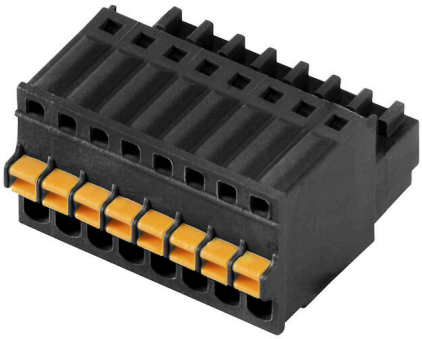
Data sheet

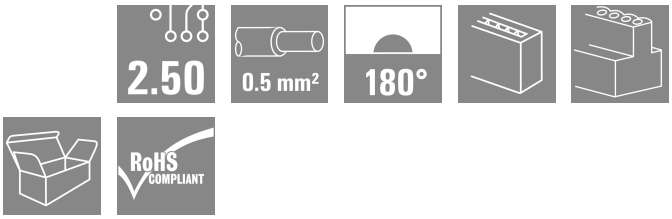
BLF 2.50/04/180 SN BK BX

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: 4, Box
Order No.	2439670000
Type	BLF 2.50/04/180 SN BK BX
GTIN (EAN)	4050118454741
Qty.	250 items
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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Data sheet

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Technical data

Approvals

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

Dimensions and weights

Depth	19.2 mm	Depth (inches)	0.7559 inch
Height	11.75 mm	Height (inches)	0.4626 inch
Width	10.6 mm	Width (inches)	0.4173 inch
Net weight	0.61 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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)	2.50 mm
Pitch in inches (P)	0.098 "	Conductor outlet direction	180°
Number of poles	4	L1 in mm	7.50 mm
L1 in inches	2.952 "	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 of operational elements	orange	Colour chart (similar)	RAL 9011
Comparative Tracking Index (CTI)	≥ 600	Moisture Level (MSL)	
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 mm²	Clamping range, max.	0.5 mm²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 20
Solid, min. H05(07) V-U	0.08 mm²	Solid, max. H05(07) V-U	0.5 mm²
Stranded, min. H07V-R	0.08 mm²	Stranded, max. H07V-R	0.5 mm²
Flexible, min. H05(07) V-K	0.08 mm²	Flexible, max. H05(07) V-K	0.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	0.34 mm²

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Technical data

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.

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)	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	167.00 mm
VPE width	123.00 mm	VPE height	57.00 mm

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	• 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

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Technical data

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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Data sheet

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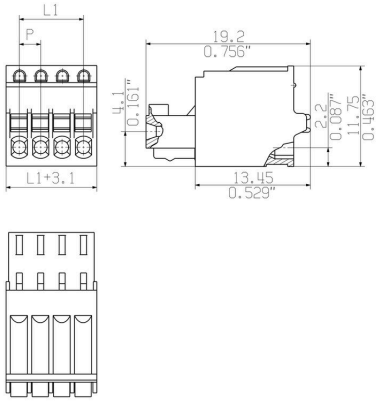
Drawings

Product image

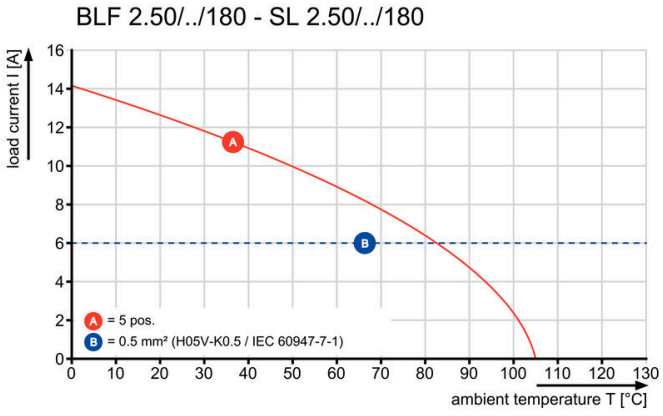


Similar to illustration

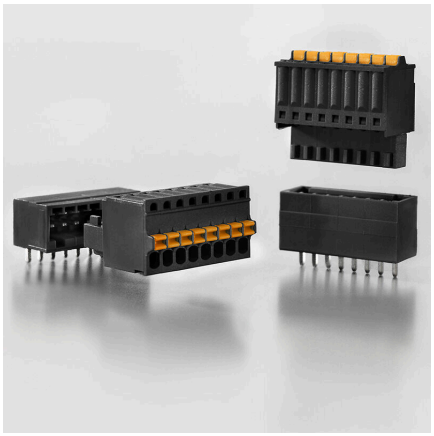
Dimensional drawing



Graph



Product benefits



Flexible applicationOutlet direction: 90° and 180°

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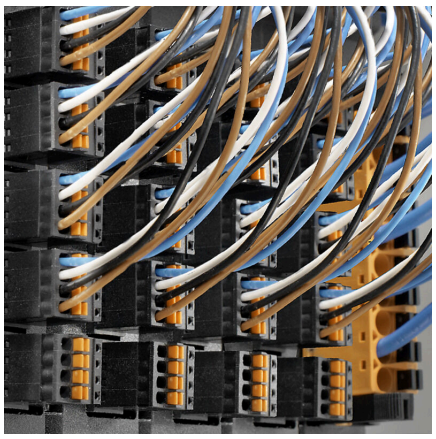
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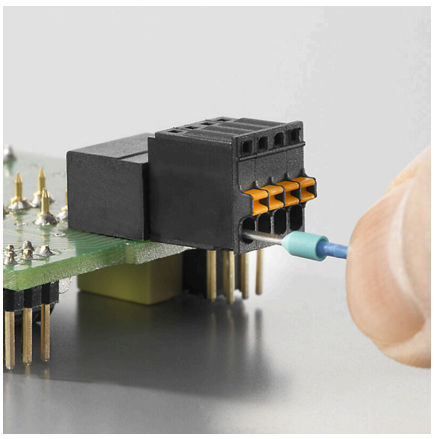
Drawings

Product benefits



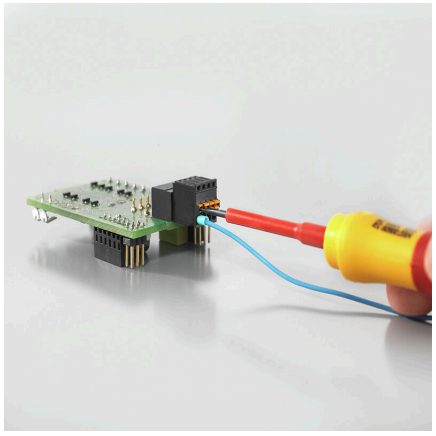
High component densitySmall and compact pitch

Product benefits



PUSH IN connection up to 0.5 mm²Reliable and space-saving

Product benefits



Operating safetyThrough PUSH IN connection system

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