

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image

















Straight, double-row pin header available in closed-sided or flange version (open-sided pin headers on request). The male headers with a pin length of 3.5mm are designed for wave soldering and are packed in a box. They can be screwed on to the PCB. The male 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, 180°, Solder pin length (I): 3.5 mm, tinned, black, Box
Order No.	<u>1729610000</u>
Туре	S2L 3.50/10/180F 3.5SN BK BX
GTIN (EAN)	4032248041015
Qty.	72 pc(s).
Product data	IEC: 250 V / 10 A
	UL: 150 V / 10 A
Packaging	Box

Creation date September 16, 2022 10:02:49 AM CEST



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Technical data

Dimensions and weights

Depth	10.5 mm	Depth (inches)	0.413 inch
Height	17.7 mm	Height (inches)	0.697 inch
Height of lowest version	14.2 mm	Width	24.5 mm
Width (inches)	0.965 inch	Net weight	3.78 g

System specifications

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Product family	OMNIMATE Signal - series B2L/S2	2L 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	180°			
Number of poles	10			
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	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	PTSC KA
			number	2.2X4.5
				<u>WN1412</u>

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper 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		



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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

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.		

Packing

Packaging	Box	VPE length	340 mm
VPE width	134 mm	VPE height	20 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	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



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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
	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.

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	UL Website
Certificate No. (UR)	E60693

Downloads

Engineering Data	CAD data – STEP	
Catalogues	Catalogues in PDF-format	
Brochures	FL DRIVES EN	
	FL DRIVES DE	



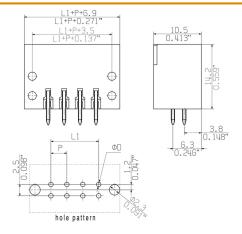
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Drawings

Dimensional drawing





Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

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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.