

## SL 2.50/10/180G 3.2SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

### Product image



Similar to illustration

Male header for wave soldering in 2.50 mm pitch.

- Plugging direction is straight (180°) to the PCB
- Housing variant: Closed (G)
- Packaged in a cardboard box (BX)

### General ordering data

|              |                                                                                                                     |
|--------------|---------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male header, THT solder connection, Pitch in mm (P): 2.50 mm, Number of poles: 10, 180°, Box |
| Order No.    | <a href="#">2439990000</a>                                                                                          |
| Type         | SL 2.50/10/180G 3.2SN BK BX                                                                                         |
| GTIN (EAN)   | 4050118455168                                                                                                       |
| Qty.         | 100 items                                                                                                           |
| Product data | IEC: 320 V / 6 A<br>UL: 150 V / 5 A                                                                                 |
| Packaging    | Box                                                                                                                 |

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## Technical data

## Approvals

Approvals



|                         |                            |
|-------------------------|----------------------------|
| ROHS                    | Conform                    |
| UL File Number Search   | <a href="#">UL Website</a> |
| Certificate No. (cURus) | E60693                     |

## Dimensions and weights

|                          |             |                 |             |
|--------------------------|-------------|-----------------|-------------|
| Depth                    | 8.1 mm      | Depth (inches)  | 0.3189 inch |
| Height                   | 13.3 mm     | Height (inches) | 0.5236 inch |
| Height of lowest version | 10.1 mm     | Width           | 26.9 mm     |
| Width (inches)           | 1.0591 inch | Net weight      | 1.76 g      |

## Environmental Product Compliance

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

## System specifications

|                                              |                                                     |                                            |                                 |
|----------------------------------------------|-----------------------------------------------------|--------------------------------------------|---------------------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 2.50                 | Type of connection                         | Board connection                |
| Mounting onto the PCB                        | THT solder connection                               | Pitch in mm (P)                            | 2.50 mm                         |
| Pitch in inches (P)                          | 0.098 "                                             | Outgoing elbow                             | 180°                            |
| Number of poles                              | 10                                                  | Number of solder pins per pole             | 1                               |
| Solder pin length (l)                        | 3.2 mm                                              | Solder pin length tolerance                | +0.1 / -0.1 mm                  |
| Solder pin dimensions                        | 0.8 x 0.8 mm                                        | Solder pin dimensions = d tolerance        | +0.02 / -0.02 mm                |
| Solder eyelet hole diameter (D)              | 1.3 mm                                              | Solder eyelet hole diameter tolerance (D)  | + 0,1 mm                        |
| L1 in mm                                     | 22.50 mm                                            | L1 in inches                               | 8.856 "                         |
| Number of rows                               | 1                                                   | Pin series quantity                        | 1                               |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe unplugged/<br>back-of-hand-safe plugged | Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10<br>unplugged |
| Plugging cycles                              | 25                                                  |                                            |                                 |

## Material data

|                             |              |                                      |                                  |
|-----------------------------|--------------|--------------------------------------|----------------------------------|
| Insulating material         | PA 66        | Colour                               | black                            |
| Colour chart (similar)      | RAL 9011     | Comparative Tracking Index (CTI)     | ≥ 600                            |
| Moisture Level (MSL)        |              | UL 94 flammability rating            | V-0                              |
| Contact material            | Copper alloy | Contact surface                      | tinned                           |
| Tinning type                | mat          | Layer structure of solder connection | 1...3 µm Ni / 4...6 µm Sn<br>mat |
| Storage temperature, min.   | -40 °C       | Storage temperature, max.            | 70 °C                            |
| Operating temperature, min. | -40 °C       | Operating temperature, max.          | 105 °C                           |

## Rated data acc. to IEC

|                                                                      |           |                                                                       |        |
|----------------------------------------------------------------------|-----------|-----------------------------------------------------------------------|--------|
| tested acc. to standard                                              | IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 6 A    |
| Rated current, min. number of poles (Tu=40°C)                        | 6 A       | Rated voltage for surge voltage class / pollution degree II/2         | 320 V  |
| Rated voltage for surge voltage class / pollution degree III/2       | 320 V     | Rated voltage for surge voltage class / pollution degree III/3        | 80 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 |

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## Technical data

Rated impulse voltage for surge voltage 2.5 kV  
 class/ contamination degree III/3

### Rated data acc. to CSA

|                                   |       |                                   |     |
|-----------------------------------|-------|-----------------------------------|-----|
| Rated voltage (Use group B / CSA) | 150 V | Rated current (Use group B / CSA) | 5 A |
|-----------------------------------|-------|-----------------------------------|-----|

### Rated data acc. to UL 1059

|                                       |                                                                        |                                       |        |
|---------------------------------------|------------------------------------------------------------------------|---------------------------------------|--------|
| Institute (cURus)                     | CURUS                                                                  | Certificate No. (cURus)               | E60693 |
| Rated voltage (Use group B / UL 1059) | 150 V                                                                  | Rated current (Use group B / UL 1059) | 5 A    |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate. |                                       |        |

### Packing

|           |           |            |           |
|-----------|-----------|------------|-----------|
| Packaging | Box       | VPE length | 181.00 mm |
| VPE width | 141.00 mm | VPE height | 54.00 mm  |

### 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>• 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> <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> |

### Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC002637    | ETIM 9.0    | EC002637    |
| ETIM 10.0   | EC002637    | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 |             |             |

Dimensional drawing



HOLE PATTERN

**Product benefits**

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Operating safety Through PUSH IN connection system