

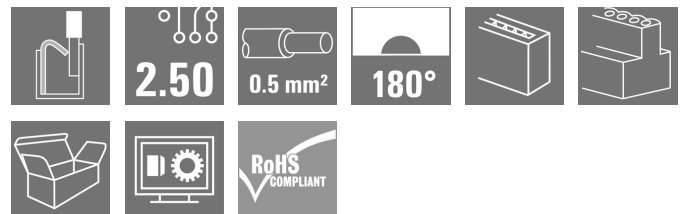
BLF 2.50/05/180 SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Version	PCB plug-in connector, female plug, Pitch in mm (P): 2.50 mm, Number of poles: 5, Box
Order No.	2439680000
Type	BLF 2.50/05/180 SN BK BX
GTIN (EAN)	4050118454758
Qty.	200 pc(s).
Product data	IEC: 320 V / 6 A / 0.08 - 0.5 mm² UL: 150 V / 5 A / AWG 28 - AWG 20
Packaging	Box

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Technical data

Dimensions and weights

Depth	19.2 mm	Depth (inches)	0.756 inch
Height	11.75 mm	Height (inches)	0.463 inch
Width	13.1 mm	Width (inches)	0.516 inch
Net weight	3.405 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 2.50	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	2.5 mm
Pitch in inches (P)	0.098 "	Conductor outlet direction	180°
Number of poles	5	L1 in mm	10 mm
L1 in inches	3.936 "	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	Protection degree	IP20
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	Cu-alloy
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	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.		

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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	260 mm
VPE width	167 mm	VPE height	54 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ECLASS 9.0	27-44-03-09	ECLASS 9.1	27-44-03-09
ECLASS 10.0	27-44-03-09	ECLASS 11.0	27-46-02-02
ECLASS 12.0	27-46-02-02	ECLASS 13.0	27-46-02-02

Environmental Product Compliance

REACH SVHC	/
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Technical data

Important note

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.
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. In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cULus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE 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

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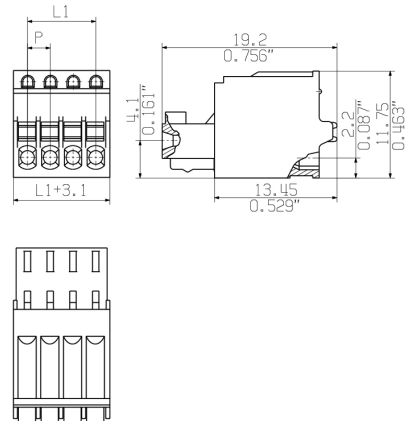
Drawings

Product image



Similar to illustration

Dimensional drawing



Graph

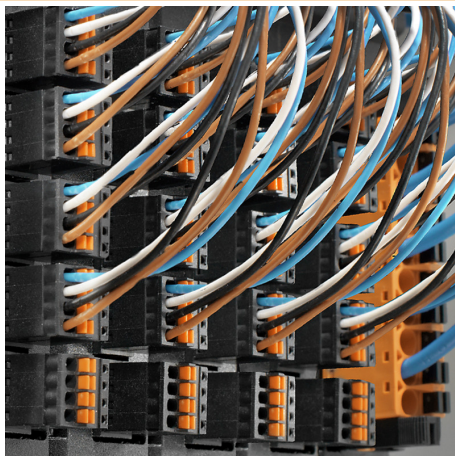


Product benefits



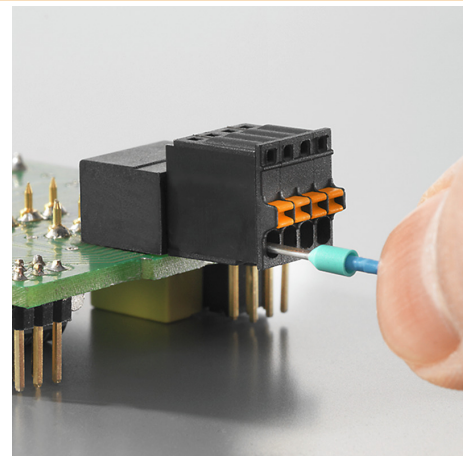
Flexible application
Outlet direction: 90° and 180°

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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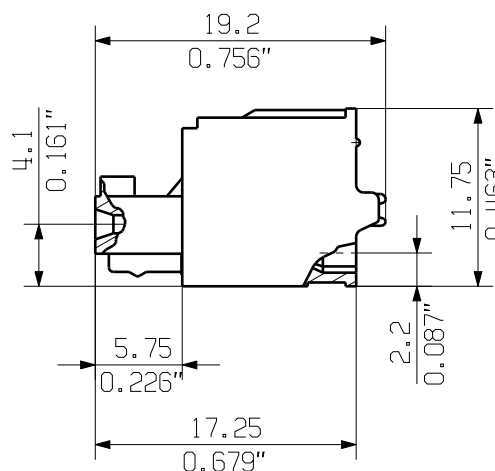
Drawings

Product benefits



Operating safety
Through PUSH IN connection system

**DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING**



SCREWDRIVER
AND CONDUCTOR
DIRECTION



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 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

$$L1 = (n-1) \times P$$

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	00
02.03.16 AMANN A	

MODIFICATION

	DATE	NAME
DRAWN	18.02.2016	AMANN A

RESPONSIBLE	AMANN A
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CHECKED	02.03.2016	HELIS MA
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Weidmüller 

C 63331

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DRAWING NO.

ISSUE NO

SHEET 00

OF 00 SHEETS

SHEETS

SCALE: 2:1

SUPERSEDES: .

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

PRODUCT FILE: SL/BLF 2.50

7414

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