

**SCDV 3.81/24/90F 3.2SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Similar to illustration

Two-tier SCDV pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at two offset levels and with open access to each row.
- Space for labelling and coding
- Packed in cardboard box.

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of standard connectors and offer space for labelling and coding.

**General ordering data**

|              |                                                                                                                                                          |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male header, Flange, THT solder connection, 3.81 mm, Number of poles: 24, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box |
| Order No.    | <a href="#">1032680000</a>                                                                                                                               |
| Type         | SCDV 3.81/24/90F 3.2SN OR BX                                                                                                                             |
| GTIN (EAN)   | 4032248771950                                                                                                                                            |
| Qty.         | 50 pc(s).                                                                                                                                                |
| Product data | IEC: 320 V / 17.5 A<br>UL: 300 V / 10 A                                                                                                                  |
| Packaging    | Box                                                                                                                                                      |

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## Technical data

## Dimensions and weights

|                          |          |                 |            |
|--------------------------|----------|-----------------|------------|
| Depth                    | 21.9 mm  | Depth (inches)  | 0.862 inch |
| Height                   | 25.9 mm  | Height (inches) | 1.02 inch  |
| Height of lowest version | 22.7 mm  | Net weight      | 13.42 g    |
| Width                    | 56.11 mm | Width (inches)  | 2.209 inch |

## Environmental Product Compliance

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

## System specifications

|                                              |                                     |                     |                                                    |
|----------------------------------------------|-------------------------------------|---------------------|----------------------------------------------------|
| Product family                               | OMNIMATE Signal - series BC/SC 3.81 |                     |                                                    |
| Type of connection                           | Board connection                    |                     |                                                    |
| Mounting onto the PCB                        | THT solder connection               |                     |                                                    |
| Pitch in mm (P)                              | 3.81 mm                             |                     |                                                    |
| Pitch in inches (P)                          | 0.15 inch                           |                     |                                                    |
| Outgoing elbow                               | 90°                                 |                     |                                                    |
| Number of poles                              | 24                                  |                     |                                                    |
| Number of solder pins per pole               | 1                                   |                     |                                                    |
| Solder pin length (l)                        | 3.2 mm                              |                     |                                                    |
| Solder pin length tolerance                  | +0,02 / -0.2 mm                     |                     |                                                    |
| Solder pin dimensions                        | d = 1.0 mm, Octagonal               |                     |                                                    |
| Solder pin dimensions = d tolerance          | 0 / -0,03 mm                        |                     |                                                    |
| Solder eyelet hole diameter (D)              | 1.2 mm                              |                     |                                                    |
| Solder eyelet hole diameter tolerance (D)    | + 0,1 mm                            |                     |                                                    |
| L1 in mm                                     | 41.91 mm                            |                     |                                                    |
| L1 in inches                                 | 1.65 inch                           |                     |                                                    |
| Number of rows                               | 2                                   |                     |                                                    |
| Pin series quantity                          | 2                                   |                     |                                                    |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch              |                     |                                                    |
| Touch-safe protection acc. to DIN VDE 0470   | IP 20                               |                     |                                                    |
| Volume resistance                            | ≤5 mΩ                               |                     |                                                    |
| Can be coded                                 | Yes                                 |                     |                                                    |
| Plugging force/pole, max.                    | 7.5 N                               |                     |                                                    |
| Pulling force/pole, max.                     | 5.5 N                               |                     |                                                    |
| Tightening torque                            | Torque type                         | Mounting screw, PCB |                                                    |
|                                              | Usage information                   | Tightening torque   | min. 0.1 Nm                                        |
|                                              |                                     |                     | max. 0.15 Nm                                       |
|                                              |                                     | Recommended screw   | Part number <a href="#">PTSC KA 2.2X4.5 WN1412</a> |

## Material data

|                                       |              |                                       |        |
|---------------------------------------|--------------|---------------------------------------|--------|
| Insulating material                   | PA GF        | Colour                                | orange |
| Colour chart (similar)                | RAL 2000     | Insulating material group             | II     |
| Comparative Tracking Index (CTI)      | ≥ 550        | UL 94 flammability rating             | V-0    |
| Contact material                      | Copper alloy | Contact surface                       | tinned |
| Storage temperature, min.             | -40 °C       | Storage temperature, max.             | 70 °C  |
| Operating temperature, min.           | -50 °C       | Operating temperature, max.           | 120 °C |
| Temperature range, installation, min. | -25 °C       | Temperature range, installation, max. | 120 °C |

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## Rated data acc. to IEC

|                                                                           |                        |                                                                       |                  |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 17.5 A           |
| Rated current, min. number of poles (Tu=40°C)                             | 17 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 320 V            |
| Rated voltage for surge voltage class / pollution degree III/2            | 160 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 160 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 76 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) | 11 A  | Rated current (Use group D / CSA) | 11 A  |

## Rated data acc. to UL 1059

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

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 495 mm |
| VPE width | 355 mm | VPE height | 182 mm |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002637    | ETIM 7.0    | 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 |

## 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 colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</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>• P on drawing = pitch</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |

## Approvals

Approvals



ROHS

Conform

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Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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## Technical data

### Downloads

Approval/Certificate/Document of  
Conformity

[Declaration of the Manufacturer](#)

Engineering Data

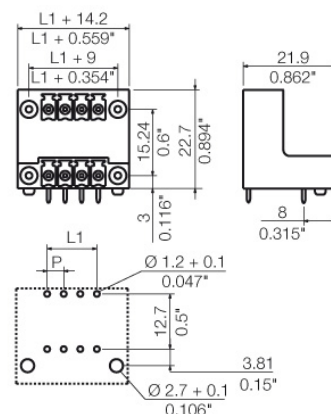
[STEP](#)

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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Dimensional drawing**

## Recommended wave soldering profiles

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### 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.

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