

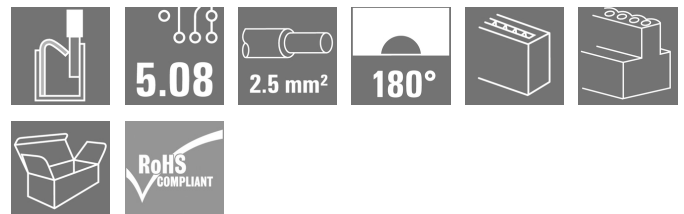
**BLDF 5.08/03/180 SN BK BX SO****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Similar to illustration

The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5A current-carrying capacity. The large clamping capacity (up to 2.5mm<sup>2</sup> wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop.

Four flange variations, including the patented release latch, allow for user-friendly unplugging designs.

**General ordering data**

|              |                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 180°, PUSH IN with actuator, Clamping range, max.: 3.31 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">2547410000</a>                                                                                                                     |
| Type         | BLDF 5.08/03/180 SN BK BX SO                                                                                                                   |
| GTIN (EAN)   | 4050118557039                                                                                                                                  |
| Qty.         | 80 pc(s).                                                                                                                                      |
| Product data | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup><br>UL: / 18.5 A                                                                                |
| Packaging    | Box                                                                                                                                            |

Creation date July 12, 2025 7:20:35 AM CEST

Catalogue status 04.07.2025 / We reserve the right to make technical changes.

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

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 28.3 mm  | Depth (inches)  | 1.114 inch |
| Height     | 24.7 mm  | Height (inches) | 0.972 inch |
| Width      | 15.24 mm | Width (inches)  | 0.6 inch   |
| Net weight | 9.04 g   |                 |            |

**System Parameters**

|                                              |                                     |                                            |                              |
|----------------------------------------------|-------------------------------------|--------------------------------------------|------------------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 5.08 | Type of connection                         | Field connection             |
| Wire connection method                       | PUSH IN with actuator               | Pitch in mm (P)                            | 5.08 mm                      |
| Pitch in inches (P)                          | 0.2 "                               | Conductor outlet direction                 | 180°                         |
| Number of poles                              | 3                                   | L1 in mm                                   | 10.16 mm                     |
| L1 in inches                                 | 0.4 "                               | 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                           | 10 mm                        |
| Screwdriver blade                            | 0.6 x 3.5                           | Screwdriver blade standard                 | DIN 5264                     |
| Plugging cycles                              | 25                                  | Plugging force/pole, max.                  | 9.5 N                        |
| Pulling force/pole, max.                     | 7.5 N                               |                                            |                              |

**Material data**

|                                       |                            |                                       |        |
|---------------------------------------|----------------------------|---------------------------------------|--------|
| Insulating material                   | PBT                        | Colour                                | black  |
| Colour chart (similar)                | RAL 9011                   | Insulating material group             | IIIa   |
| Comparative Tracking Index (CTI)      | ≥ 200                      | UL 94 flammability rating             | V-0    |
| Contact material                      | Cu-alloy                   | Contact surface                       | tinned |
| 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. | -30 °C |
| Temperature range, installation, max. | 100 °C                     |                                       |        |

**Conductors suitable for connection**

|                                                                      |                      |
|----------------------------------------------------------------------|----------------------|
| Clamping range, min.                                                 | 0.13 mm <sup>2</sup> |
| Clamping range, max.                                                 | 3.31 mm <sup>2</sup> |
| Wire connection cross section AWG, min.                              | AWG 26               |
| Wire connection cross section AWG, max.                              | AWG 12               |
| Solid, min. H05(07) V-U                                              | 0.2 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                                              | 2.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                                           | 0.2 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K                                           | 2.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max.  |                      |
| w. wire end ferrule, DIN 46228 pt 1, min.                            | 0.25 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, max.                            | 2.5 mm <sup>2</sup>  |
| Plug gauge in accordance with EN 60999 a x b; ø                      | 2.8 mm x 2.0 mm      |

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**Technical data**

|                                        |                                                                                                                                                                        |                              |                            |       |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|-------|
| Clampable conductor                    | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                 |       |
|                                        |                                                                                                                                                                        | nominal                      | 0.5 mm <sup>2</sup>        |       |
|                                        | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                    | 12 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.5/16 OR</a> |       |
|                                        |                                                                                                                                                                        | Stripping length             | nominal                    | 10 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.5/10</a>    |       |
|                                        | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                 |       |
|                                        |                                                                                                                                                                        | nominal                      | 0.75 mm <sup>2</sup>       |       |
|                                        | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                    | 12 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.75/16 W</a> |       |
|                                        |                                                                                                                                                                        | Stripping length             | nominal                    | 10 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.75/10</a>   |       |
|                                        | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                 |       |
|                                        |                                                                                                                                                                        | nominal                      | 1 mm <sup>2</sup>          |       |
|                                        | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                    | 12 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.0/16D R</a> |       |
|                                        |                                                                                                                                                                        | Stripping length             | nominal                    | 10 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.0/10</a>    |       |
|                                        | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                 |       |
|                                        |                                                                                                                                                                        | nominal                      | 1.5 mm <sup>2</sup>        |       |
|                                        | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                    | 10 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.5/10</a>    |       |
|                                        |                                                                                                                                                                        | Stripping length             | nominal                    | 12 mm |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.5/16 R</a>  |       |
| Cross-section for conductor connection | Type                                                                                                                                                                   | fine-wired                   |                            |       |
|                                        | nominal                                                                                                                                                                | 2.5 mm <sup>2</sup>          |                            |       |
| wire end ferrule                       | Stripping length                                                                                                                                                       | nominal                      | 10 mm                      |       |
|                                        | Recommended wire-end ferrule                                                                                                                                           | <a href="#">H2.5/10</a>      |                            |       |
|                                        | Stripping length                                                                                                                                                       | nominal                      | 13 mm                      |       |
|                                        | Recommended wire-end ferrule                                                                                                                                           | <a href="#">H2.5/16DS BL</a> |                            |       |
| 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)                         | 20.8 A            |
| Rated current, max. number of poles (Tu=20°C)                             | 17.4 A                 | Rated current, min. number of poles (Tu=40°C)                         | 17.9 A            |
| Rated current, max. number of poles (Tu=40°C)                             | 14.9 A                 | Rated current cross-connector, min. number of poles (Ta=20°C)         | 28.1 A            |
| Rated current cross-connector, max. number of poles (Ta=20°C)             | 23.3 A                 | Rated current cross-connector, min. number of poles (Ta=40°C)         | 24.2 A            |
| Rated current cross-connector, max. number of poles (Ta=40°C)             | 19.9 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**

|                                   |        |                                   |        |
|-----------------------------------|--------|-----------------------------------|--------|
| Rated voltage (Use group B / CSA) | 300 V  | Rated voltage (Use group D / CSA) | 300 V  |
| Rated current (Use group B / CSA) | 18.5 A | Rated current (Use group D / CSA) | 10 A   |
| Wire cross-section, AWG, min.     | AWG 12 | Wire cross-section, AWG, max.     | AWG 26 |

**Rated data acc. to UL 1059**

Rated current (Use group B / UL 1059) 18.5 A

**Packing**

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 338 mm |
| VPE width | 130 mm | VPE height | 33 mm  |

**Cross-connector rated data according to DIN IEC**

|                                                               |        |                                                               |        |
|---------------------------------------------------------------|--------|---------------------------------------------------------------|--------|
| Rated current cross-connector, max. number of poles (Ta=20°C) | 23.3 A | Rated current cross-connector, max. number of poles (Ta=40°C) | 19.9 A |
| Rated current cross-connector, min. number of poles (Ta=20°C) | 28.1 A | Rated current cross-connector, min. number of poles (Ta=40°C) | 24.2 A |

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | EC002638    |
| ETIM 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| 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 |             |             |

**Approvals**

ROHS Conform

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Environmental Product Compliance**

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

**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>• Gold-plated contact surfaces on request</li><li>• Rated current related to rated cross-section &amp; min. No. of poles.</li><li>• Wire end ferrule without plastic collar to DIN 46228/1</li><li>• Wire end ferrule with plastic collar to DIN 46228/4</li><li>• P on drawing = pitch</li><li>• Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.</li><li>• The test point can only be used as potential-pickup point.</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> |

**Downloads**

|            |                                          |
|------------|------------------------------------------|
| Catalogues | <a href="#">Catalogues in PDF-format</a> |
|------------|------------------------------------------|

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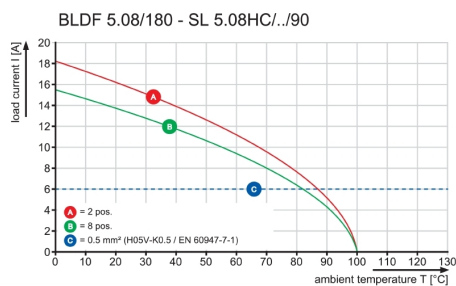
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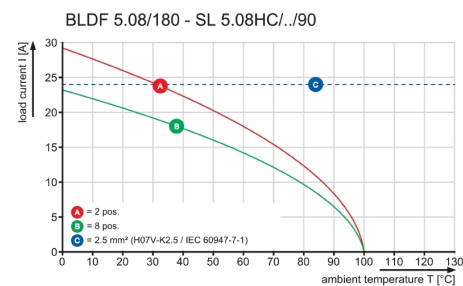
## Drawings

### Dimensional drawing

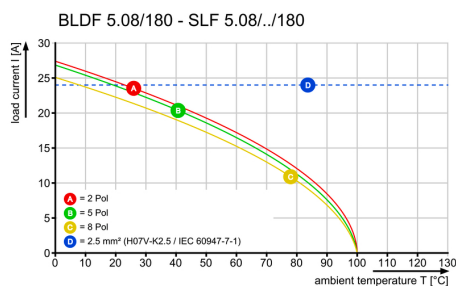
### Graph



### Graph



### Graph



Uncompromising functionality  
High vibration resistance

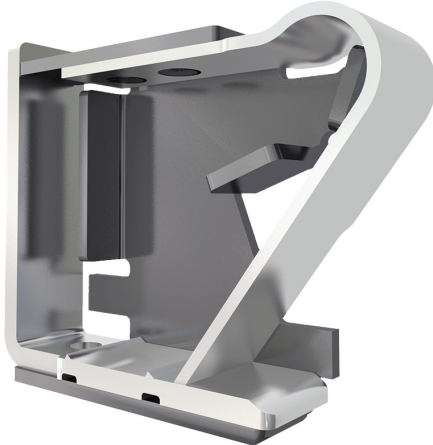
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**Drawings**

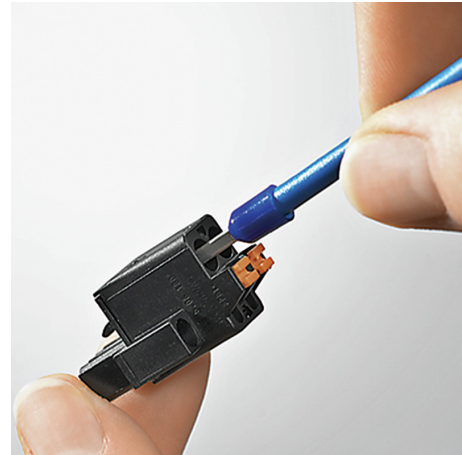
**Product benefits**



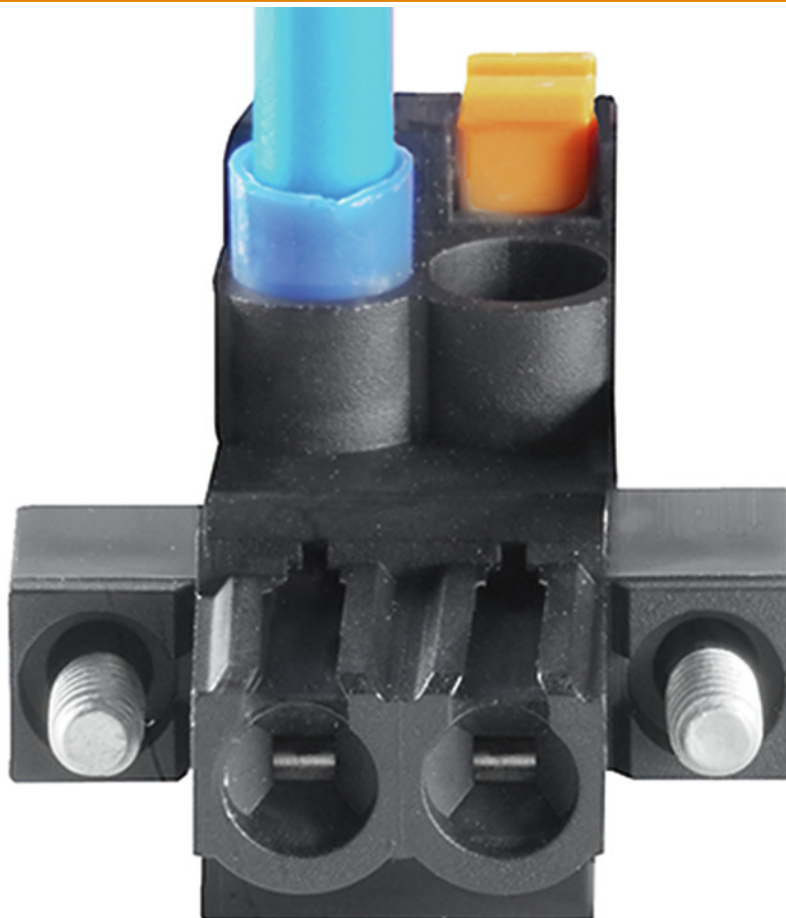
Solid PUSH IN contact  
Safe and durable

**Product benefits**

**Product benefits**



Cost-effective wiring  
Quick and intuitive operation



Wide clamping range  
Tool-free wire connection