

**BLC 5.08/10/180R OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

**General ordering data**

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 10, 180°, Crimp connection, Clamping range, max. : 2.5 mm², Box
Order No.	<a href="#">1610570000</a>
Type	BLC 5.08/10/180R OR BX
GTIN (EAN)	4008190128180
Qty.	50 pc(s).
Product data	IEC: 400 V / 21 A UL: 300 V / 10 A / AWG 26 - AWG 14
Packaging	Box

Creation date August 29, 2024 8:39:26 PM CEST

Catalogue status 17.08.2024 / We reserve the right to make technical changes.

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

Depth	24.5 mm	Depth (inches)	0.965 inch
Height	10.1 mm	Height (inches)	0.398 inch
Width	50.8 mm	Width (inches)	2 inch
Net weight	5.75 g		

**System Parameters**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	Crimp connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 "	Conductor outlet direction	180°
Number of poles	10	L1 in mm	45.72 mm
L1 in inches	1.8 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Protection degree	IP20	Volume resistance	≤5 mΩ
Can be coded	Yes	Stripping length	5 mm
Plugging cycles	25	Plugging force/pole, max.	8.5 N
Pulling force/pole, max.	6.5 N		

**Material data**

Insulating material	PBT GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Layer structure of plug contact	4...8 µm Sn hot-dip tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

**Conductors suitable for connection**

Clamping range, min.	0.22 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 24	Wire connection cross section AWG, max.	AWG 14
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>	Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
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 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	21 A
Rated current, max. number of poles (Tu=20°C)	14.5 A	Rated current, min. number of poles (Tu=40°C)	18 A
Rated current, max. number of poles (Tu=40°C)	12.5 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

## Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	12400-374
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	163 mm
VPE width	97 mm	VPE height	84 mm

## Type tests

Test: Durability of markings	Standard	draft DIN VDE 0627 section 6.2.2 / 09.91, DIN IEC 512 part 7 section 5 / 05.94
	Test	durability
	Evaluation	passed

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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
ECLASS 14.0	27-46-02-02		

**Environmental Product Compliance**

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

**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"> <li>• Additional variants on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Rated cross-section depends on crimp contact used.</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• 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</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

**Approvals**

Approvals



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

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## Technical data

### Downloads

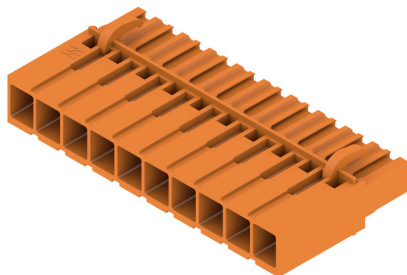
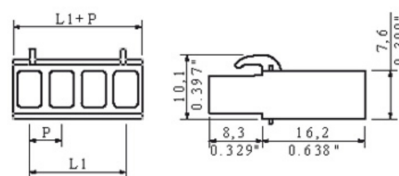
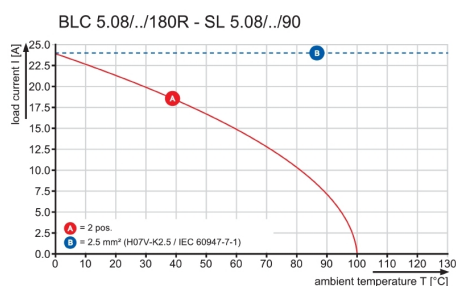
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FL INDUSTR.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Product image****Dimensional drawing****Graph**

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## Accessories

## Coding elements

**Only connects what is supposed to be connected: the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

## General ordering data

Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<a href="#">1545710000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

## Blocks for PCB mounting

**Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the whole plug connection by

- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

## General ordering data

Type	SLA BB12R OR	Version	Product data	Packaging
Order No.	<a href="#">1593450000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190122164	of poles: 1		
Qty.	100 pc(s).			

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**Accessories**

Type	SLA BB12R SW	Version	Product data	Packaging
Order No.	<a href="#">1626880000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190198213	poles: 1		
Qty.	100 pc(s).			
Type	SLA BB11R OR	Version	Product data	Packaging
Order No.	<a href="#">1604120000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190182977	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB11R SW	Version	Product data	Packaging
Order No.	<a href="#">1692340000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190864965	poles: 1		
Qty.	20 pc(s).			

**... for Weidmüller DFF and ZRV contacts****Crimping tools for for turned/stamped contact**

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

**General ordering data**

Type	HTF DFF	Version
Order No.	<a href="#">9014140000</a>	Pressing tool, Crimping tool for contacts, 0.22mm², 2.5mm², B-Crimp
GTIN (EAN)	4008190297305	
Qty.	1 pc(s).	



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## Accessories

## Crimp contacts



## For a reliable contact - CB/CS crimp contact.

The combination of RSV housings and Weidmüller's crimp contacts enable custom adaptations to the specific requirements of your applications.

The following product options are available depending on the system:

- Safe centring of the contacts using the three-segment pin tips
- High contact reliability using four defined contact points
- Locking clasp in the cantilever spring for a secure mount of the contacts in the housing
- Pin contacts with two lengths to implement leading-pin contacts
- Up to 100 plugging cycles (tin version)
- Up to 500 plugging cycles (gold version)

The appropriate high-quality tools from Weidmüller guarantee professional processing.

## General ordering data

Type	DFFC 0.22-0.35 SN 3000	Version	Product data	Packaging
Order No.	<a href="#">1604230000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Reel
GTIN (EAN)	4008190117498	range : 0.35 mm <sup>2</sup>		
Qty.	3,000 pc(s).			
Type	DFFC 0.22-0.35 SN E	Version	Product data	Packaging
Order No.	<a href="#">1604250000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190042905	range : 0.35 mm <sup>2</sup>		
Qty.	250 pc(s).			
Type	DFFC 1.5-2.5 SN 2500	Version	Product data	Packaging
Order No.	<a href="#">1480100000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Reel
GTIN (EAN)	4008190100414	range : 2.5 mm <sup>2</sup>		
Qty.	2,500 pc(s).			
Type	DFFC 0.5-1.0 SN E	Version	Product data	Packaging
Order No.	<a href="#">1567060000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190166991	range : 1 mm <sup>2</sup>		
Qty.	250 pc(s).			
Type	DFFC 1.5-2.5 SN E	Version	Product data	Packaging
Order No.	<a href="#">1567070000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190059071	range : 2.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Type	DFFC 0.5-1.0 SN 3000	Version	Product data	Packaging
Order No.	<a href="#">1480000000</a>	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Reel
GTIN (EAN)	4008190179175	range : 1 mm <sup>2</sup>		
Qty.	3,000 pc(s).			