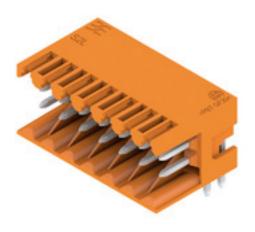


Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image

















Angled, two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

General ordering data

| Version | PCB plug-in connector, male header, open side, THT solder connection, 3.50 mm, Number of poles: 14, 90°, Solder pin length (I): 3.5 mm, tinned, orange, Box |
|--------------|--|
| Order No. | <u>1728190000</u> |
| Туре | S2L 3.50/14/90 3.5SN OR BX |
| GTIN (EAN) | 4032248039685 |
| Qty. | 72 pc(s). |
| Product data | IEC: 250 V / 10 A |
| | UL: 150 V / 10 A |
| Packaging | Box |

Creation date May 30, 2025 8:44:59 PM CEST



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Technical data

Dimensions and weights

| Depth | 14.2 mm | Depth (inches) | 0.559 inch |
|--------------------------|------------|-----------------|------------|
| Height | 14 mm | Height (inches) | 0.551 inch |
| Height of lowest version | 10.5 mm | Width | 24.5 mm |
| Width (inches) | 0.965 inch | Net weight | 3.83 g |

System specifications

| Product family | OMNIMATE Signal - series | Type of connection | Doord connection |
|---------------------------------------|---------------------------|--|------------------------|
| | B2L/S2L 3.50 - 2-row | | 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 | 14 | Number of solder pins per pole | 1 |
| Solder pin length (I) | 3.5 mm | Solder pin dimensions | d = 1.0 mm, Octagonal |
| Solder eyelet hole diameter (D) | 1.3 mm | Solder eyelet hole diameter tolerance ([| D)+ 0,1 mm |
| L1 in mm | 21 mm | L1 in inches | 0.827 " |
| Number of rows | 1 | Pin series quantity | 2 |
| Touch-safe protection acc. to DIN VDE | finger-safe unplugged/ | Touch-safe protection acc. to DIN VDE | IP20 plugged/ IP10 un- |
| 57 106 | back-of-hand-safe plugged | 0470 | plugged |
| Can be coded | Yes | Plugging force/pole, max. | 5 N |
| Pulling force/pole, max. | 4 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 | 23 μm Ni / 57 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 | | Rated current, min. number of poles | |
|---|------------------------|---|------------------|
| | IEC 60664-1, IEC 61984 | (Tu=20°C) | 10 A |
| Rated current, max. number of poles | | Rated current, min. number of poles | |
| (Tu=20°C) | 10 A | (Tu=40°C) | 9 A |
| Rated current, max. number of poles | | Rated voltage for surge voltage class / | |
| (Tu=40°C) | 8.5 A | pollution degree II/2 | 250 V |
| Rated voltage for surge voltage class / | | Rated voltage for surge voltage class / | |
| pollution degree III/2 | 125 V | pollution degree III/3 | 80 V |
| Rated impulse voltage for surge voltage | · | Rated impulse voltage for surge voltage | · |
| class/ pollution degree II/2 | 2.5 kV | class/ pollution degree III/2 | 2.5 kV |
| Rated impulse voltage for surge voltage | | Short-time withstand current resistance | |
| class/ contamination degree III/3 | 2.5 kV | | 3 x 1s with 77 A |



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26 mm

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Technical data

Rated data acc. to CSA

| Institute (CSA) | € | Certificate No. (CSA) | |
|-----------------------------------|--|-----------------------------------|----------------|
| | • | | 200039-1488444 |
| Rated voltage (Use group B / CSA) | 150 V | Rated current (Use group B / CSA) | 5 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

| Rated data acc. to UL 1059 | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (UR) | <i>51</i> 1. | Certificate No. (UR) | |
| | | | E60693 |
| Rated voltage (Use group B / UL 1059) | 150 V | Rated voltage (Use group C / UL 1059) | 50 V |
| Rated current (Use group B / UL 1059) | 10 A | Rated current (Use group C / UL 1059) | 10 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |
| Packing | | | |
| Packaging | Box | VPE length | 352 mm |

VPE width Classifications

| ETIM 6.0 | EC002637 | ETIM 7.0 | EC002637 |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002637 | ETIM 9.0 | EC002637 |
| ETIM 10.0 | 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 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 | | |

VPE height

Environmental Product Compliance

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

137 mm



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Germany

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Technical data

Important note

| important noto | |
|----------------|--|
| | |
| IPC conformity | Conformity: The products are developed, manufactured and delivered according international recognized stan- dards 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 |
| | Spacing between rows: see hole layout |
| | Rated current related to rated cross-section & min. No. of poles. |
| | • Diameter of solder eyelet D = 1.3+0.1 mm |
| | • 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 |

Approvals

| - | | |
|----|------|-----|
| Αp | prov | als |



months

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

Downloads

| Engineering Data | CAD data – STEP | |
|------------------|--------------------------|--|
| Catalogues | Catalogues in PDF-format | |
| Brochures | FL DRIVES EN | |
| | <u>FL DRIVES DE</u> | |



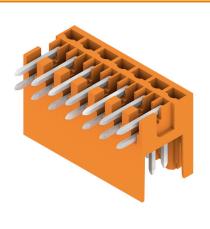
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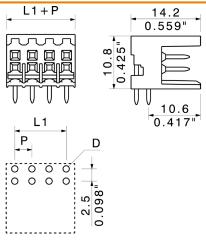
www.weidmueller.com

Drawings

Product image



Dimensional drawing





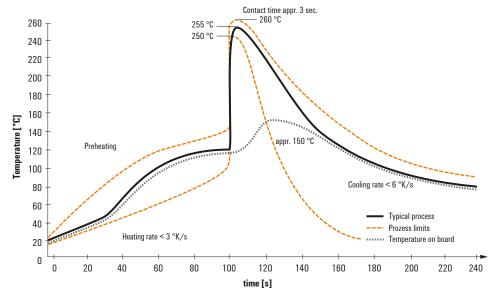
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

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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.