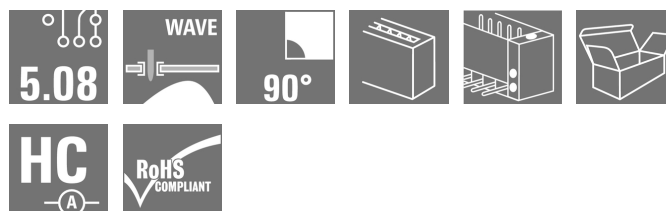


**OMNIMATE Signal - series BL/SL 5.08  
SL 5.08HC/23/90F 3.2SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com



Similar to illustration

Pin headers made from glass-fibre-reinforced plastic with 90° 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**

|              |  |
|--------------|--|
| Type         | SL 5.08HC/23/90F 3.2SN OR BX   |
| Order No.    | <a href="#">1149310000</a>   |
| Version      | PCB plug-in connector, male header, Flange, THT solder connection, 5.08 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box |
| GTIN (EAN)   | 4032248936465  |
| Qty.         | 12 pc(s).  |
| Product data | IEC: 400 V / 24 A<br>UL: 300 V / 18.5 A  |
| Packaging    | Box  |

Creation date May 2, 2020 6:48:54 AM CEST

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Technical data

#### Dimensions and weights

|                          |            |                 |            |
|--------------------------|------------|-----------------|------------|
| Width                    | 127 mm     | Width (inches)  | 5 inch     |
| Height                   | 11.7 mm    | Height (inches) | 0.461 inch |
| Height of lowest version | 8.5 mm     | Depth           | 12 mm      |
| Depth (inches)           | 0.472 inch | Net weight      | 9.006 g    |

#### System specifications

|   |                                     |                   |             |  |
|---|-------------------------------------|-------------------|-------------|--|
| 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                            | 90°                                 |                   |             |  |
| Number of poles                           | 23                                  |                   |             |  |
| Number of solder pins per pole            | 1                                   |                   |             |  |
| Solder pin length (l)                     | 3.2 mm                              |                   |             |  |
| Solder pin length tolerance               | +0.1 / -0.3 mm                      |                   |             |  |
| Tolerance of solder pin position          | ± 0.20 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 (D) | + 0.1 mm                            |                   |             |  |
| L1 in mm                                  | 111.76 mm                           |                   |             |  |
| L1 in inches                              | 4.4 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 | min.        | 0.1 Nm                                 |
|   |                                     |                   | max.        | 0.15 Nm                                |
|   |                                     | Recommended screw | Part number | <a href="#">PTSC KA 2.2X4.5 WN1412</a> |

#### 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 matt | Layer structure of plug contact       | 1-3 µm Ni / 2-4 µm Sn 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                     |                                       |                            |

**OMNIMATE Signal - series BL/SL 5.08**  
**SL 5.08HC/23/90F 3.2SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com


**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)                         | 24 A  |
| Rated current, max. number of poles (Tu=20°C)                             | 19 A                   | Rated current, min. number of poles (Tu=40°C)                         | 21 A  |
| Rated current, max. number of poles (Tu=40°C)                             | 16.5 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                   |   |       |

**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  |

**Rated data acc. to UL 1059**

|                                       |   |                                       |        |
|---------------------------------------|---|---------------------------------------|--------|
| Institute (cURus)                     |  | Certificate No. (cURus)               | 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 maximum values, details - see approval certificate.              |                                       |        |

**Packing**

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 35 mm  |
| VPE width | 130 mm | VPE height | 200 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          | <ul style="list-style-type: none"> <li>• Additional colours 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>• 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> </ul> |
| 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.   |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

# Technical data

## Approvals

Approvals



ROHS

Conform

## Downloads

Approval/Certificate/Document of  
Conformity

[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

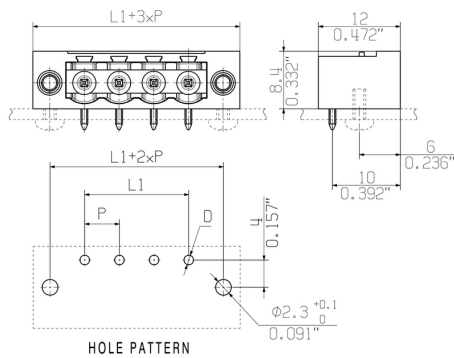
[STEP](#)

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

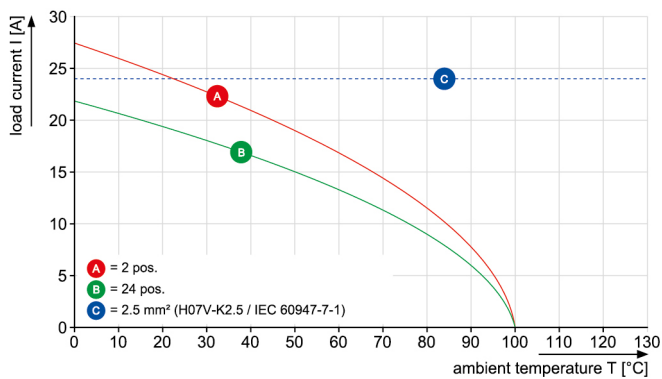
## Drawings

### Dimensional drawing



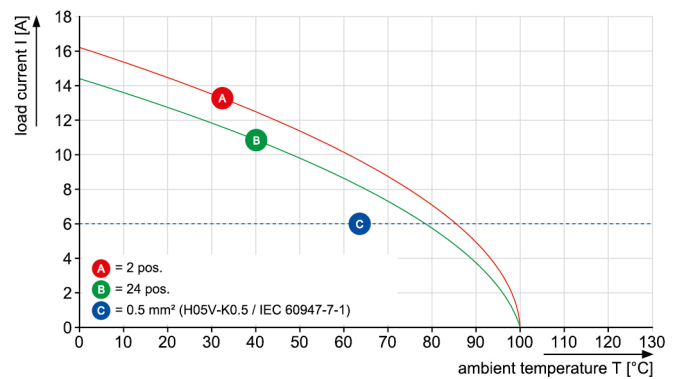
### Graph

BLF 5.08HC/./90 - SL 5.08HC/./90



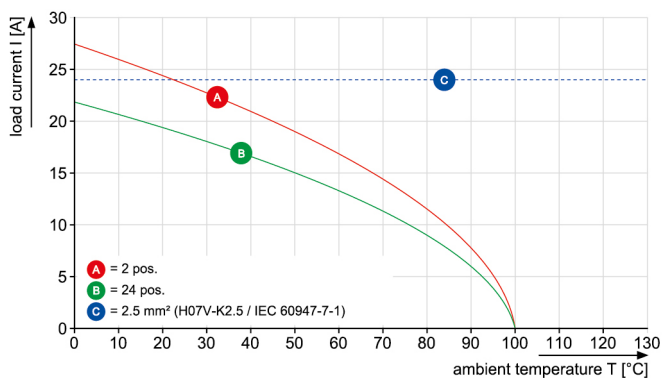
### Graph

BLF 5.08HC/./90 - SL 5.08HC/./90



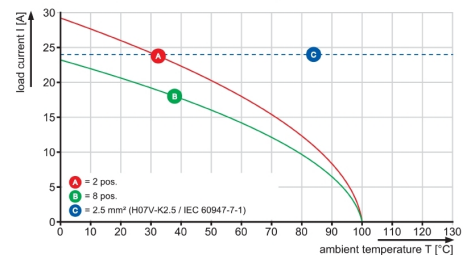
### Graph

BLF 5.08HC/./270 - SL 5.08HC/./90



### Graph

BLDF 5.08/180 - SL 5.08HC/./90



## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Mating connector (fully pluggable)

#### 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.

#### General ordering data

| Type       | BLZP 5.08HC/23/90LR SN ... | Version   | Product data                                | Packaging |
|------------|----------------------------|---|---|-----------|
| Order No.  | <a href="#">1087230000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,             | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248854486              | 90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                  |   |   |           |
| Type       | BLZP 5.08HC/23/90LR SN ... | Version   | Product data                                | Packaging |
| Order No.  | <a href="#">1087460000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,             | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248854257              | 90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                  |   |   |           |

#### 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.

#### General ordering data

| Type       | BLZP 5.08HC/23/270LR SN ... | Version  | Product data                                | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1947740000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,              | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248624133               | 270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |  |   |           |
| Type       | BLZP 5.08HC/23/270LR SN ... | Version  | Product data                                | Packaging |
| Order No.  | <a href="#">1947970000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,              | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248624461               | 270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |  |   |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmüller.com

### 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. 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

| Type       | BLZP 5.08HC/23/180F SN ... | Version   | Product data                       | Packaging |
|------------|----------------------------|---|------------------------------------|-----------|
| Order No.  | <a href="#">1944300000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23, | IEC: 400 V / 23 A / 0.2 - 4 mm²    | Box       |
| GTIN (EAN) | 4032248618880              | 180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box  | UL: 300 V / 20 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                    |           |
| Type       | BLZP 5.08HC/23/180F SN ... | Version   | Product data                       | Packaging |
| Order No.  | <a href="#">1944540000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23, | IEC: 400 V / 23 A / 0.2 - 4 mm²    | Box       |
| GTIN (EAN) | 4032248619115              | 180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box  | UL: 300 V / 20 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                    |           |

#### 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

| Type       | BLF 5.08HC/23/180LR SN ... | Version   | Product data                         | Packaging |
|------------|----------------------------|---|--------------------------------------|-----------|
| Order No.  | <a href="#">1014350000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,     | IEC: 400 V / 24 A / 0.2 - 2.5 mm²    | Box       |
| GTIN (EAN) | 4032248723003              | 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm², Box | UL: 300 V / 18.5 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                      |           |
| Type       | BLF 5.08HC/23/180LR SN ... | Version   | Product data                         | Packaging |
| Order No.  | <a href="#">1014610000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,     | IEC: 400 V / 24 A / 0.2 - 2.5 mm²    | Box       |
| GTIN (EAN) | 4032248722778              | 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm², Box | UL: 300 V / 18.5 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                      |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Mating connector (fully pluggable)

#### 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.

#### General ordering data

| Type       | BLZP 5.08HC/23/90F SN B ... | Version   | Product data                                | Packaging |
|------------|-----------------------------|---|---|-----------|
| Order No.  | <a href="#">1950250000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,             | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248628186               | 90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |   |   |           |
| Type       | BLZP 5.08HC/23/90F SN O ... | Version   | Product data                                | Packaging |
| Order No.  | <a href="#">1950020000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,             | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248627950               | 90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |   |   |           |

#### 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. 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

| Type       | BLZP 5.08HC/23/180LR SN ... | Version  | Product data                                | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1945040000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,              | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248620173               | 180°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |  |   |           |
| Type       | BLZP 5.08HC/23/180LR SN ... | Version  | Product data                                | Packaging |
| Order No.  | <a href="#">1945270000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,              | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248620418               | 180°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box | UL: 300 V / 20 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |  |   |           |



## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### 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

| Type       | BLZP 5.08HC/23/270F SN ... | Version   | Product data                       | Packaging |
|------------|----------------------------|---|------------------------------------|-----------|
| Order No.  | <a href="#">1950800000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23, | IEC: 400 V / 23 A / 0.2 - 4 mm²    | Box       |
| GTIN (EAN) | 4032248629244              | 270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box | UL: 300 V / 20 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                    |           |
| Type       | BLZP 5.08HC/23/270F SN ... | Version   | Product data                       | Packaging |
| Order No.  | <a href="#">1950520000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23, | IEC: 400 V / 23 A / 0.2 - 4 mm²    | Box       |
| GTIN (EAN) | 4032248628643              | 270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box | UL: 300 V / 20 A / AWG 26 - AWG 12 |           |
| Qty.       | 12 pc(s).                  |   |                                    |           |

#### BLL 5.08/90FI



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

#### General ordering data

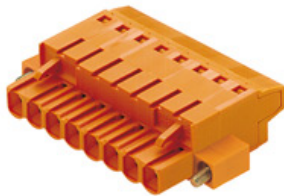
| Type       | BLL 5.08/23/90FI 3.2SN ... | Version   | Product data      | Packaging |
|------------|----------------------------|---|-------------------|-----------|
| Order No.  | <a href="#">1843960000</a> | PCB plug-in connector, female header, Inverted flange, THT solder     | IEC: 400 V / 23 A | Box       |
| GTIN (EAN) | 4032248355716              | connection, 5.08 mm, Number of poles: 23, 90°, Solder pin length (l): | UL: 300 V / 15 A  |           |
| Qty.       | 12 pc(s).                  | 3.2 mm, tinned, orange, Box   |                   |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmüller.com

### 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

| Type       | BLT 5.08HC/23/180F SN O ... | Version  | Product data                                  | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1844200000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,      | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248356126               | 180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box | UL: 300 V / 17 A / AWG 26 - AWG 14            |           |
| Qty.       | 12 pc(s).                   |  |   |           |
| Type       | BLT 5.08HC/23/180F SN B ... | Version  | Product data                                  | Packaging |
| Order No.  | <a href="#">1844430000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,      | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248356362               | 180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box | UL: 300 V / 17 A / AWG 26 - AWG 14            |           |
| Qty.       | 12 pc(s).                   |  |   |           |

#### 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

| Type       | BLF 5.08HC/23/180F SN B ... | Version   | Product data                                  | Packaging |
|------------|-----------------------------|---|---|-----------|
| Order No.  | <a href="#">1013050000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,                   | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248720828               | 180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box | UL: 300 V / 18.5 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |   |   |           |
| Type       | BLF 5.08HC/23/180F SN O ... | Version   | Product data                                  | Packaging |
| Order No.  | <a href="#">1013320000</a>  | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,                   | IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248721054               | 180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box | UL: 300 V / 18.5 A / AWG 26 - AWG 12          |           |
| Qty.       | 12 pc(s).                   |   |   |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### 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

| Type       | BLT 5.08HC/23/180LR SN ... | Version  | Product data                                  | Packaging |
|------------|----------------------------|--|---|-----------|
| Order No.  | <a href="#">1890430000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,      | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248498918              | 180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box | UL: 300 V / 17 A / AWG 26 - AWG 14            |           |
| Qty.       | 12 pc(s).                  |  |   |           |
| Type       | BLT 5.08HC/23/180LR SN ... | Version  | Product data                                  | Packaging |
| Order No.  | <a href="#">1894360000</a> | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 23,      | IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4032248508693              | 180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box | UL: 300 V / 17 A / AWG 26 - AWG 14            |           |
| Qty.       | 12 pc(s).                  |  |   |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmüller.com

## Accessories

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

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

## Accessories

### LED Light guides



#### Effective: the link between LED and front panel.

Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.

The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.

The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

### General ordering data

| Type       | SL FLA 3.8/1               | Version   | Product data | Packaging |
|------------|----------------------------|---|--------------|-----------|
| Order No.  | <a href="#">1580110000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              | Box       |
| GTIN (EAN) | 4008190050740              | Number of poles: 1  |              |           |
| Qty.       | 100 pc(s).                 |   |              |           |
| Type       | SL FLA 2,3/1               | Version   | Product data | Packaging |
| Order No.  | <a href="#">1636670000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              | Box       |
| GTIN (EAN) | 4008190409975              | Number of poles: 1  |              |           |
| Qty.       | 100 pc(s).                 |   |              |           |
| Type       | SL FLA 2,3/24              | Version   | Product data | Packaging |
| Order No.  | <a href="#">1636680000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              | Box       |
| GTIN (EAN) | 4008190409968              | Number of poles: 1  |              |           |
| Qty.       | 10 pc(s).                  |   |              |           |
| Type       | SL FLA 3.8/24              | Version   | Product data |           |
| Order No.  | <a href="#">1595860000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              |           |
| GTIN (EAN) | 4008190140892              | Number of poles: 1  |              |           |
| Qty.       | 10 pc(s).                  |   |              |           |
| Type       | SL FLA 9.0/24              | Version   | Product data |           |
| Order No.  | <a href="#">1595870000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              |           |
| GTIN (EAN) | 4008190079796              | Number of poles: 1  |              |           |
| Qty.       | 10 pc(s).                  |   |              |           |
| Type       | SL FLA 9.0/1               | Version   | Product data | Packaging |
| Order No.  | <a href="#">1580120000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              | Box       |
| GTIN (EAN) | 4008190031909              | Number of poles: 1  |              |           |
| Qty.       | 100 pc(s).                 |   |              |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Accessories

| Type       | SL FLA 1.5/1               | Version   | Product data | Packaging |
|------------|----------------------------|---|--------------|-----------|
| Order No.  | <a href="#">1580100000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              | Box       |
| GTIN (EAN) | 4008190152475              | Number of poles: 1  |              |           |
| Qty.       | 100 pc(s).                 |   |              |           |
| Type       | SL FLA 1.5/24              | Version   | Product data |           |
| Order No.  | <a href="#">1595850000</a> | PCB plug-in connector, Accessories, Flood-light display, Transparent, |              |           |
| GTIN (EAN) | 4008190092573              | Number of poles: 1  |              |           |
| Qty.       | 10 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).                  |  |              |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

## Accessories

### Additional accessories



#### No task is too small when creating the perfect solution. br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

### General ordering data

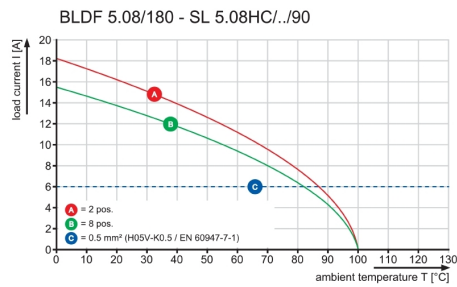
| Type       | SL AT SW                   | Version  | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No.  | <a href="#">1770240000</a> | PCB plug-in connector, Accessories, Spacer, black, Number of poles: 1  |              | Box       |
| GTIN (EAN) | 4032248117710              |  |              |           |
| Qty.       | 100 pc(s).                 |  |              |           |
| Type       | SL AT OR                   | Version  | Product data | Packaging |
| Order No.  | <a href="#">1598300000</a> | PCB plug-in connector, Accessories, Spacer, orange, Number of poles: 1 |              | Box       |
| GTIN (EAN) | 4008190189266              |  |              |           |
| Qty.       | 100 pc(s).                 |  |              |           |

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/23/90F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

## Graph



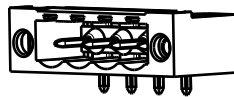
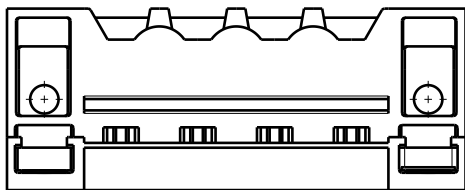
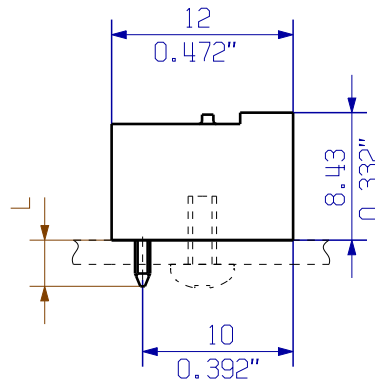
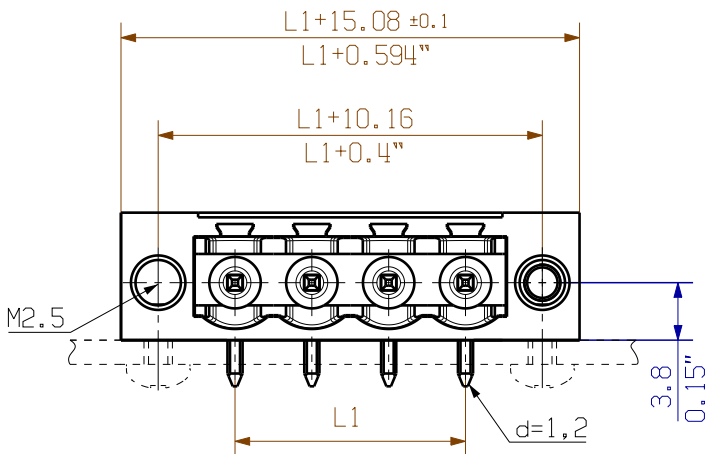


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models or designs.

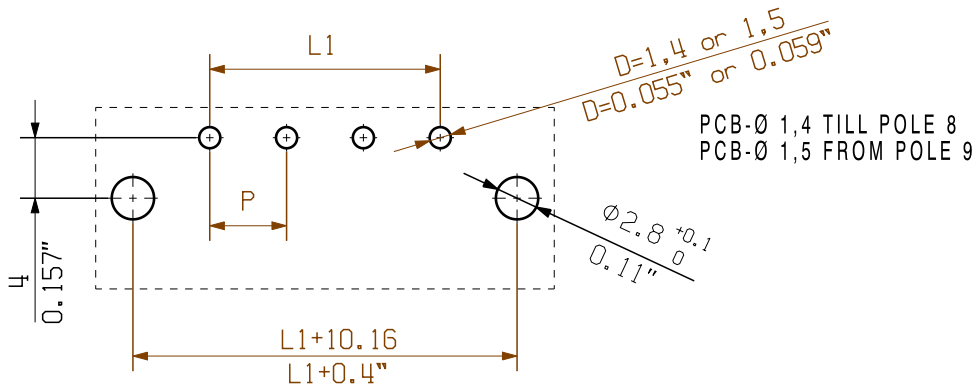
© Weidmüller Interface GmbH & Co. KG

Dimensions without tolerances are no check dimensions

The English version is binding



1/1



HOLE PATTERN

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.  
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.  
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

P=PITCH

SHOWN: SL 5.08HC/04/90F

| STIFTLÄNGE L | TOLERANZ  |
|--------------|-----------|
| PIN LENGTH L | TOLERANCE |
| 3,2          | 0,1       |
|              | -0,3      |
| 4,5          | 0,1       |
|              | -0,3      |

|    |         |           |
|----|---------|-----------|
| 24 | 116,84  | 4,600     |
| 23 | 111,76  | 4,400     |
| 22 | 106,68  | 4,200     |
| 21 | 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     |
| 11 | 50,80   | 2,000     |
| 10 | 45,72   | 1,800     |
| 9  | 40,64   | 1,600     |
| 8  | 35,56   | 1,400     |
| 7  | 30,48   | 1,200     |
| 6  | 25,40   | 1,000     |
| 5  | 20,32   | 0,800     |
| 4  | 15,24   | 0,600     |
| 3  | 10,16   | 0,400     |
| 2  | 5,08    | 0,200     |
| n  | L1 [mm] | L1 [inch] |



DIN ISO 2768-m

101482/5  
07.02.18 HELIS\_MA 00

Modification

**Weidmüller**



3 48753 04

Drawing no. Issue no.

Sheet 04 of 05 sheets



Scale: 2:1

Supersedes: .

| Date        | Name     |
|-------------|----------|
| Drawn       | HERTEL_S |
| Responsible | HERTEL_S |
| Checked     | HELIS_MA |
| Approved    | LANG_T   |

**SL 5.08HC/.. /90...**  
STIFTLISTE  
MALE HEADER

Product file: SL-HP 5.08

7377

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

### 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.

We reserve the right to make technical changes.