

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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# **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, open side, THT solder connection, 3.50 mm, Number of poles: 32, 90°, Solder pin length (I): 3.5 mm, tinned, orange, Box
Order No.	<u>1728280000</u>
Туре	S2L 3.50/32/90 3.5SN OR BX
GTIN (EAN)	4032248039777
Qty.	30 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Вох

Creation date January 27, 2022 10:38:27 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	Width	56 mm
Width (inches)	2.205 inch	Net weight	7.53 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 inch	Outgoing elbow	90°
Number of poles	32	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	52.5 mm	L1 in inches	2.067 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		

### **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	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		

#### 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



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# **Technical data**

#### Rated data acc. to CSA

Institute (CSA)	<b>(1)</b>	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)	<i>71</i> .	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	350 mm
VPE width	135 mm	VPE height	26 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		

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		
Important note			
IPC conformity	standards and norms an	es are developed, manufactured and deliv d comply with the assured properties in t A-610 "Class 2". Further claims on the pro	the data sheet resp. fulfill decorative properties
Notes	<ul> <li>Additional colours on</li> </ul>	request	
	Gold-plated contact s	urfaces on request	
	Spacing between row	vs: see hole layout	
	Rated current related	to rated cross-section & min. No. of poles	
	Diameter of solder ey	elet D = 1.3+0.1 mm	
	• P on drawing = pitch		
	Rated data refer only	to the component itself. Clearance and c	reepage distances to other components are to

be designed in accordance with the relevant application standards.



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# **Technical data**

### **Approvals**

Approvals

ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

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



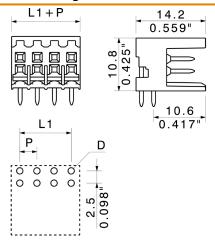
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# **Drawings**

## **Dimensional drawing**





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# **Accessories**

#### **Coding elements**



# Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery. Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### **General ordering data**

Туре	B2L/S2L 3.50 KO BK BX	Version	Product data	Packaging
Order No.	<u>1849740000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248378203	of poles: 1		
Qty.	100 pc(s).			
Туре	B2L/S2L 3.50 KO OR BX	Version	Product data	Packaging
Type Order No.	B2L/S2L 3.50 KO OR BX 1849730000	Version PCB plug-in connector, Accessories, Coding element, orange, Numbe		Packaging Box
	· ·			0 0



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# **Accessories**

#### **LED Light guides**



#### Effective: the link between LED and front panel.

Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.

The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.

The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

#### **General ordering data**

Туре	S2L/S2C 3.5 FLA 20/10	Version	Product data	Packaging
Order No.	<u>1699580000</u>	PCB plug-in connector, Accessories, Flood-light display, Transpare	nt,	Box
GTIN (EAN)	4008190891350	Number of poles: 10		
Qty.	100 pc(s).			



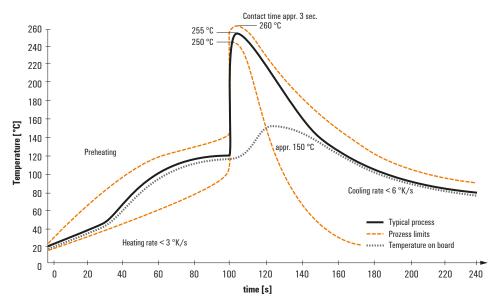
## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

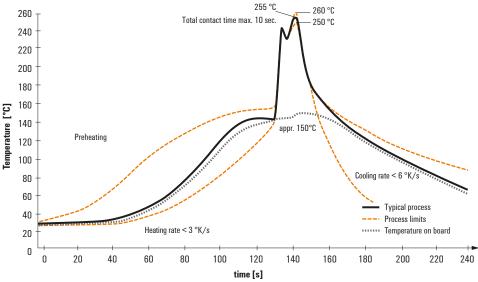
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#### **Single Wave:**



#### **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.

# **Mouser Electronics**

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