

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **Product image**





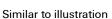












Straight, double-row pin header available in closed-sided or flange version (open-sided pin headers on request). The male headers with a pin length of 3.5mm are designed for wave soldering and are packed in a box. They can be screwed on to the PCB. The male headers provide space for labelling and can be coded.

#### **General ordering data**

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 16, 180°, Solder pin length (I): 3.5 mm, Gold-plated, orange, Box	
Order No.	<u>1757010000</u>	
Туре	S2L 3.50/16/180F 3.5AU OR BX	
GTIN (EAN)	4032248042807	
Qty.	48 pc(s).	
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A	
Packaging	Вох	

Creation date March 25, 2021 3:24:25 AM CET



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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	Net weight	4.749 g
Width	35 mm	Width (inches)	1.378 inch

#### **System specifications**

Oystein specifications					
Product family	OMNIMATE Signal - series B2L/S	32L 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°	80°			
Number of poles	16				
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	24.5 mm				
L1 in inches	0.965 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	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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E60693

50 V

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# **Technical data**

#### 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)

	(2B)		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)

Rated voltage (Use group B / UL 1059) Rated voltage (Use group C / UL 1059) Rated current (Use group B / UL 1059) Rated current (Use group C / UL 1059) Reference to approval values Specifications are

maximum values, details see approval certificate.

#### **Packing**

Packaging	Box	VPE length	149 mm
VPE width	76 mm	VPE height	69 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**

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	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

· Additional colours 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.
- 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.
- $\bullet$  Long term storage of the product with average temperature of 50  $^{\circ}\text{C}$  and average humidity 70%, 36 months

#### **Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Engineering Data	STEP	



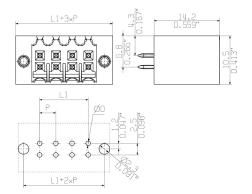
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# **Drawings**

## **Dimensional drawing**





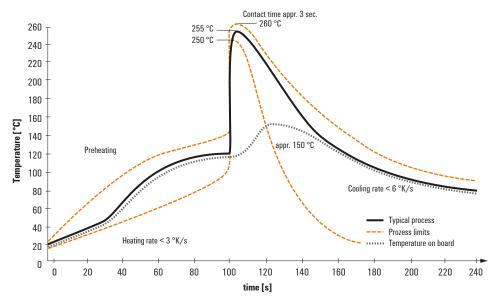
## Recommended wave solderding profiles

#### 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.