

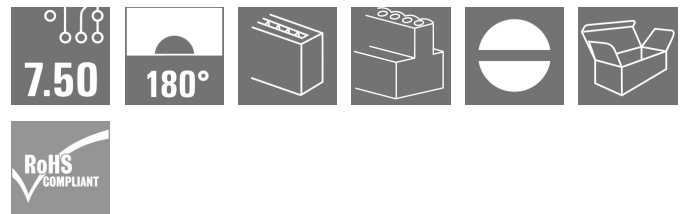
**BLZ 7.50/02/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Female plugs with clamping-yoke screw wire-connect system. The female plugs provide space for labelling and can be coded.

**General ordering data**

|              |                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 7.50 mm, Number of poles: 2, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box |
| Order No.    | <a href="#">1628030000</a>                                                                                                            |
| Type         | BLZ 7.50/02/180 SN BK BX                                                                                                              |
| GTIN (EAN)   | 4008190200831                                                                                                                         |
| Qty.         | 100 pc(s).                                                                                                                            |
| Product data | IEC: 800 V / 18.5 A / 0.2 - 2.5 mm²<br>UL: 300 V / 15 A / AWG 26 - AWG 12                                                             |
| Packaging    | Box                                                                                                                                   |

Creation date July 9, 2025 11:37:59 AM CEST

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

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

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 20.1 mm | Depth (inches)  | 0.791 inch |
| Height     | 15.2 mm | Height (inches) | 0.598 inch |
| Net weight | 3.77 g  |                 |            |

**System Parameters**

|                           |                                     |                                              |                        |
|---------------------------|-------------------------------------|----------------------------------------------|------------------------|
| Product family            | OMNIMATE Signal - series BL/SL 7.50 | Type of connection                           | Field connection       |
| Wire connection method    | Clamping yoke connection            | Pitch in mm (P)                              | 7.5 mm                 |
| Pitch in inches (P)       | 0.295 "                             | Conductor outlet direction                   | 180°                   |
| Number of poles           | 2                                   | L1 in mm                                     | 7.5 mm                 |
| L1 in inches              | 0.295 "                             | Number of rows                               | 1                      |
| Pin series quantity       | 1                                   | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Volume resistance         | 4.50 mΩ                             | Can be coded                                 | Yes                    |
| Stripping length          | 7 mm                                | Tightening torque, min.                      | 0.4 Nm                 |
| Tightening torque, max.   | 0.5 Nm                              | Clamping screw                               | M 2.5                  |
| Screwdriver blade         | 0.6 x 3.5                           | Screwdriver blade standard                   | DIN 5264               |
| Plugging force/pole, max. | 9 N                                 | Pulling force/pole, max.                     | 8.5 N                  |

**Material data**

|                                       |          |                                       |        |
|---------------------------------------|----------|---------------------------------------|--------|
| Insulating material                   | PBT      | Colour                                | black  |
| Colour chart (similar)                | RAL 9011 | Insulating material group             | IIIa   |
| Comparative Tracking Index (CTI)      | ≥ 200    | UL 94 flammability rating             | V-0    |
| Contact material                      | Cu-alloy | Contact surface                       | tinned |
| Storage temperature, min.             | -40 °C   | Storage temperature, max.             | 70 °C  |
| Operating temperature, min.           | -50 °C   | Operating temperature, max.           | 100 °C |
| Temperature range, installation, min. | -25 °C   | Temperature range, installation, max. | 100 °C |

**Conductors suitable for connection**

|                                                                     |                         |
|---------------------------------------------------------------------|-------------------------|
| Clamping range, min.                                                | 0.13 mm <sup>2</sup>    |
| Clamping range, max.                                                | 3.31 mm <sup>2</sup>    |
| Wire connection cross section AWG, min.                             | AWG 26                  |
| Wire connection cross section AWG, max.                             | AWG 12                  |
| Solid, min. H05(07) V-U                                             | 0.2 mm <sup>2</sup>     |
| Solid, max. H05(07) V-U                                             | 2.5 mm <sup>2</sup>     |
| Flexible, min. H05(07) V-K                                          | 0.2 mm <sup>2</sup>     |
| Flexible, max. H05(07) V-K                                          | 2.5 mm <sup>2</sup>     |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm <sup>2</sup> min. |                         |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max. |                         |
| w. wire end ferrule, DIN 46228 pt 1, 0.2 mm <sup>2</sup> min.       |                         |
| w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.       |                         |
| Plug gauge in accordance with EN 60999 a x b; ø                     | 2.8 mm x 2.0 mm; 2.4 mm |

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**Technical data**

|                     |                                        |                              |                         |
|---------------------|----------------------------------------|------------------------------|-------------------------|
| Clampable conductor | Cross-section for conductor connection | Type                         | fine-wired              |
|                     |                                        | nominal                      | 0.5 mm <sup>2</sup>     |
|                     | wire end ferrule                       | Stripping length             | nominal 6 mm            |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.5/6</a>  |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |
|                     |                                        | nominal                      | 1 mm <sup>2</sup>       |
|                     | wire end ferrule                       | Stripping length             | nominal 6 mm            |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.0/6</a>  |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |
|                     |                                        | nominal                      | 1.5 mm <sup>2</sup>     |
|                     | wire end ferrule                       | Stripping length             | nominal 7 mm            |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.5/7</a>  |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |
|                     |                                        | nominal                      | 2.5 mm <sup>2</sup>     |
|                     | wire end ferrule                       | Stripping length             | nominal 7 mm            |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H2.5/7</a>  |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |
|                     |                                        | nominal                      | 0.75 mm <sup>2</sup>    |
|                     | wire end ferrule                       | Stripping length             | nominal 6 mm            |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.75/6</a> |

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.

**Rated data acc. to IEC**

|                                                                           |                        |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 18.5 A            |
| Rated current, max. number of poles (Tu=20°C)                             | 17 A                   | Rated current, min. number of poles (Tu=40°C)                         | 15 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 14.5 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 800 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 630 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 500 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 6 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 6 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 6 kV                   | Short-time withstand current resistance                               | 3 x 1s with 120 A |

**Rated data acc. to CSA**

|                                   |                                                                                     |                                   |                |
|-----------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|----------------|
| Institute (CSA)                   |  | Certificate No. (CSA)             | 200039-1121690 |
| Rated voltage (Use group B / CSA) | 300 V                                                                               | Rated voltage (Use group D / CSA) | 300 V          |
| Rated current (Use group B / CSA) | 15 A                                                                                | Rated current (Use group D / CSA) | 10 A           |
| Wire cross-section, AWG, min.     | AWG 26                                                                              | Wire cross-section, AWG, max.     | AWG 12         |
| Reference to approval values      | Specifications are maximum values, details - see approval certificate.              |                                   |                |

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**Technical data****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) 15 A

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, min. AWG 26

Wire cross-section, AWG, max. AWG 12

Reference to approval values  
Specifications are maximum values, details - see approval certificate.**Packing**

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 136 mm |
| VPE width | 93 mm | VPE height | 78 mm  |

**Type tests**

|                                              |                |                                                                                                                                             |
|----------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Test: Durability of markings                 | Standard       | DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96                                                            |
|                                              | Test           | mark of origin, type identification, rated cross-section, rated voltage, pitch, type of material, approval marking UL, approval marking CSA |
|                                              | Evaluation     | available                                                                                                                                   |
|                                              | Test           | durability                                                                                                                                  |
|                                              | Evaluation     | passed                                                                                                                                      |
| Test: Misengagement (Non-interchangeability) | Standard       | draft DIN VDE 0627 section 5.9.1 / 09.91, DIN IEC 60512-7 section 5 / 05.94                                                                 |
|                                              | Test           | 180° turned with coding elements                                                                                                            |
|                                              | Evaluation     | passed                                                                                                                                      |
| Test: Clampable cross section                | Standard       | DIN EN 60999 section 6 and 8.1 / 04.94, DIN EN 60947-1 section 8.2.4.5.1 / 07.98                                                            |
|                                              | Conductor type | Type of conductor and solid 0.08 mm <sup>2</sup> conductor cross-section                                                                    |
|                                              |                | Type of conductor and stranded 0.08 mm <sup>2</sup> conductor cross-section                                                                 |
|                                              |                | Type of conductor and solid 2.5 mm <sup>2</sup> conductor cross-section                                                                     |
|                                              |                | Type of conductor and stranded 2.5 mm <sup>2</sup> conductor cross-section                                                                  |
|                                              |                | Type of conductor and AWG 28/1 conductor cross-section                                                                                      |
|                                              |                | Type of conductor and AWG 28/19 conductor cross-section                                                                                     |
|                                              |                | Type of conductor and AWG 12/1 conductor cross-section                                                                                      |
|                                              |                | Type of conductor and AWG 12/19 conductor cross-section                                                                                     |
|                                              | Evaluation     | passed                                                                                                                                      |

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**Technical data**

|                                                           |                |                                                                            |
|-----------------------------------------------------------|----------------|----------------------------------------------------------------------------|
| Test for damage to and accidental loosening of conductors | Standard       | DIN EN 60999 section 8.4 / 04.94                                           |
|                                                           | Requirement    | 0.2 kg                                                                     |
|                                                           | Conductor type | Type of conductor and AWG 28/1 conductor cross-section                     |
|                                                           |                | Type of conductor and AWG 28/7 conductor cross-section                     |
|                                                           | Evaluation     | passed                                                                     |
|                                                           | Requirement    | 0.3 kg                                                                     |
|                                                           | Conductor type | Type of conductor and solid 0.5 mm <sup>2</sup> conductor cross-section    |
|                                                           |                | Type of conductor and stranded 0.5 mm <sup>2</sup> conductor cross-section |
|                                                           | Evaluation     | passed                                                                     |
|                                                           | Requirement    | 0.7 kg                                                                     |
|                                                           | Conductor type | Type of conductor and solid 2.5 mm <sup>2</sup> conductor cross-section    |
|                                                           |                | Type of conductor and stranded 2.5 mm <sup>2</sup> conductor cross-section |
| Pull-out test                                             | Evaluation     | passed                                                                     |
|                                                           | Requirement    | 0.9 kg                                                                     |
|                                                           | Conductor type | Type of conductor and AWG 12/1 conductor cross-section                     |
|                                                           |                | Type of conductor and AWG 12/19 conductor cross-section                    |
|                                                           | Evaluation     | passed                                                                     |
|                                                           | Standard       | DIN EN 60999 section 8.5 / 04.94                                           |
|                                                           | Requirement    | ≥5 N                                                                       |
|                                                           | Conductor type | Type of conductor and AWG 28/1 conductor cross-section                     |
|                                                           |                | Type of conductor and AWG 28/7 conductor cross-section                     |
|                                                           | Evaluation     | passed                                                                     |
|                                                           | Requirement    | ≥50 N                                                                      |
|                                                           | Conductor type | Type of conductor and H05V-U2.5 conductor cross-section                    |
|                                                           |                | Type of conductor and H05V-K2.5 conductor cross-section                    |
|                                                           | Evaluation     | passed                                                                     |
|                                                           | Requirement    | ≥60 N                                                                      |
|                                                           | Conductor type | Type of conductor and AWG 12/1 conductor cross-section                     |
|                                                           |                | Type of conductor and AWG 12/19 conductor cross-section                    |
|                                                           | Evaluation     | passed                                                                     |

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**Technical data****Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | EC002638    |
| ETIM 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| ETIM 10.0   | EC002638    | ECLASS 9.0  | 27-44-03-09 |
| ECLASS 9.1  | 27-44-03-09 | ECLASS 10.0 | 27-44-03-09 |
| ECLASS 11.0 | 27-46-02-02 | ECLASS 12.0 | 27-46-02-02 |
| ECLASS 13.0 | 27-46-02-02 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 |             |             |

**Approvals**

Approvals



|                       |                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals MAMID       | <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319262/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319262/-T1z1mm-S800/</a> |
| ROHS                  | Conform                                                                                                                                                                                                                                                                                                                                                 |
| UL File Number Search | UL Website                                                                                                                                                                                                                                                                                                                                              |
| Certificate No. (UR)  | E60693                                                                                                                                                                                                                                                                                                                                                  |

**Environmental Product Compliance**

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

**Important note**

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IPC conformity | Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Notes          | <ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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> <li>• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul> |

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## Technical data

### Downloads

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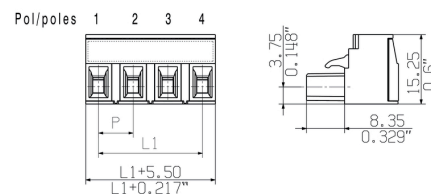
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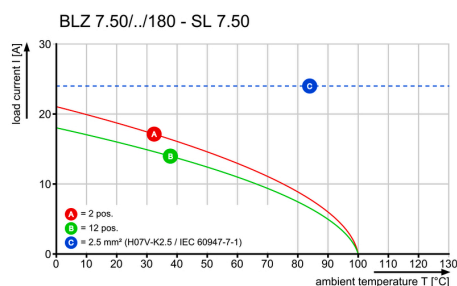
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# Drawings

## Dimensional drawing



## Derating curve





## BLZ 7.50/02/180 SN BK BX

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## Accessories

## 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).                  |                                                                    |              |           |