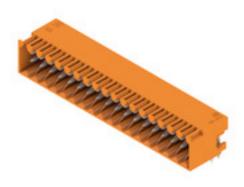


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## **Product image**



















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, closed side, THT solder connection, 3.50 mm, Number of poles: 36, 90°, Solder pin length (I): 3.5 mm, tinned, orange, Box
Order No.	<u>1727980000</u>
Туре	S2L 3.50/36/90G 3.5SN OR BX
GTIN (EAN)	4032248039470
Qty.	24 pc(s).
Product data	IEC: 250 V / 10 A
	UL: 150 V / 10 A
Packaging	Box

Creation date May 11, 2025 7:06:09 PM CEST



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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	64.4 mm
Width (inches)	2.535 inch	Net weight	8.21 g

## **System specifications**

Product family	OMNIMATE Signal - series	Type of connection	Daniel annualities
	B2L/S2L 3.50 - 2-row		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	36	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	59.5 mm	L1 in inches	2.343 "
Number of rows	1	Pin series quantity	2
Touch-safe protection acc. to DIN VDE	finger-safe unplugged/	Touch-safe protection acc. to DIN VDE	IP20 plugged/ IP10 un-
57 106	back-of-hand-safe plugged	0470	plugged
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	Cu-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

### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	150 V	Rated current (Use group B / CSA)	5 A



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# **Technical data**

#### Rated data acc. to UL 1059

nated data dec. to GE 1005			
		0 10 11 (110)	
Institute (UR)		Certificate No. (UR)	
	/ <b></b>		E60693
Rated voltage (Use group B / UL 1059)	150 V	Rated voltage (Use group C / UL 1059)	
Rated current (Use group B / UL 1059)		Rated current (Use group C / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
	n.	VDE	054
Packaging	Box	VPE length	354 mm
VPE width	138 mm	VPE height	27 mm
Classifications			
ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	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	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		
Environmental Product Complian	се		
RoHS Compliance Status	Compliant without exemption		
REACH SVHC	No SVHC above 0.1 wt%		
TEACH OVIIC	NO OVITIC above 0.1 Wt/0		
Important note			
IPC conformity	dards and norms and comply w	eveloped, manufactured and delivered according vith the assured properties in the data sheet resp ass 2". Further claims on the products can be eva	. fulfill decorative properties in
Notes	Additional variants on reques	st	
	Gold-plated contact surfaces	on request	
	Spacing between rows: see l	hole layout	
	Rated current related to rated	d cross-section & min. No. of poles.	
	Diameter of solder eyelet D =	= 1.3+0.1 mm	
	• P on drawing = pitch		
	·	component itself. Clearance and creepage distand with the relevant application standards.	ces to other components are t
		84, OMNIMATE-connectors are connectors withours are not allowed to be engaged or disengaged	0 , , ,
	Long term storage of the promonths	duct with average temperature of 50 °C and max	kimum humidity 70%, 36



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# **Technical data**

## **Approvals**

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319262/-T1z1mm-S800/	
ROHS	Conform	
UL File Number Search	UL Website	
Certificate No. (UR)	E60693	

### **Downloads**

Approval/Certificate/Document of Con-	
formity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN
	MB DEVICE MANUF. EN
	FL DRIVES DE
	FL BUILDING SAFETY EN
	<u>FL APPL LED LIGHTING EN</u>
	FL INDUSTR.CONTROLS EN
	FL MACHINE SAFETY EN
	<u>FL HEATING ELECTR EN</u>
	FL APPL_INVERTER EN
	FL BASE STATION EN
	<u>FL ELEVATOR EN</u>
	FL POWER SUPPLY EN
	FL 72H SAMPLE SER EN
	PO OMNIMATE EN
	PO OMNIMATE EN



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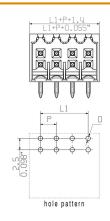
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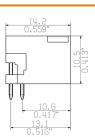
## **Drawings**

## **Product image**



## **Dimensional drawing**







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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, Transparent,		Вох
GTIN (EAN)	4008190891350	Number of poles: 10		
Qty.	100 pc(s).			

#### **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 OR BX	Version	Product data	Packaging
Order No.	1849730000	PCB plug-in connector, Accessories, Coding element, orange, Number	er	Вох
GTIN (EAN)	4032248378197	of poles: 1		
Qty.	100 pc(s).			



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# Accessories

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



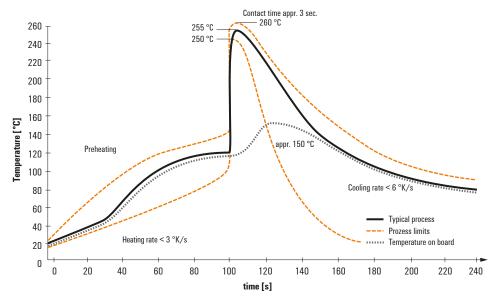
## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

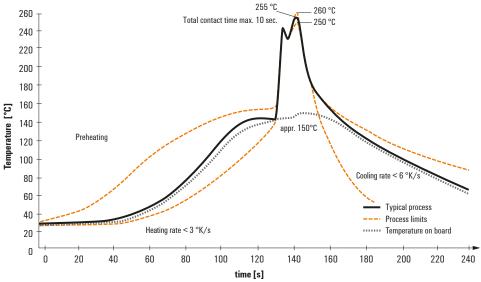
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## Single Wave:



#### **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.