

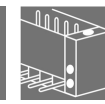
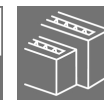
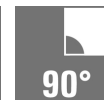
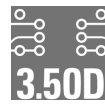
S2L 3.50/10/90F 3.5AU OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

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: 10, 90°, Solder pin length (l): 3.5 mm, Gold-plated, orange, Box
Order No.	1756020000
Type	S2L 3.50/10/90F 3.5AU OR BX
GTIN (EAN)	4032248041817
Qty.	72 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Box

Creation date March 25, 2021 3:12:45 AM CET

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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	Net weight	2.75 g
Width	24.5 mm	Width (inches)	0.965 inch

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 inch		
Outgoing elbow	90°		
Number of poles	10		
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	14 mm		
L1 in inches	0.551 inch		
Number of rows	1		
Pin series quantity	2		
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch		
Touch-safe protection acc. to DIN VDE 0470	IP 10		
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 PTSC KA 2.2X4.5 WN1412

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	Gold-plated
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

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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

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)



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

70 mm

VPE width

84 mm

VPE height

104 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

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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	• Additional colours 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. • 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. • 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. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	STEP

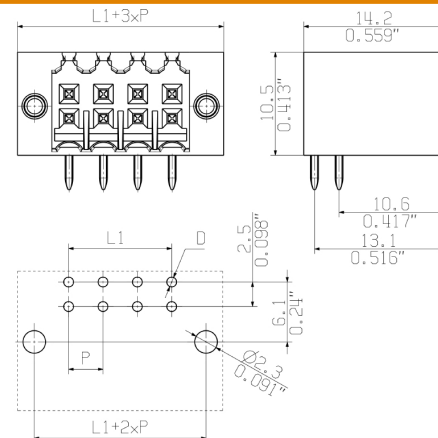
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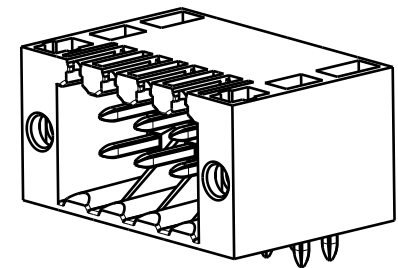
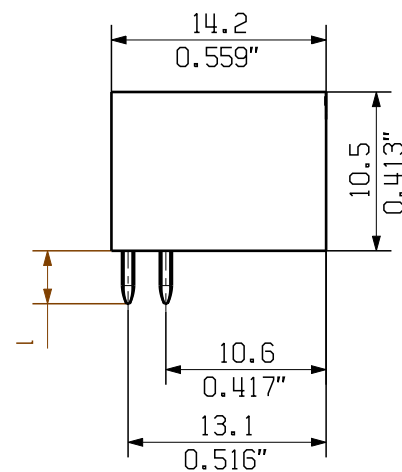
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Drawings

Dimensional drawing



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optional fixing screw
order no.: 161074 0000

P = 3.50 Raster Pitch
D = Ø1,3 +0.1
Ø0.051" +0.1
d = 1mm oktogonal
0.039" octogonal

shown: S2L 3.50/08/90F

pin length l	tolerance
3,5	0,2
	-0,2
2,6	0,2
	-0,2

		+/-0.2
46	77.0	
44	73.5	
42	70.0	
40	66.5	
38	63.0	
36	59.5	
34	56.0	
32	52.5	
30	49.0	
28	45.5	+/-0.15
26	42.0	
24	38.5	
22	35.0	
20	31.5	+/-0.1
18	28.0	
16	24.5	
14	21.0	
12	17.5	
10	14.0	
8	10.5	
6	7.0	
4	3.5	
n Polzahl/ no of poles	L1	toleranz/ tolerance L1

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		98746/5 29.11.17 HELIS_MA		01	Weidmüller 		Cat.no.: .		3 25607 18	
		Modification		Drawing no. _____ Issue no. _____			Sheet 03 of 06 sheets			
				Date	Name	S2L 3.50/.../... STIFTELEISTE MALE HEADER				
Drawn		28.11.2008	HELIS_MA							
Responsible			AMANN_A							
Checked		04.12.2017	HELIS_MA							
Scale: 5/1	Approved		LANG_T	Product file: S2L 3.50					7110	
Supersedes: .										

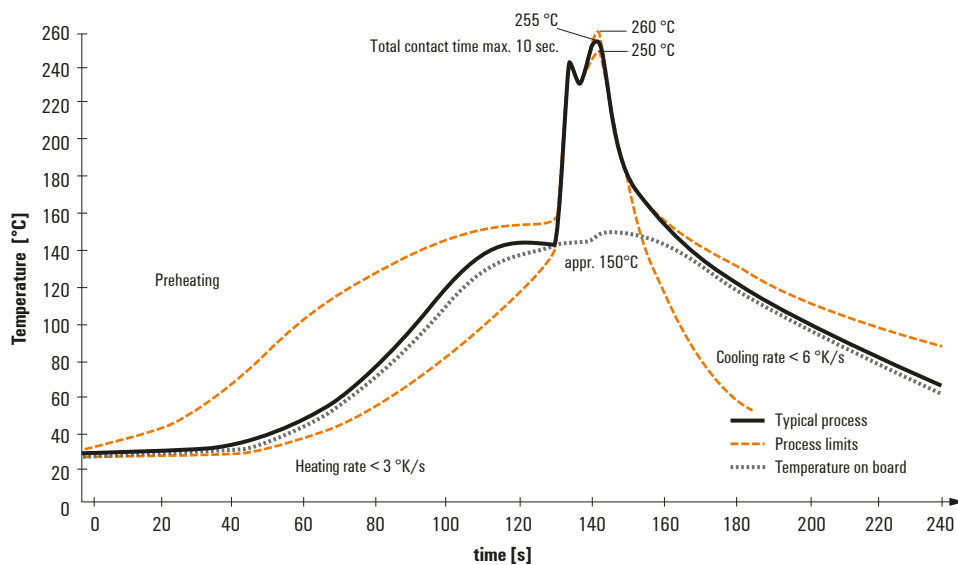
Recommended wave soldering profiles

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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.

We reserve the right to make technical changes.