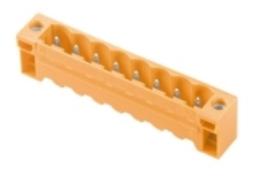


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#### Similar to illustration

Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

#### **General ordering data**

| Туре         | SL 5.08HC/02/180F 3.2SN OR BX  |
|--------------|--|
| Order No.    | <u>1147130000</u>  |
| Version      | PCB plug-in connector, male header, Flange, THT solder connection, 5.08 mm, Number of poles: 2, 180°, Solder pin length (I): 3.2 mm, tinned, orange, Box |
| GTIN (EAN)   | 4032248931040  |
| Qty.         | 90 pc(s).  |
| Product data | IEC: 400 V / 24 A<br>UL: 300 V / 18.5 A  |
| Packaging    | Вох  |

Creation date May 2, 2020 2:08:58 AM CEST



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## **Technical data**

#### **Dimensions and weights**

| Width                    | 20.16 mm   | Width (inches)  | 0.794 inch |
|--------------------------|------------|-----------------|------------|
| Height                   | 15.2 mm    | Height (inches) | 0.598 inch |
| Height of lowest version | 12 mm      | Depth           | 8.5 mm     |
| Depth (inches)           | 0.335 inch | Net weight      | 1.532 g    |

#### **System specifications**

| Cyclom opcomouncie                       |                                |      |                      |        |               |
|--|--------------------------------|------|----------------------|--------|---------------|
|  |                                |      |                      |        |               |
| Product family                           | OMNIMATE Signal - series BL/SL | 5.08 |                      |        |               |
| Type of connection                       | Board connection               |      |                      |        |               |
| Mounting onto the PCB                    | THT solder connection          |      |                      |        |               |
| Pitch in mm (P)                          | 5.08 mm                        |      |                      |        |               |
| Pitch in inches (P)                      | 0.2 inch                       |      |                      |        |               |
| Outgoing elbow                           | 180°                           |      |                      |        |               |
| Number of poles                          | 2                              |      |                      |        |               |
| Number of solder pins per pole           | 1                              |      |                      |        |               |
| Solder pin length (I)                    | 3.2 mm                         |      |                      |        |               |
| Solder pin length tolerance              | +0.1 / -0.3 mm                 |      |                      |        |               |
| Tolerance of solder pin position         | ± 0.1 mm                       |      |                      |        |               |
| Solder pin dimensions                    | d = 1.2 mm, Octagonal          |      |                      |        |               |
| Solder pin dimensions = d tolerance      | 0 / -0,03 mm                   |      |                      |        |               |
| Solder eyelet hole diameter (D)          | 1.3 mm                         |      |                      |        |               |
| Solder eyelet hole diameter tolerance (I | D)+ 0,1 mm                     |      |                      |        |               |
| L1 in mm                                 | 5.08 mm                        |      |                      |        |               |
| L1 in inches                             | 0.2 inch                       |      |                      |        |               |
| Number of rows                           | 1                              |      |                      |        |               |
| Pin series quantity                      | 1                              |      |                      |        |               |
| Volume resistance                        | ≤ 5mΩ                          |      |                      |        |               |
| Can be coded                             | Yes                            |      |                      |        |               |
| Plugging cycles                          | 25                             |      |                      |        |               |
| Plugging force/pole, max.                | 10 N                           |      |                      |        |               |
| Pulling force/pole, max.                 | 7.5 N                          |      |                      |        |               |
| Tightening torque                        | Torque type                    |      | PCB, Screw flange    |        |               |
|  | Usage information              |      | Tightening torque mi | min.   | 0.1 Nm        |
|  |                                |      |                      | max.   | 0.15 Nm       |
|  |                                |      | Recommended screw    | Part   | PTSC KA       |
|  |                                |      |                      | number | 2.2X4.5       |
|  |                                |      |                      |        | <u>WN1412</u> |

#### **Material data**

| Insulating material                   | PA GF                         | Colour                                | orange                        |
|---------------------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Colour chart (similar)                | RAL 2000                      | Insulating material group             | II                            |
| Comparative Tracking Index (CTI)      | ≥ 550                         | Insulation strength                   | ≥ 10 <sup>8</sup> Ω           |
| UL 94 flammability rating             | V-0                           | GWFI                                  | 960 °C                        |
| Contact material                      | CuMg                          | Contact surface                       | tinned                        |
| Layer structure of solder connection  | 1-3 µm Ni / 2-4 µm Sn<br>matt | Layer structure of plug contact       | 1-3 µm Ni / 2-4 µm Sn<br>matt |
| Storage temperature, min.             | -25 °C                        | Storage temperature, max.             | 50 °C                         |
| Max. relative humidity during storage | 70 %                          | Operating temperature, min.           | -50 °C                        |
| Operating temperature, max.           | 100 °C                        | Temperature range, installation, min. | -25 °C                        |
| Temperature range, installation, max. | 100 °C                        | <del>-</del>                          |                               |



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## **Technical data**

#### Rated data acc. to IEC

| tested acc. to standard                 |                        | Rated current, min. number of poles     |       |
|---|------------------------|---|-------|
|   | IEC 60664-1, IEC 61984 | (Tu=20°C)                               | 24 A  |
| Rated current, max. number of poles     |                        | Rated current, min. number of poles     |       |
| (Tu=20°C)                               | 19 A                   | (Tu=40°C)                               | 21 A  |
| Rated current, max. number of poles     |                        | Rated voltage for surge voltage class / |       |
| (Tu=40°C)                               | 16.5 A                 | pollution degree II/2                   | 400 V |
| Rated voltage for surge voltage class / |                        | Rated voltage for surge voltage class / |       |
| pollution degree III/2                  | 320 V                  | pollution degree III/3                  | 250 V |
| Rated impulse voltage for surge voltage | 9                      | Rated impulse voltage for surge voltage | •     |
| class/ pollution degree II/2            | 4 kV                   | class/ pollution degree III/2           | 4 kV  |
| Rated impulse voltage for surge voltage | 9                      |   |       |
| class/ contamination degree III/3       | 4 kV                   |   |       |

#### 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) | 18.5 A |

#### Rated data acc. to UL 1059

| Institute (cURus) |          |
|-------------------|----------|
|                   | C 774 US |

Certificate No. (cURus)

|                                       | C = 100            |                                       | 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) | 18.5 A             | Rated current (Use group D / UL 1059) | 10 A   |
| Reference to approval values          | Specifications are |                                       |        |

see approval certificate.

### **Packing**

| Packaging       | Box    | VPE length | 44 mm  |
|-----------------|--------|------------|--------|
| VPE width       | 108 mm | VPE height | 179 mm |
| Classifications |        |            |        |

| ETIM 6.0    | EC002637    | ETIM 7.0   | EC002637    |
|-------------|-------------|------------|-------------|
| eClass 9.0  | 27-44-04-02 | eClass 9.1 | 27-44-04-02 |
| eClass 10.0 | 27-44-04-02 |            |             |

#### Notes

| Notes          | Additional colours on request  |
|----------------|--|
|                |  |
|                | Gold-plated contact surfaces on request  |
|                |  |
|                | <ul> <li>Rated current related to rated cross-section &amp; min. No. of poles.</li> </ul>  |
|                |  |
|                | P on drawing = pitch   |
|                | 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.   |
| 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. |
|                | in accordance with in C-A-6 to Class 2. Further claims on the products can be evaluated on request.  |



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## **Technical data**

| Approvals | C STUS III KEMA |  |
|-----------|-----------------|--|

| ROHS | Conform |
|------|---------|
| RUHS | Conform |

**Approvals** 

| Downloads                        |                                 |
|----------------------------------|---------------------------------|
|                                  |                                 |
| Approval/Certificate/Document of | CB Certificate                  |
| Conformity                       | CB Testreport                   |
| •                                | Declaration of the Manufacturer |
| Brochure/Catalogue               | FL DRIVES EN                    |
|                                  | MB DEVICE MANUF. EN             |
|                                  | FL DRIVES DE                    |
|                                  | CAT 2 PORTFOLIOGUIDE EN         |
|                                  | FL BUILDING SAFETY EN           |
|                                  | FL APPL LED LIGHTING EN         |
|                                  | FL INDUSTR.CONTROLS EN          |
|                                  | FL MACHINE SAFETY EN            |
|                                  | FL HEATING ELECTR EN            |
|                                  | FL APPL_INVERTER EN             |
|                                  | FL_BASE_STATION_EN              |
|                                  | FL ELEVATOR EN                  |
|                                  | FL POWER SUPPLY EN              |
|                                  | FL 72H SAMPLE SER EN            |
|                                  | PO OMNIMATE EN                  |
| Engineering Data                 | <u>STEP</u>                     |



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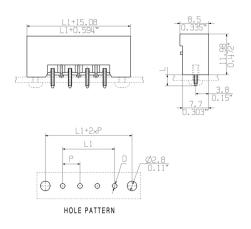
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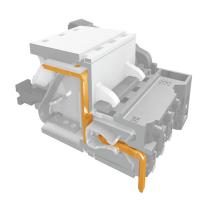
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## **Drawings**

#### **Dimensional drawing**



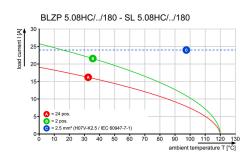
#### **Product benefits**



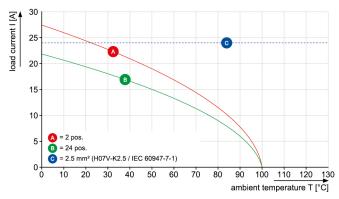
Graph

Safe power transmission Proven properties

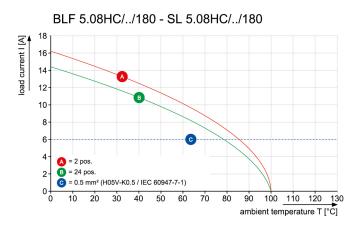
#### Graph



#### BLF 5.08HC/../180 - SL 5.08HC/../180



#### Graph





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## Mating connector (fully pluggable)

#### **BLT 5.08HC/180F**



Female plugs with TOP screw connection system for connecting wires with straight outlet direction and screw flange. The female connectors provide space for labelling and can be coded. HC = High Current.

#### **General ordering data**

| Туре                    | BLT 5.08HC/02/180F SN B     | Version  | Product data   | Packaging  |
|-------------------------|-----------------------------|--|--|------------|
| Order No.               | <u>1844220000</u>           | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>                                      | Box        |
| GTIN (EAN)              | 4032248356140               | 180°, TOP connection, Clamping range, max. : 2.5 mm², Box  | UL: 300 V / 17 A / AWG 26 - AWG 1  | 4          |
| Qty.                    | 90 pc(s).                   |  |  |            |
| Туре                    | BLT 5.08HC/02/180F SN O     | Version  | Product data   | Packaging  |
|                         |                             |  |  | . aonaging |
| Order No.               | <u>1843990000</u>           | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>                                      | Box        |
| Order No.<br>GTIN (EAN) | 1843990000<br>4032248355914 | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup><br>UL: 300 V / 17 A / AWG 26 - AWG 1 | Вох        |

#### **BLF 5.08HC/90LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

| Туре                    | BLF 5.08HC/02/90LR SN B     | Version  | Product data                                  | Packaging |
|-------------------------|-----------------------------|--|---|-----------|
| Order No.               | 1000410001                  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN)              | 4032248690374               | $90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.}: 3.31 \text{mm}^{2}\text{,}$                                  | UL: 300 V / 18.5 A / AWG 26 - AWG             |           |
| Qty.                    | 90 pc(s).                   | Box  | 12  |           |
| Туре                    | BLF 5.08HC/02/90LR SN O     | Version  | Product data                                  | Packaging |
|                         |                             |  |   | 0 0       |
| Order No.               | 1002280000                  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Вох       |
| Order No.<br>GTIN (EAN) | 1002280000<br>4032248694440 | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, 90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², | - , ,   |           |



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## Mating connector (fully pluggable)

#### **BLT 5.08HC/180LR**



Female plugs with TOP screw connection system for connecting wires with straight wire outlet and release latch mechanism. The female connectors provide space for labelling and can be coded. HC = High Current.

#### **General ordering data**

| Туре       | BLT 5.08HC/02/180LR SN | Version  | Product data                                  | Packaging |
|------------|------------------------|--|---|-----------|
| Order No.  | <u>1894130000</u>      | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248508372          | 180°, TOP connection, Clamping range, max. : 2.5 mm², Box  | UL: 300 V / 17 A / AWG 26 - AWG 1             | 4         |
| Qty.       | 90 pc(s).              |  |   |           |
| Туре       | BLT 5.08HC/02/180LR SN | Version  | Product data                                  | Packaging |
| Order No.  | 100000000              | DOD 1 :  | JEO 4003// / 07 4 / 00 0 E 0                  | _         |
| Order No.  | <u>1890220000</u>      | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,   | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248498406          | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box | UL: 300 V / 17 A / AWG 26 - AWG 1             |           |

#### **BLZP 5.08HC/90F SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

| Туре       | BLZP 5.08HC/02/90F SN O     | Version  | Product data                                | Packaging        |
|------------|-----------------------------|--|---|------------------|
| Order No.  | <u>1949800000</u>           | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box              |
| GTIN (EAN) | 4032248627721               | 90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box | UL: 300 V / 20 A / AWG 26 - AWG 1           | 2                |
| Qty.       | 90 pc(s).                   |  |   |                  |
| Туре       | DL 7D E 00110 (02 (00E CN D | Vi   | B 1 - 1 - 1 - 1                             | <b>.</b>         |
| Type       | BLZP 5.08HC/02/90F SN B     | Version  | Product data                                | Packaging        |
| Order No.  | 1950040000                  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
|            |                             |  |   | Вох              |



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## Mating connector (fully pluggable)

#### **BLF 5.08HC/180LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

#### **General ordering data**

| Туре              | BLF 5.08HC/02/180LR SN               | Version  | Product data  | Packaging        |
|-------------------|--------------------------------------|--|---|------------------|
| Order No.         | 1014120000                           | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,             | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248723218                        | 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup> | , UL: 300 V / 18.5 A / AWG 26 - AWG                           |                  |
| Qty.              | 90 pc(s).                            | Box  | 12  |                  |
|                   |                                      |  |   |                  |
| Туре              | BLF 5.08HC/02/180LR SN               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLF 5.08HC/02/180LR SN<br>1014370000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,     | Product data<br>IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |
|                   | , ,                                  |  | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Вох              |

#### **BLZP 5.08HC/180LR SN**



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

| Туре              | BLZP 5.08HC/02/180LR SN               | Version  | Product data  | Packaging        |
|-------------------|---------------------------------------|--|---|------------------|
| Order No.         | <u>1944830000</u>                     | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,         | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248619436                         | 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box        | UL: 300 V / 20 A / AWG 26 - AWG 12                          | 2                |
| Qty.              | 90 pc(s).                             |  |   |                  |
|                   |                                       |  |   |                  |
| Туре              | BLZP 5.08HC/02/180LR SN               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLZP 5.08HC/02/180LR SN<br>1945060000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, | Product data<br>IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
|                   | -, ,                                  |  | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Box              |



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## Mating connector (fully pluggable)

#### **BLF 5.08HC/270LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

#### **General ordering data**

| Туре              | BLF 5.08HC/02/270LR SN               | Version  | Product data  | Packaging        |
|-------------------|--------------------------------------|--|---|------------------|
| Order No.         | 1982310000                           | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,             | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248686407                        | 270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup> | , UL: 300 V / 18.5 A / AWG 26 - AWG                           |                  |
| Qty.              | 90 pc(s).                            | Box  | 12  |                  |
|                   |                                      |  |   |                  |
| Туре              | BLF 5.08HC/02/270LR SN               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLF 5.08HC/02/270LR SN<br>1983080000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,     | Product data<br>IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |
|                   |                                      |  | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |

#### **BLDF 5.08/180F SN**



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 2.5mm² 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.

| Туре              | BLDF 5.08/02/180F SN OR               | Version  | Product data  | Packaging        |
|-------------------|---------------------------------------|--|---|------------------|
| Order No.         | 1001220000                            | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,             | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248817955                         | 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup> | , UL: 300 V / 18.5 A / AWG 12 - AWG                             |                  |
| Qty.              | 60 pc(s).                             | Box  | 26  |                  |
|                   |                                       |  |   |                  |
| Туре              | BLDF 5.08/02/180F SN BK               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLDF 5.08/02/180F SN BK<br>1000930000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,     | Product data<br>IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |
|                   | , ,                                   |  | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>                 |                  |



#### Weidmüller Interface GmbH & Co. KG

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## Mating connector (fully pluggable)

#### **BLF 5.08HC/180F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

#### **General ordering data**

| Туре              | BLF 5.08HC/02/180F SN B               | Version  | Product data  | Packaging        |
|-------------------|---------------------------------------|--|---|------------------|
| Order No.         | 1012640000                            | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,             | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248720293                         | 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup> | , UL: 300 V / 18.5 A / AWG 26 - AWG                           |                  |
| Qty.              | 90 pc(s).                             | Box  | 12  |                  |
|                   |                                       |  |   |                  |
| Туре              | BLF 5.08HC/02/180F SN O               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLF 5.08HC/02/180F SN O<br>1013070000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,     | Product data<br>IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |
|                   | , ,                                   |  | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |

#### **BLZP 5.08HC/270LR SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

| Туре              | BLZP 5.08HC/02/270LR SN               | Version   | Product data  | Packaging        |
|-------------------|---------------------------------------|---|---|------------------|
| Order No.         | <u>1947760000</u>                     | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                                | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Box              |
| GTIN (EAN)        | 4032248624157                         | $270^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4~\text{mm}^2\text{, Box}$ | UL: 300 V / 20 A / AWG 26 - AWG 12                          | 2                |
| Qty.              | 90 pc(s).                             |   |   |                  |
|                   |                                       |   |   |                  |
| Туре              | BLZP 5.08HC/02/270LR SN               | Version   | Product data  | Packaging        |
| Type<br>Order No. | BLZP 5.08HC/02/270LR SN<br>1947530000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                        | Product data<br>IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
|                   |                                       |   | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Вох              |



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## Mating connector (fully pluggable)

#### **BLDF 5.08/180LR SN**



The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5 A current-carrying capacity. The large clamping capacity (up to 2.5mm² 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, so you can design the interlock based on the requirements of the user.

#### **General ordering data**

| Туре              | BLDF 5.08/02/180LR SN B               | Version   | Product data  | Packaging        |  |
|-------------------|---------------------------------------|---|---|------------------|--|
| Order No.         | <u>1001010000</u>                     | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,  | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |  |
| GTIN (EAN)        | 4032248817542                         | $180^{\circ}$ , PUSH IN, Spring connection, Clamping range, max. : $3.31~\text{mm}^2$ , UL: $300~\text{V}$ / $18.5~\text{A}$ / AWG 12 - AWG |   |                  |  |
| Qty.              | 60 pc(s).                             | Box   | 26  |                  |  |
|                   |                                       |   |   |                  |  |
| Туре              | BLDF 5.08/02/180LR SN O               | Version   | Product data  | Packaging        |  |
| Type<br>Order No. | BLDF 5.08/02/180LR SN O<br>1065130000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,  | Product data<br>IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |  |
|                   | , ,                                   |   | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |  |

#### **BLZP 5.08HC/90LR**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

| Туре              | BLZP 5.08HC/02/90LR SN               | Version  | Product data  | Packaging        |
|-------------------|--------------------------------------|--|---|------------------|
| Order No.         | <u>1087250000</u>                    | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,         |   | Box              |
| GTIN (EAN)        | 4032248853816                        | 90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box         | UL: 300 V / 20 A / AWG 26 - AWG 12                          |                  |
| Qty.              | 90 pc(s).                            |  |   |                  |
|                   |                                      |  |   |                  |
| Туре              | BLZP 5.08HC/02/90LR SN               | Version  | Product data  | Packaging        |
| Type<br>Order No. | BLZP 5.08HC/02/90LR SN<br>1087020000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, | Product data<br>IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
| • •               |                                      |  |   | Вох              |



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## Mating connector (fully pluggable)

#### **BLZP 5.08HC/270F SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

#### **General ordering data**

| Туре       | BLZP 5.08HC/02/270F SN               | Version  | Product data  | Packaging        |
|------------|--------------------------------------|--|---|------------------|
| Order No.  | <u>1950550000</u>                    | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,         | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Box              |
| GTIN (EAN) | 4032248628674                        | 270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box        | UL: 300 V / 20 A / AWG 26 - AWG 12                          | 2                |
| Qty.       | 90 pc(s).                            |  |   |                  |
| •          |                                      |  |   |                  |
| Туре       | BLZP 5.08HC/02/270F SN               | Version  | Product data  | Packaging        |
|            | BLZP 5.08HC/02/270F SN<br>1950310000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2, | Product data<br>IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
| Туре       | , ,                                  |  | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Вох              |

#### **BLL 5.08/90FI**



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

| Туре       | BLL 5.08/02/90FI 3.2SN | Version  | Product data      | Packaging |
|------------|------------------------|--|-------------------|-----------|
| Order No.  | <u>1843750000</u>      | PCB plug-in connector, female header, Inverted flange, THT solder                    | IEC: 400 V / 23 A | Box       |
| GTIN (EAN) | 4032248355501          | connection, 5.08 mm, Number of poles: 2, $90^{\circ}\text{, Solder pin length (I):}$ | UL: 300 V / 15 A  |           |
| Qty.       | 90 pc(s).              | 3.2 mm, tinned, orange, Box  |                   |           |



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## Mating connector (fully pluggable)

#### **BLZP 5.08HC/180F SN**



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

#### General ordering data

| Туре              | BLZP 5.08HC/02/180F SN               | Version   | Product data  | Packaging        |
|-------------------|--------------------------------------|---|---|------------------|
| Order No.         | <u>1944090000</u>                    | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,              |   | Box              |
| GTIN (EAN)        | 4032248617470                        | 32248617470 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box |   | 2                |
| Qty.              | 90 pc(s).                            |   |   |                  |
|                   |                                      |   |   |                  |
| Туре              | BLZP 5.08HC/02/180F SN               | Version   | Product data  | Packaging        |
| Type<br>Order No. | BLZP 5.08HC/02/180F SN<br>1944330000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,      | Product data<br>IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Packaging<br>Box |
| • •               | , ,                                  |   | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>                 | Вох              |

#### **BLF 5.08HC/270F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

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- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

| Туре              | BLF 5.08HC/02/270F SN 0               | Version  | Product data  | Packaging        |  |
|-------------------|---------------------------------------|--|---|------------------|--|
| Order No.         | <u>1982890000</u>                     | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                                     | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>               | Box              |  |
| GTIN (EAN)        | 4032248686988                         | 270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², UL: 300 V / 18.5 A / AWG 26 - AWG |   |                  |  |
| Qty.              | 90 pc(s).                             | Box  | 12  |                  |  |
|                   |                                       |  |   |                  |  |
| Type              | BLF 5.08HC/02/270F SN B               | Version  | Product data  | Packaging        |  |
| Type<br>Order No. | BLF 5.08HC/02/270F SN B<br>1982120000 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                             | Product data  IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |  |
|                   |                                       |  | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>               | Box              |  |



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## Mating connector (fully pluggable)

#### **BLF 5.08HC/90F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

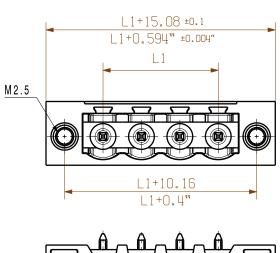
The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

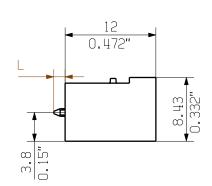
In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

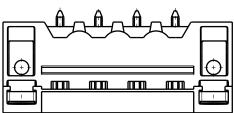
- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

| Туре       | BLF 5.08HC/02/90F SN OR               | Version   | Product data  | Packaging        |
|------------|---------------------------------------|---|---|------------------|
| Order No.  | 1002090000                            | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                                  | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |
| GTIN (EAN) | 4032248694044                         | $90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.}: 3.31 \text{mm}^{2}\text{,}$ | UL: 300 V / 18.5 A / AWG 26 - AWG                             |                  |
| Qty.       | 90 pc(s).                             | Box   | 12  |                  |
| _          |                                       |   |   |                  |
| Type       | BLF 5.08HC/02/90F SN BK               | Version   | Product data  | Packaging        |
| Order No.  | BLF 5.08HC/02/90F SN BK<br>1000220001 | Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 2,                          | Product data<br>IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Packaging<br>Box |
|            | , ,                                   |   | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>                 | Box              |









1/1 0 

L1+10.16 L1+0.4" L1  $\oplus$ Ρ PCB-Ø 1,4 TILL POLE 8 PCB-Ø 1,5 FROM POLE 9 HOLE PATTERN

116,84 4.600 23 111,76 4,400 22 106,68 4,200 101,60 4,000 20 96.52 3.800 19 91,44 3,600 18 86,36 3,400 17 81,28 3,200 16 76,20 3,000 15 71,12 2,800 14 66,04 2,600 13 60,96 2,400 12 55.88 2,200 50,80 2.000 10 45,72 1,800 40.64 1.600 9 8 35.56 1,400 30.48 1,200 25,40 6 1,000 5 20,32 0,800 4 15.24 0.600 3 10.16 0.400

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to IEC 60326 part 3 very fine.

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

P = PITCH

SHOWN: SL 5.08HC/04/180F

General tolerance: DIN ISO 2768-mK

| STIFTLAENGE L | TOLERANZ  | 6 | 25,40   | 1,000     |
|---------------|-----------|---|---------|-----------|
| PIN LENGTH L  | TOLERANCE | 5 | 20,32   | 0,800     |
| TIN CENOTITE  | 0.1       | 4 | 15,24   | 0,600     |
| 3,2           | -0.3      | 3 | 10,16   | 0,400     |
| 4.5           | 0.1       | 2 | 5,08    | 0,200     |
| 4,5           | -0.3      | n | L1 [mm] | L1 [Inch] |

| -, | _           | _  |           |
|----|-------------|----|-----------|
|    | Cat.no.:.   |    |           |
|    | 3 509       | 53 | 04        |
|    | Drawing no. |    | Issue no. |

05

sheets

04

| ROMS         | 99587/5<br>22.11.17 HE | LIS_MA 04  | W        | eidmüller 🏂             |
|--------------|------------------------|------------|----------|-------------------------|
| COMPLIANT    | Modifi                 | cation     |          |                         |
|              |                        | Date       | Name     |                         |
|              | Drawn                  | 18.02.2011 | HERTEL_S | SL 5.08H                |
|              | Responsible            |            | HERTEL_S | STIFT                   |
| Scale: 2:1   | Checked                | 30.11.2017 | HELIS_MA | MALE H                  |
| Supersedes:. | Approved               |            | LANG T   | Product file: SL5.08 HC |

99587/5 22.11.17 HELIS MA

SL 5.08HC/../180.. STIFTLEISTE

MALE HEADER

Product file: SL5.08 HC 7377

Sheet



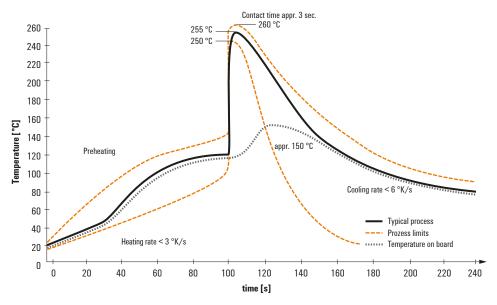
### Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

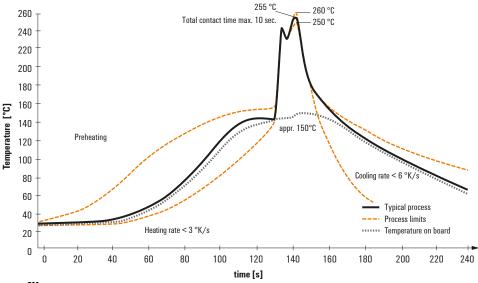
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#### Single Wave:



#### **Double Wave:**



#### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.