

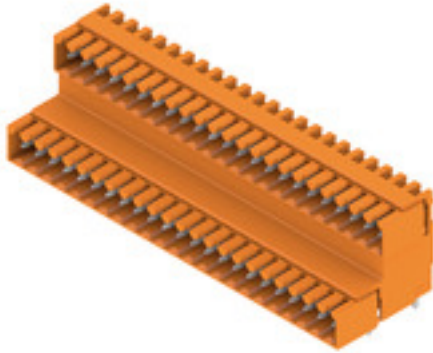
SLD 3.50V/46/90G 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Double-level, staggered pin header for wave soldering at 3.50 mm pitch. They are available in closed and flanged versions. The male connectors provide space for labelling and can be coded.

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 46, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box |
| Order No. | 1890680000 |
| Type | SLD 3.50V/46/90G 3.2SN OR BX |
| GTIN (EAN) | 4032248499700 |
| Qty. | 10 pc(s). |
| Product data | IEC: 200 V / 10.5 A UL: 300 V / 8 A |
| Packaging | Box |

Creation date July 2, 2024 12:59:35 PM CEST

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Technical data

Dimensions and weights

| | | | |
|--------------------------|------------|-----------------|------------|
| Depth | 24.2 mm | Depth (inches) | 0.953 inch |
| Height | 25.2 mm | Height (inches) | 0.992 inch |
| Height of lowest version | 22 mm | Width | 81.9 mm |
| Width (inches) | 3.224 inch | Net weight | 30.75 g |

System specifications

| | | | |
|--|--|--|------------------------------|
| Product family | OMNIMATE Signal - series BL/SL 3.50 | Type of connection | Board connection |
| Mounting onto the PCB | THT solder connection | Pitch in mm (P) | 3.5 mm |
| Pitch in inches (P) | 0.138 " | Outgoing elbow | 90° |
| Number of poles | 46 | Number of solder pins per pole | 1 |
| Solder pin length (l) | 3.2 mm | Solder pin length tolerance | 0 / -0.3 mm |
| Solder pin dimensions | d = 1.2 mm, Octagonal | Solder pin dimensions = d tolerance | 0 / -0.03 mm |
| Solder eyelet hole diameter (D) | 1.4 mm | Solder eyelet hole diameter tolerance (D)+ | 0,1 mm |
| L1 in mm | 77 mm | L1 in inches | 3.031 " |
| Number of rows | 2 | Pin series quantity | 2 |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe plugged/ back-of-hand-safe unplugged | Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged |
| Volume resistance | ≤5 mΩ | Can be coded | Yes |
| Plugging force/pole, max. | 10 N | Pulling force/pole, max. | 8 N |

Material data

| | | | |
|---------------------------------------|----------------------------------|---------------------------------------|--------|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Layer structure of solder connection | 2...3 µm Ni / 5...7 µm Sn glossy | Storage temperature, min. | -40 °C |
| Storage temperature, max. | 70 °C | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 100 °C | Temperature range, installation, min. | -30 °C |
| Temperature range, installation, max. | 100 °C | | |

Rated data acc. to IEC

| | | | |
|---|------------------------|---|------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 10.5 A |
| Rated current, max. number of poles (Tu=20°C) | 8 A | Rated current, min. number of poles (Tu=40°C) | 9 A |
| Rated current, max. number of poles (Tu=40°C) | 7 A | Rated voltage for surge voltage class / pollution degree II/2 | 200 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 160 V | Rated voltage for surge voltage class / pollution degree III/3 | 125 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 80 A |

Rated data acc. to CSA

| | | | |
|-----------------------------------|-------|-----------------------------------|-------|
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group D / CSA) | 300 V |
| Rated current (Use group B / CSA) | 8 A | Rated current (Use group D / CSA) | 8 A |

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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) 8 A

Rated current (Use group D / UL 1059) 8 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Packing

Packaging

Box

VPE length

88 mm

VPE width

82 mm

VPE height

78 mm

Classifications

ETIM 6.0

EC002637

ETIM 7.0

EC002637

ETIM 8.0

EC002637

ETIM 9.0

EC002637

ECLASS 9.0

27-44-04-02

ECLASS 9.1

27-44-04-02

ECLASS 10.0

27-44-04-02

ECLASS 11.0

27-46-02-01

ECLASS 12.0

27-46-02-01

ECLASS 13.0

27-46-02-01

Environmental Product Compliance

REACH SVHC

/

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.
- 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

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www.weidmueller.com**Technical data****Approvals**

Approvals



ROHS Conform

UL File Number Search UL Website

Certificate No. (UR) E60693

DownloadsApproval/Certificate/Document of Con-
formity[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

Catalogues

[Catalogues in PDF-format](#)

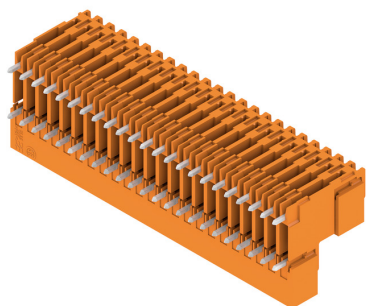
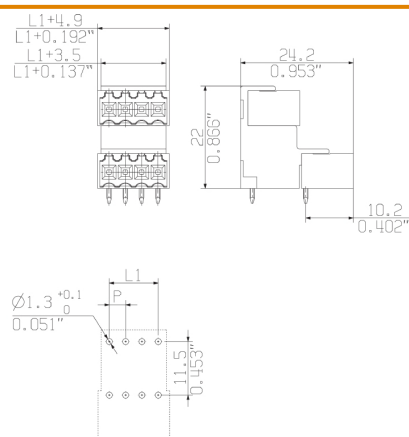
Brochures

[FL DRIVES EN](#)[MB DEVICE MANUF. EN](#)[FL DRIVES DE](#)[FL BUILDING SAFETY EN](#)[FL APPL LED LIGHTING EN](#)[FL INDUSTR.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](#)[PO OMNIMATE EN](#)

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Drawings**Product image****Dimensional drawing**

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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 | BL SL 3.5 KO OR | Version | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No. | 1693430000 | PCB plug-in connector, Accessories, Coding element, orange, Number | | Box |
| GTIN (EAN) | 4008190867447 | of poles: 1 | | |
| Qty. | 100 pc(s). | | | |
| Type | BL SL 3.5 KO SW | Version | Product data | Packaging |
| Order No. | 1610100000 | PCB plug-in connector, Accessories, Coding element, black, Number | | Box |
| GTIN (EAN) | 4008190187637 | of poles: 1 | | |
| Qty. | 100 pc(s). | | | |

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Dimensions without tolerances are no check dimensions

The English version is binding

AUSFUEHRUNG/TYPE: SLD 3.50V/./90F..

AUSFUEHRUNG/TYPE SLD 3.50V/./90..

AUSFUEHRUNG/TYPE: SLD 3.50V/./90G..



| | | | | |
|----|-------|-------|-------|-------|
| 46 | 80,50 | 77,00 | 81,90 | 87,50 |
| 42 | 73,50 | 70,00 | 74,90 | 80,50 |
| 38 | 66,50 | 63,00 | 67,90 | 73,50 |
| 34 | 59,50 | 56,00 | 60,90 | 66,50 |
| 30 | 52,50 | 49,00 | 53,90 | 59,50 |
| 26 | 45,50 | 42,00 | 46,90 | 52,50 |
| 22 | 38,50 | 35,00 | 39,90 | 45,50 |
| 18 | 31,50 | 28,00 | 32,90 | 38,50 |
| 14 | 24,50 | 21,00 | 25,90 | 31,50 |
| 10 | 17,50 | 14,00 | 18,90 | 24,50 |
| 6 | 10,50 | 7,00 | 11,90 | 17,50 |
| n | L | L1 | L2 | L3 |

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to IEC 60326 part 3 very fine.

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

General tolerance:
DIN ISO 2768-mK

99080/5
20.10.17 HELIS_MA

06

Modification

Drawn

13.08.2004

LANG_T

Responsible

Checked

01.11.2017

HELI5_MA

Supersedes: .

Approved

HECKERT_M

Cat.no.: .

3 21372

Drawing no. **3 21372** Issue no. **15**

Sheet 00 of 00 sheets

SLD 3.50V/./90...
STIFTELEISTE
MALE HEADER

Product file: SLD 3.50V

7302

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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.

We reserve the right to make technical changes.