

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image























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.	<u>2439670000</u>
Туре	BLF 2.50/04/180 SN BK BX
GTIN (EAN)	4050118454741
Qty.	250 ST
Product data	IEC: 320 V / 6 A / 0.08 - 0.5 mm ² UL: 150 V / 5 A / AWG 28 - AWG 20
Packaging	Вох



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Technical data

Approvals

Approvals	c FL *us
ROHS	Conform
UL File Number Search	<u>UL Website</u>
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	0.7 g		

Environmental Product Compliance

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

System Parameters

OMNIMATE Signal - series BL/SL 2.50	Type of connection	Field connection
PUSH IN with actuator	Pitch in mm (P)	2.50 mm
0.098 "	Conductor outlet direction	180°
4	L1 in mm	7.50 mm
2.952 "	Number of rows	1
1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
IP 20	Protection degree	IP20
<10 mΩ	Stripping length	8 mm
DIN 5264	Plugging cycles	25
	BL/SL 2.50 PUSH IN with actuator 0.098 " 4 2.952 " 1 IP 20 <10 mΩ	BL/SL 2.50 PUSH IN with actuator Pitch in mm (P) 0.098 " Conductor outlet direction 4 L1 in mm 2.952 " Number of rows 1 Touch-safe protection acc. to DIN VDE 57 106 IP 20 Protection degree <10 mΩ

Material data

Insulating material	PA	Colour	black
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 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 mm²
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 mm²
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		

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Catalogue status / Drawings 2





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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

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638

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Technical data

ETIM 10.0	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	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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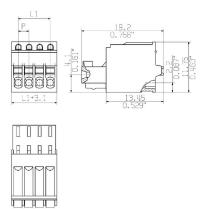
Drawings

Product image



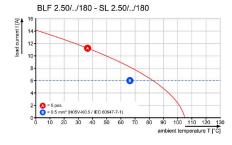
Similar to illustration

Dimensional drawing



Graph

Grapn



Product benefits



Flexible applicationOutlet direction: 90° and 180°



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Drawings

Product benefits



High component densitySmall and compact pitch

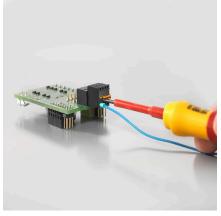
Product benefits



PUSH IN connection up to 0.5 mm²Reliable and space-saving

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Product benefits



Operating safetyThrough PUSH IN connection system