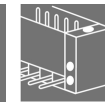
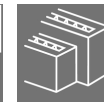
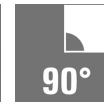
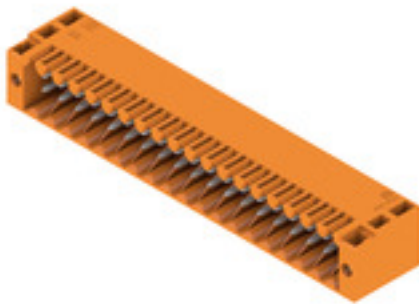


**S2L 3.50/38/90F 3.5SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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, Flange, THT solder connection, 3.50 mm, Number of poles: 38, 90°, Solder pin length (l): 3.5 mm, tinned, orange, Box
Order No.	<a href="#">2556180000</a>
Type	S2L 3.50/38/90F 3.5SN OR BX
GTIN (EAN)	4050118567199
Qty.	24 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Box

Creation date July 16, 2024 8:36:08 PM CEST

**S2L 3.50/38/90F 3.5SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**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	73.5 mm
Width (inches)	2.894 inch	Net weight	10.102 g

**System specifications**

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row		
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	38		
Number of solder pins per pole	1		
Solder pin length (l)	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	63 mm		
L1 in inches	2.482 "		
Pin series quantity	2		
Touch-safe protection acc. to DIN VDE 57 106	finger-safe unplugged/ back-of-hand-safe plugged		
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged		
Can be coded	Yes		
Plugging force/pole, max.	5 N		
Pulling force/pole, max.	4 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	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		

**S2L 3.50/38/90F 3.5SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****Rated data acc. to IEC**

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. number of poles  
(Tu=20°C)

10 A

Rated current, max. number of poles  
(Tu=40°C)

8.5 A

Rated voltage for surge voltage class /  
pollution degree III/2

125 V

Rated impulse voltage for surge voltage  
class/ pollution degree II/2

2.5 kV

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

2.5 kV

Rated current, min. number of poles  
(Tu=20°C)

10 A

Rated current, min. number of poles  
(Tu=40°C)

9 A

Rated voltage for surge voltage class /  
pollution degree II/2

250 V

Rated voltage for surge voltage class /  
pollution degree III/3

80 V

Rated impulse voltage for surge voltage  
class/ pollution degree III/2

2.5 kV

Short-time withstand current resistance

3 x 1s with 77 A

**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**

Rated voltage (Use group B / UL 1059)

150 V

Rated current (Use group B / UL 1059)

10 A

**Packing**

Packaging

Box

VPE length

338 mm

VPE width

130 mm

VPE height

27 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

/

RoHS Compliance Status

Compliant without exemption

**S2L 3.50/38/90F 3.5SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****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 variants on request</li><li>• Gold-plated contact surfaces on request</li><li>• Spacing between rows: see hole layout</li><li>• Rated current related to rated cross-section &amp; min. No. of poles.</li><li>• Diameter of solder eyelet <math>D = 1.3 \pm 0.1</math> mm</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>• For additional mechanical support for male connectors with screw flange (...F), we recommend an additional cable gland with fastening screws (sheet metal screw ISO 1481-ST 2.2x4.5 C or ISO 7049-ST 2.2x4.5 C – see Accessories). Cable gland only permitted before soldering.</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>

**Approvals**

ROHS	Conform
------	---------

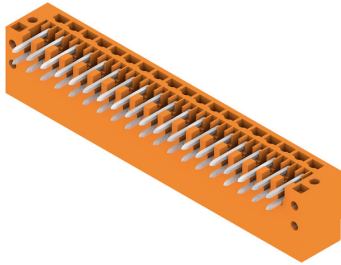
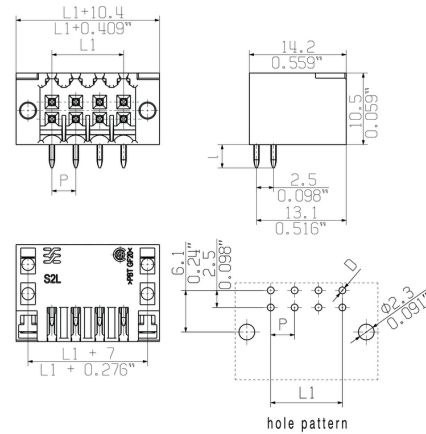
**Downloads**

Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

**S2L 3.50/38/90F 3.5SN OR BX**

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

[www.weidmueller.com](http://www.weidmueller.com)

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

## 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](http://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.