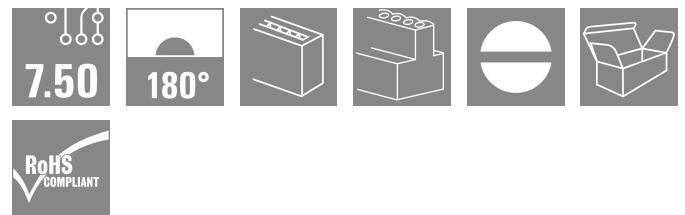


BLZ 7.50/11/180 SN OR BX

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Product image



Similar to illustration

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: 11, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box |
| Order No. | 1628010000 |
| Type | BLZ 7.50/11/180 SN OR BX |
| GTIN (EAN) | 4008190200817 |
| Qty. | 30 items |
| Product data | IEC: 800 V / 18,5 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12 |
| Packaging | Box |

BLZ 7.50/11/180 SN OR BX

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Technical data

Approvals

Approvals



| | |
|-----------------------|----------------------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (UR) | E60693 |

Dimensions and weights

| | | | |
|------------|---------|-----------------|-------------|
| Depth | 20.1 mm | Depth (inches) | 0.7913 inch |
| Height | 15.2 mm | Height (inches) | 0.5984 inch |
| Net weight | 21.26 g | | |

Environmental Product Compliance

| | | | |
|--------------------------|-----------------------------|------------------|--|
| RoHS Compliance Status | Compliant without exemption | | |
| REACH SVHC | No SVHC above 0.1 wt% | | |
| Product Carbon Footprint | Cradle to gate | 0.389 kg CO2 eq. | |

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) | 7.50 mm |
| Pitch in inches (P) | 0.295 " | Conductor outlet direction | 180° |
| Number of poles | 11 | L1 in mm | 75.00 mm |
| L1 in inches | 2.953 " | 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 cycles | 25 | Plugging force/pole, max. | 9 N |
| Pulling force/pole, max. | 8.5 N | | |

Material data

| | | | |
|---------------------------------------|----------|---------------------------------------|----------|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | Moisture Level (MSL) | |
| 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 ² |
| Clamping range, max. | 3.31 mm ² |
| Wire connection cross section AWG, min. | AWG 26 |

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Technical data

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

| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
|--|--|------------------------------|-------------------------|
| | | nominal | 0.5 mm ² |
| wire end ferrule | | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0,5/6 |
| | | | |
| Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 1 mm ² |
| wire end ferrule | | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H1,0/6 |
| | | | |
| Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 1.5 mm ² |
| wire end ferrule | | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H1,5/7 |
| | | | |
| Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 2.5 mm ² |
| wire end ferrule | | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H2,5/7 |
| | | | |
| Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 0.75 mm ² |
| wire end ferrule | | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0,75/6 |
| | | | |

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 |

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Technical data

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|----------------|
| Institute (CSA) | 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. | | |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (UR) | 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 | 311.00 mm |
| VPE width | 97.00 mm | VPE height | 69.00 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 | | |
| Test: Misengagement (Non-interchangeability) | Evaluation | passed | | |
| | 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 | | |
| Test: Clampable cross section | Evaluation | passed | | |
| | 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 conductor cross-section | solid 0.08 mm ² | |
| | | Type of conductor and conductor cross-section | stranded 0.08 mm ² | |
| | | Type of conductor and conductor cross-section | solid 2.5 mm ² | |
| | | Type of conductor and conductor cross-section | stranded 2.5 mm ² | |
| | | Type of conductor and conductor cross-section | AWG 28/1 | |
| | | Type of conductor and conductor cross-section | AWG 28/19 | |

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Technical data

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

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Technical data

| | | |
|------------|---|-----------|
| | Type of conductor and conductor cross-section | AWG 12/19 |
| Evaluation | passed | |

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**
- Additional variants on request
 - Gold-plated contact surfaces on request
 - Rated current related to rated cross-section & min. No. of poles.
 - Wire end ferrule without plastic collar to DIN 46228/1
 - Wire end ferrule with plastic collar to DIN 46228/4
 - P on drawing = pitch
 - Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
 - 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
 - Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 | | |

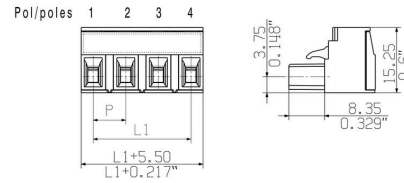
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Drawings

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Dimensional drawing



Derating curve

BLZ 7.50/.. /180 - SL 7.50



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Accessories

Strain reliefs



For frequent load changes: the "trailer coupling" for plug-in connectors.

The strain relief can do more than just relieve the strain on conductors:

Simply clip onto the plug and

- bundle conductors
- guide cables
- use as a connection and disconnection aid

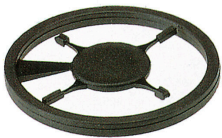
No damage to the connecting points, clear, tidy wiring and easy to handle.

User advantages: permanent heavy-duty connections for harsh industrial environments and convenient operation ensure improved system availability.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | BLZ 7.50 ZE03 OR BX | Version |
| Order No. | 1652140000 | PCB plug-in connector, Accessories, Strain relief, orange, Number of |
| GTIN (EAN) | 4008190401818 | poles: 3 |
| Qty. | 50 ST | |

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 BK BX | Version |
| Order No. | 1545710000 | PCB plug-in connector, Accessories, Coding element, black, Number |
| GTIN (EAN) | 4008190087142 | of poles: 1 |
| Qty. | 50 ST | |
| Type | BLZ/SL KO OR BX | Version |
| Order No. | 1573010000 | PCB plug-in connector, Accessories, Coding element, orange, Number |
| GTIN (EAN) | 4008190048396 | of poles: 1 |
| Qty. | 100 ST | |

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Counterpart

SL 7.50/90B

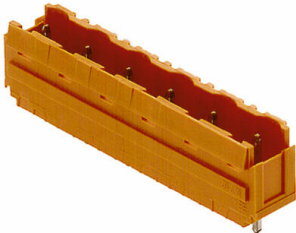


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SL 7.50/11/90B 3.2SN OR... | Version |
| Order No. | 1628560000 | PCB plug-in connector, male header, Dovetails for fixing blocks, THT |
| GTIN (EAN) | 4008190201364 | solder connection, 7.50 mm, Number of poles: 11, 90°, Solder pin |
| Qty. | 50 ST | length (l): 3.2 mm, tinned, orange, Box |

SL 7.50/180B

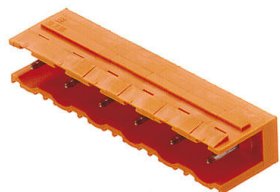


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SL 7.50/11/180B 3.2SN O... | Version |
| Order No. | 1629220000 | PCB plug-in connector, male header, Dovetails for fixing blocks, THT |
| GTIN (EAN) | 4008190202026 | solder connection, 7.50 mm, Number of poles: 11, 180°, Solder pin |
| Qty. | 50 ST | length (l): 3.2 mm, tinned, orange, Box |

SL 7.50/90



Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SL 7.50/11/90 3.2SN OR ... | Version |
| Order No. | 1628450000 | PCB plug-in connector, male header, open side, THT solder |
| GTIN (EAN) | 4008190201258 | connection, 7.50 mm, Number of poles: 11, 90°, Solder pin length (l): |
| Qty. | 50 ST | 3.2 mm, tinned, orange, Box |

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Counterpart

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SL 7.50/180



Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SL 7.50/11/180 3.2SN OR... | Version |
| Order No. | 1629110000 | PCB plug-in connector, male header, open side, THT solder |
| GTIN (EAN) | 4008190201913 | connection, 7.50 mm, Number of poles: 11, 180°, Solder pin length |
| Qty. | 50 ST | (I): 3.2 mm, tinned, orange, Box |