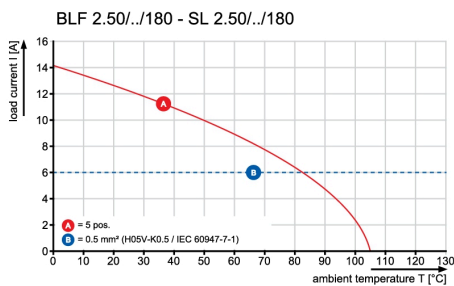
Dimensional drawing



Product image



Graph

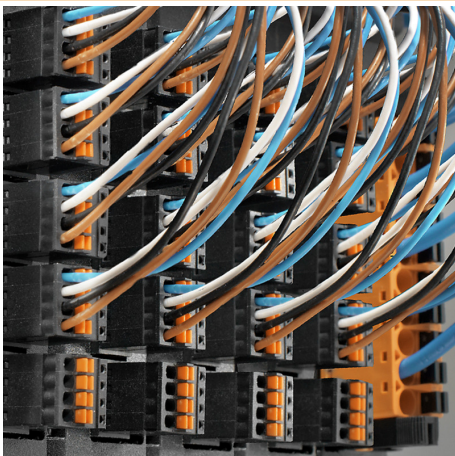


Product benefits



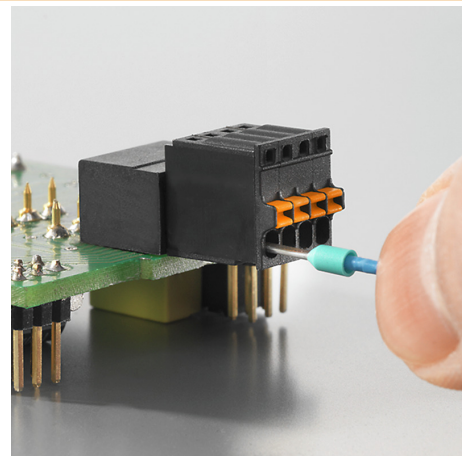
Flexible application
 Outlet direction: 90° and 180°

Product benefits



High component density
 Small and compact pitch

Product benefits



PUSH IN connection up to 0.5 mm²
 Reliable and space-saving

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Mating connector (fully pluggable)
SL 2.50/90G


Male header for wave soldering in 2.50 mm pitch.

- Plugging direction is parallel (90°) to the PCB
- Housing variant: Closed (G)
- Packaged in a cardboard box (BX)

General ordering data

Type	SL 2.50/07/90G 3.2SN BK ...	Version	Product data	Packaging
Order No.	2439800000	PCB plug-in connector, male header, THT solder connection, Pitch in	IEC: 320 V / 6 A	Box
GTIN (EAN)	4050118454970	mm (P): 2.50 mm, Number of poles: 7, 90°, Box	UL: 150 V / 5 A	
Qty.	125 pc(s).			

SL 2.50/180G


Male header for wave soldering in 2.50 mm pitch.

- Plugging direction is straight (180°) to the PCB
- Housing variant: Closed (G)
- Packaged in a cardboard box (BX)

General ordering data

Type	SL 2.50/07/180G 3.2SN B ...	Version	Product data	Packaging
Order No.	2439960000	PCB plug-in connector, male header, THT solder connection, Pitch in	IEC: 320 V / 6 A	Box
GTIN (EAN)	4050118455137	mm (P): 2.50 mm, Number of poles: 7, 180°, Box	UL: 150 V / 5 A	
Qty.	125 pc(s).			

**OMNIMATE Signal - series BL/SL 2.50
BLF 2.50/07/180 SN BK BX**

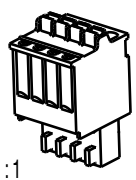
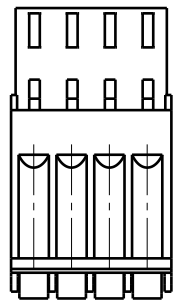
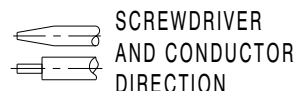
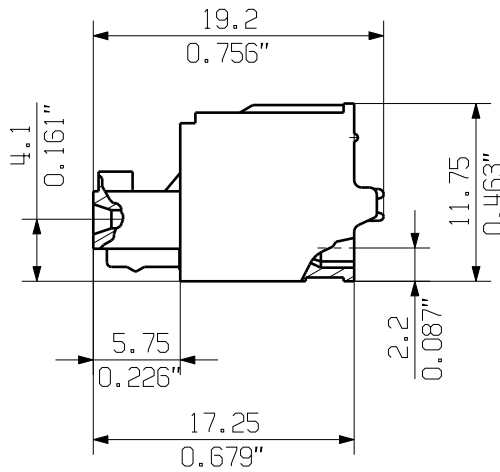
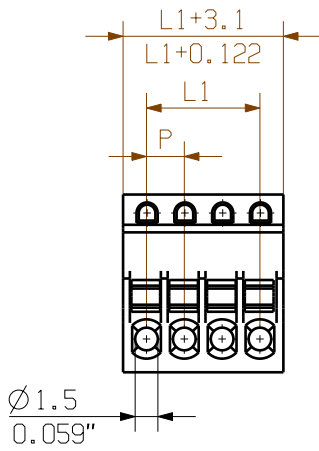
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Product benefits

Operating safety
Through PUSH IN connection system

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

DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING



WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESER DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINER INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTÄTTET.
 ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.
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 WEIDMUELLER INTERFACE GmbH & Co. KG

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 with VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: BLF 2.50/04/180

P = 2.50mm RASTER
 0,098" PITCH

n = POLZAHL/NO OF POLS

L1 = (n-1)xP

12	27,50	1,083
11	25,00	0,984
10	22,50	0,886
9	20,00	0,787
8	17,50	0,689
7	15,00	0,591
6	12,50	0,492
5	10,00	0,394
4	7,50	0,295
3	5,00	0,197
2	2,50	0,098
n	L1 [mm]	L [Inch]

GENERAL TOLERANCE:
 DIN ISO 2768-mH



MAX. NRN./NOS.

86555/0
 02.03.16 AMANN_A 00

MODIFICATION



C 63331 00

DRAWING NO. SHEET 00 OF 00 SHEETS ISSUE NO.



	DATE	NAME
DRAWN	18.02.2016	AMANN_A
RESPONSIBLE		AMANN_A
CHECKED	02.03.2016	HELIS_MA
APPROVED		LANG_T

BLF 2.50/02-12/180..
 BUCHSENSTECKER
 FEMALE PLUG

SCALE: 2:1

SUPERSEDES:

PRODUCT FILE: SL/BLF 2.50

7414