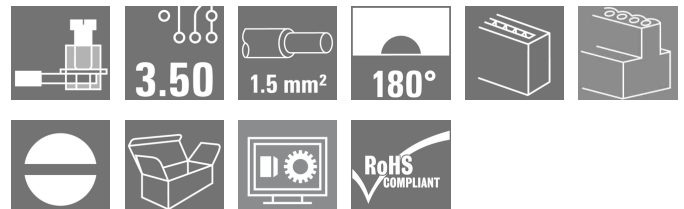


**OMNIMATE Signal - series BL/SL 3.50**  
**BL 3.50/02/180 SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 1429-0  
 Fax: +49 5231 14292083  
[www.weidmueller.com](http://www.weidmueller.com)



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They provide space for labelling and can be coded.

**General ordering data**

|              |                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Type         | BL 3.50/02/180 SN OR BX                                                                                                                            |
| Order No.    | <a href="#">1597360000</a>                                                                                                                         |
| Version      | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box |
| GTIN (EAN)   | 4008190435868                                                                                                                                      |
| Qty.         | 264 pc(s).                                                                                                                                         |
| Product data | IEC: 320 V / 17 A / 0.2 - 1.5 mm²<br>UL: 300 V / 10 A / AWG 28 - AWG 14                                                                            |
| Packaging    | Box                                                                                                                                                |

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## Technical data

### Dimensions and weights

|            |         |
|------------|---------|
| Net weight | 0.735 g |
|------------|---------|

### System parameters

|                                              |                                     |                                            |                     |
|----------------------------------------------|-------------------------------------|--------------------------------------------|---------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 3.50 | Type of connection                         | Field connection    |
| Wire connection method                       | Clamping yoke connection            | Pitch in mm (P)                            | 3.5 mm              |
| Pitch in inches (P)                          | 0.138 inch                          | Conductor outlet direction                 | 180°                |
| No. of poles                                 | 2                                   | L1 in mm                                   | 3.5 mm              |
| L1 in inches                                 | 0.138 inch                          | Number of rows                             | 1                   |
| Pin series quantity                          | 1                                   | Rated cross-section                        | 1.5 mm <sup>2</sup> |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch              | Touch-safe protection acc. to DIN VDE 0470 | IP 20               |
| Can be coded                                 | Yes                                 | Stripping length                           | 6 mm                |
| Tightening torque, min.                      | 0.2 Nm                              | Tightening torque, max.                    | 0.25 Nm             |
| Clamping screw                               | M 2                                 | Screwdriver blade                          | 0.4 x 2.5           |
| Screwdriver blade standard                   | DIN 5264                            | Plugging cycles                            | 25                  |
| push-in force/pole                           | 10 N                                | Withdrawal force per pole                  | 4 N                 |
| Packaging                                    | Box                                 |                                            |                     |

### Material data

|                                       |          |                                       |                          |
|---------------------------------------|----------|---------------------------------------|--------------------------|
| Insulating material                   | PBT      | Colour                                | Orange                   |
| Colour chart (similar)                | RAL 2000 | Insulating material group             | IIIa                     |
| CTI                                   | ≥ 200    | Insulation resistance                 | ≥ 10 <sup>8</sup> Ω      |
| UL 94 flammability rating             | V-0      | Contact material                      | Copper alloy             |
| Contact surface                       | tinned   | Layer structure of plug contact       | 4-8 µm Sn hot-dip tinned |
| Storage temperature, min.             | -25 °C   | Storage temperature, max.             | 55 °C                    |
| Max. relative humidity during storage | 80 %     | Operating temperature, min.           | -50 °C                   |
| Operating temperature, max.           | 100 °C   | Temperature range, installation, min. | -30 °C                   |
| Temperature range, installation, max. | 100 °C   |                                       |                          |

### Conductors suitable for connection

|                                                 |                      |                                                 |                     |
|-------------------------------------------------|----------------------|-------------------------------------------------|---------------------|
| Clamping range, rated connection, min.          | 0.08 mm <sup>2</sup> | Clamping range, rated connection, max.          | 1.5 mm <sup>2</sup> |
| Wire connection cross section AWG, min.         | AWG 28               | Wire connection cross section AWG, max.         | AWG 14              |
| Solid, min. H05(07) V-U                         | 0.2 mm <sup>2</sup>  | Solid, max. H05(07) V-U                         | 1.5 mm <sup>2</sup> |
| Flexible, min. H05(07) V-K                      | 0.2 mm <sup>2</sup>  | Flexible, max. H05(07) V-K                      | 1.5 mm <sup>2</sup> |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm <sup>2</sup>  | w. plastic collar ferrule, DIN 46228 pt 4, max. | 1.5 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, min.       | 0.2 mm <sup>2</sup>  | w. wire end ferrule, DIN 46228 pt 1, max.       | 1.5 mm <sup>2</sup> |
| Plug gauge acc. to EN 60999 a x b; Ø            | 2.4 mm x 1.5 mm      |                                                 |                     |

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**Technical data**
**Rated data acc. to IEC**

|                                                                           |                        |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. no. of poles (Ta = 20°C)                          | 17 A              |
| Rated current, max. no. of poles (Ta = 20°C)                              | 12 A                   | Rated current, min. no. of poles (Ta = 40°C)                          | 14.5 A            |
| Rated current, max. no. of poles (Ta = 40°C)                              | 10 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 320 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 160 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 160 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 2.5 kV                 | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 2.5 kV            |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 2.5 kV                 | Short-time withstand current resistance                               | 3 x 1s with 100 A |

**Rated data acc. to CSA**

|                               |                                                                                   |                               |                |
|-------------------------------|-----------------------------------------------------------------------------------|-------------------------------|----------------|
| Institute (CSA)               |  | Certificate No. (CSA)         | 154685-1318353 |
| Rated voltage (Use group B)   | 300 V                                                                             | Rated voltage (use group D)   | 300 V          |
| Rated current (use group B)   | 10 A                                                                              | Rated current (use group D)   | 10 A           |
| Wire cross-section, AWG, min. | AWG 28                                                                            | Wire cross-section, AWG, max. | AWG 14         |
| Reference to approval values  | Specifications are maximum values, details - see approval certificate.            |                               |                |

**Rated data acc. to UL 1059**

|                               |                                                                                     |                               |        |
|-------------------------------|-------------------------------------------------------------------------------------|-------------------------------|--------|
| Institute (UR)                |  | Certificate No. (UR)          | E60693 |
| Rated voltage (use group B)   | 300 V                                                                               | Rated voltage (use group D)   | 300 V  |
| Rated current (use group B)   | 10 A                                                                                | Rated current (use group D)   | 10 A   |
| Wire cross-section, AWG, min. | AWG 28                                                                              | Wire cross-section, AWG, max. | AWG 14 |
| Reference to approval values  | Specifications are maximum values, details - see approval certificate.              |                               |        |

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC001284    | ETIM 4.0   | EC002637    |
| ETIM 5.0   | EC002637    | ETIM 6.0   | EC002637    |
| UNSPSC     | 30-21-18-10 | eClass 5.1 | 27-26-07-04 |
| eClass 6.2 | 27-26-07-04 | eClass 7.1 | 27-44-04-02 |
| eClass 8.1 | 27-44-04-02 | eClass 9.0 | 27-44-04-02 |
| eClass 9.1 | 27-44-04-02 |            |             |

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## Technical data

### 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>• Max. outer diameter of the conductor: 2.9 mm</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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 | The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.                                                                                                                                                                                                                                                                                                                                                                                                                      |

### Approvals

Approvals



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

### Downloads

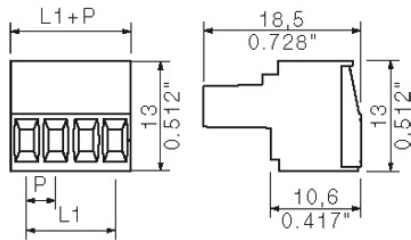
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Brochure/Catalogue                          | <a href="#">FL DRIVES EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">CAT 2 PORTFOLIOGUIDE EN</a><br><a href="#">FL BUILDING SAFETY EN</a><br><a href="#">FL APPL LED LIGHTING EN</a><br><a href="#">FL INDUSTR.CONTROLS EN</a><br><a href="#">FL MACHINE SAFETY EN</a><br><a href="#">FL HEATING ELECTR EN</a><br><a href="#">FL APPL INVERTER EN</a><br><a href="#">FL_BASE_STATION_EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a> |
| Engineering Data                            | <a href="#">EPLAN, WSCAD, Zuken E3.S</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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## Drawings

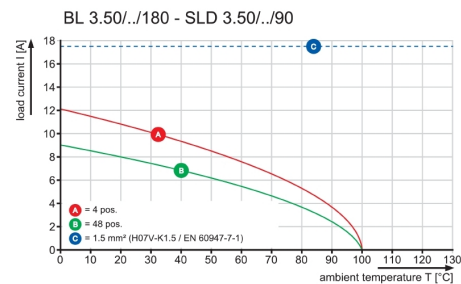
### Dimensional drawing



### Graph



### Graph



### Graph



### Graph

