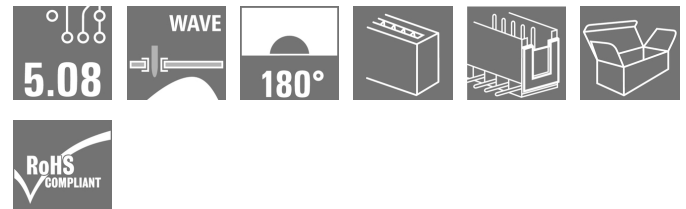


## OMNIMATE Signal - series BLA/SLA 5.08 SLA 04/180B 3.2SN OR BX

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

### Product image



Similar to illustration

Dimensionally stable, straight, codable male connector from the Unimate range of plugs with integral aid to prevent wrong connections. Available with open or closed sides. Fixing blocks can be attached to the closed version. The solder pin length of 3.2 mm has been optimised for wave soldering. Supplied in cardboard box.

### General ordering data

|              |   |
|--------------|---|
| Type         | SLA 04/180B 3.2SN OR BX   |
| Order No.    | <a href="#">1242760000</a>  |
| Version      | PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 4, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box |
| GTIN (EAN)   | 4008 190049843  |
| Qty.         | 100 pc(s).  |
| Product data | IEC: 400 V / 17.5 A<br>UL: 300 V / 10 A   |
| Packaging    | Box   |

Creation date June 25, 2020 6:54:19 PM CEST

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

|                          |           |                 |            |
|--------------------------|-----------|-----------------|------------|
| Width                    | 22.32     | Width (inches)  | 0.879 inch |
| Height                   | 15.2 mm   | Height (inches) | 0.598 inch |
| Height of lowest version | 12 mm     | Depth           | 9.4 mm     |
| Depth (inches)           | 0.37 inch | Net weight      | 1.87 g     |

**System specifications**

|   |                                       |  |                              |
|---|---------------------------------------|--|------------------------------|
| Product family                                    | OMNIMATE Signal - series BLA/SLA 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                                   | 4                                     | Number of solder pins per pole               | 1                            |
| Solder pin length (l)                             | 3.2 mm                                | Tolerance of solder pin position             | ± 0.1 mm                     |
| Solder pin dimensions                             | d = 1.2 mm, Octagonal                 | Solder eyelet hole diameter (D)              | 1.3 mm                       |
| Solder eyelet hole diameter tolerance (D)+ 0,1 mm |                                       | L1 in mm                                     | 15.24 mm                     |
| L1 in inches                                      | 0.6 inch                              | Number of rows                               | 1                            |
| Pin series quantity                               | 1                                     | Touch-safe protection acc. to DIN VDE 57 106 | Safe from back-of-hand touch |
| Volume resistance                                 | 5.50 mΩ                               | Can be coded                                 | Yes                          |
| Plugging cycles                                   | 25                                    | Pulling force/pole, max.                     | 2 N                          |

**Material data**

|                                       |          |                                       |                     |
|---------------------------------------|----------|---------------------------------------|---------------------|
| Insulating material                   | PBT GF   | Colour                                | orange              |
| Colour chart (similar)                | RAL 2000 | Insulating material group             | IIIa                |
| Comparative Tracking Index (CTI)      | ≥ 200    | Insulation strength                   | ≥ 10 <sup>8</sup> Ω |
| UL 94 flammability rating             | V-0      | GWFI                                  | 960 °C              |
| Contact material                      | CuSn     | Contact surface                       | tinned              |
| Storage temperature, min.             | -25 °C   | Storage temperature, max.             | 50 °C               |
| Max. relative humidity during storage | 70 %     | Operating temperature, min.           | -50 °C              |
| Operating temperature, max.           | 120 °C   | Temperature range, installation, min. | -25 °C              |
| Temperature range, installation, max. | 120 °C   |                                       |                     |


**Rated data acc. to IEC**

|   |                        |   |                    |
|---|------------------------|---|--------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 17.5 A             |
| Rated current, max. number of poles (Tu=20°C)                             | 12.5 A                 | Rated current, min. number of poles (Tu=40°C)                         | 16 A               |
| Rated current, max. number of poles (Tu=40°C)                             | 11 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 400 V              |
| Rated voltage for surge voltage class / pollution degree III/2            | 320 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 250 V              |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV               |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV                   | Short-time withstand current resistance                               | 3 x 1 s with 100 A |

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**Technical data****Rated data acc. to CSA**

|                                   |   |                                   |           |
|-----------------------------------|---|-----------------------------------|-----------|
| Institute (CSA)                   |  | Certificate No. (CSA)             | 12400-158 |
| Rated voltage (Use group B / CSA) | 300 V   | Rated voltage (Use group D / CSA) | 300 V     |
| Rated current (Use group B / CSA) | 10 A  | Rated current (Use group D / CSA) | 10 A      |
| Reference to approval values      | Specifications are maximum values, details - see approval certificate.            |                                   |           |

**Rated data acc. to UL 1059**

|                                       |   |                                       |        |
|---------------------------------------|---|---------------------------------------|--------|
| Institute (UR)                        |  | Certificate No. (UR)                  | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V   | Rated voltage (Use group D / UL 1059) | 300 V  |
| Rated current (Use group B / UL 1059) | 10 A  | Rated current (Use group D / UL 1059) | 10 A   |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.            |                                       |        |

**Packing**

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 70 mm  |
| VPE width | 76 mm | VPE height | 148 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 | UNSPSC     | 30-21-18-10 |

**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.   |

**Data sheet****OMNIMATE Signal - series BLA/SLA 5.08  
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**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](#)  
[FL BUILDING SAFETY EN](#)  
[FL APPL LED LIGHTING EN](#)  
[FLIndustr.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

[SLA.zip](#)

**Data sheet**

**OMNIMATE Signal - series BLA/SLA 5.08  
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**Drawings**

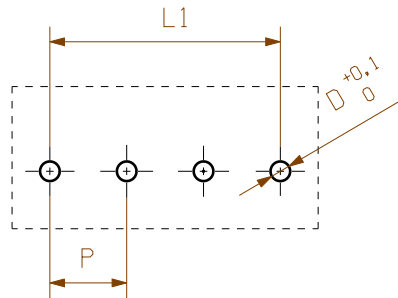
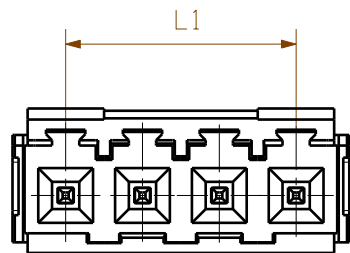
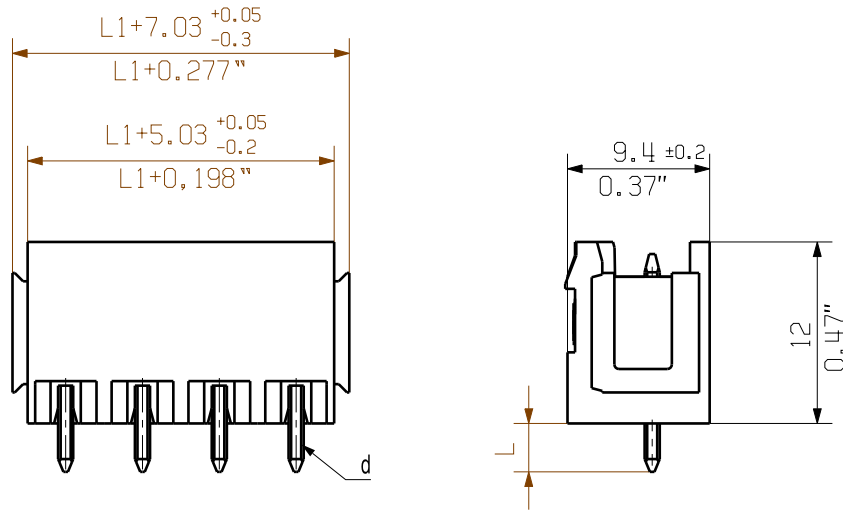
**Dimensional drawing**

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HOLE PATTERN

P = 5.08mm/0.2inch

d = max.1.2mm/0.047inch  
D = 1.3mm/0.51inch

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.

|    |         |           |
|----|---------|-----------|
| 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] |

|                            |                       |
|----------------------------|-----------------------|
| 3,2                        | 0,1                   |
|                            | -0,3                  |
| 4,5                        | 0,1                   |
|                            | -0,3                  |
| PINLÄNGE L<br>PIN LENGTH L | TOLERANZ<br>TOLERANCE |

SHOWN:SLA 04/180B

General tolerance:  
DIN ISO 2768-mK



101264/4  
19.02.18 HERTEL\_S 00

Modification

**Weidmüller**

Cat.no.: . . . . .  
**3 27739** **13**

Drawing no. Issue no.  
Sheet 02 of 02 sheets



| Date | Name |
|------|------|
|------|------|

|       |            |          |
|-------|------------|----------|
| Drawn | 17.09.2009 | HELIS_MA |
|-------|------------|----------|

|             |  |          |
|-------------|--|----------|
| Responsible |  | HERTEL_S |
|-------------|--|----------|

|         |            |          |
|---------|------------|----------|
| Checked | 27.02.2018 | HELIS_MA |
|---------|------------|----------|

|          |  |        |
|----------|--|--------|
| Approved |  | LANG_T |
|----------|--|--------|

**SLA .. / 180...**  
STIFTLISTE  
PIN HEADER

Scale: 2:1

Supersedes: .

Product file: SLA

7123

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## Recommended wave soldering profiles

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 Germany  
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 Fax: +49 5231 14-292083  
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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.