

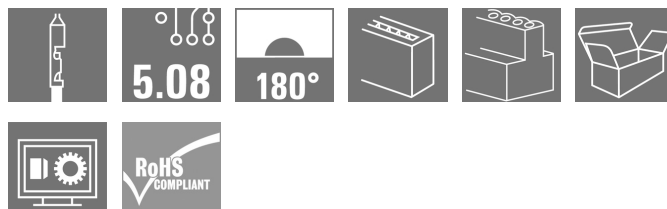
**BLC 5.08/10/180R OR BX****Weidmüller Interface GmbH & Co. KG**

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<br>UL: 300 V / 10 A / AWG 26 - AWG 14   |
| Packaging    | Box   |

Creation date May 9, 2024 3:00:34 PM CEST

Catalogue status 04.05.2024 / 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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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****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 |

**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     |

## BLC 5.08/10/180R OR BX

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## Technical data

### Downloads

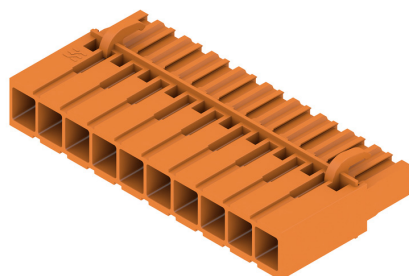
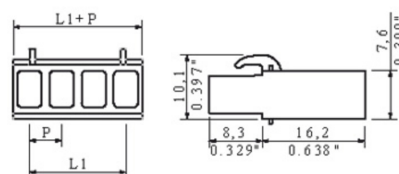
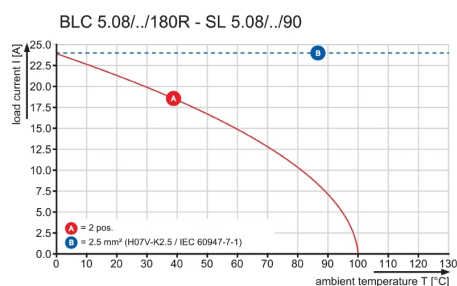
|   |  |
|---|--|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>  |
| Engineering Data                            | <a href="#">CAD data – STEP</a>  |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>   |
| Brochures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

### ... 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).                   |   |

### 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 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 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).                 |  |              |           |
| 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).                  |  |              |           |

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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).                 |  |              |           |

## 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 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 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 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 |              | Box       |
| GTIN (EAN) | 4008190100414              | range : 2.5 mm <sup>2</sup>  |              |           |
| Qty.       | 2,500 pc(s).               |  |              |           |
| 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 |              | Box       |
| GTIN (EAN) | 4008190117498              | range : 0.35 mm <sup>2</sup>   |              |           |
| Qty.       | 3,000 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).               |  |              |           |



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| 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).                 |  |              |           |

**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).                  |   |              |           |