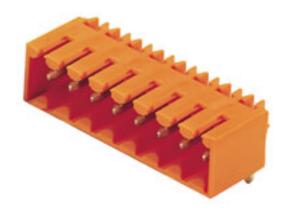


Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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# **Product image**

















Similar to illustration

Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

### **General ordering data**

Version	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 2, 90°, Solder pin length (I): 3.2 mm, Gold- plated, orange, Box
Order No.	<u>1616840000</u>
Туре	SL 3.50/02/90G 3.2AU OR BX
GTIN (EAN)	4008190092474
Qty.	100 pc(s).
Product data	IEC: / 17 A
	UL: 300 V / 10 A
Packaging	Box

Creation date March 24, 2021 12:23:19 PM CET



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# **Technical data**

## **Dimensions and weights**

Depth	11.1 mm	Depth (inches)	0.437 inch
Height	10.7 mm	Height (inches)	0.421 inch
Height of lowest version	7.5 mm	Net weight	0.69 g
Width	8.4 mm	Width (inches)	0.331 inch

## **System specifications**

Product family	OMNIMATE Signal - series	Type of connection	
	BL/SL 3.50		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	2	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder pin dimensions = d tolerance	0 / -0,03 mm
Solder eyelet hole diameter (D)	1.4 mm	Solder eyelet hole diameter tolerance (D)+ 0,1 mm	
L1 in mm	3.5 mm	L1 in inches	0.138 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE	Safe from back-of-hand	Touch-safe protection acc. to DIN VDE	
57 106	touch	0470	IP 10
Volume resistance	≤5 mΩ	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	10 N

# **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	CuSn	Contact surface	Gold-plated
Layer structure of solder connection	13 μm Ni / 24 μm Sn matt	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)	17 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	12 A	(Tu=40°C)	14.5 A
Rated current, max. number of poles			
(Tu=40°C)	10 A		

#### Rated data acc. to CSA

nated data acc. to ooA			
Institute (CSA)	<b>⊕</b>	Certificate No. (CSA)	
			154685-1318353
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		



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# **Technical data**

#### Rated data acc. to UL 1059

l		Contificate No. (UD)	
Institute (UR)	<i>71.</i>	Certificate No. (UR)	
			E60693
Rated voltage (Use group B / UL 1059)		Rated voltage (Use group D / UL 1059)	
Rated current (Use group B / UL 1059)		Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
Packaging	Box	VPE length	41 mm
VPE width	72 mm	VPE height	91 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
Important note			
IPC conformity	standards and norms and compl	veloped, manufactured and delivered according y with the assured properties in the data sheet	resp. fulfill decorative properti
IPC conformity  Notes	standards and norms and compl	y with the assured properties in the data sheet class 2". Further claims on the products can be e	resp. fulfill decorative properti
	standards and norms and complin accordance with IPC-A-610 "C  • Additional colours on request	y with the assured properties in the data sheet class 2". Further claims on the products can be e	resp. fulfill decorative properti
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	standards and norms and complin accordance with IPC-A-610 "C  • Additional colours on request  • Rated current related to rated  • P on drawing = pitch  • Rated data refer only to the colours.	y with the assured properties in the data sheet Class 2". Further claims on the products can be e	resp. fulfill decorative properti evaluated on request.
	standards and norms and complin accordance with IPC-A-610 "C  • Additional colours on request  • Rated current related to rated  • P on drawing = pitch  • Rated data refer only to the cobe designed in accordance w  • Rated data refer only to the co	y with the assured properties in the data sheet class 2". Further claims on the products can be excross-section & min. No. of poles.	resp. fulfill decorative properti evaluated on request.
	standards and norms and complin accordance with IPC-A-610 "C  • Additional colours on request  • Rated current related to rated  • P on drawing = pitch  • Rated data refer only to the cobe designed in accordance w  • Rated data refer only to the cobe designed in accordance w	y with the assured properties in the data sheet class 2". Further claims on the products can be excross-section & min. No. of poles.  Imponent itself. Clearance and creepage distance in the relevant application standards.	resp. fulfill decorative propertion and the valuated on request.  The valuated on request are to other components are the cases to other components are the case the cases the case th

Approvals	

ROHS	Conform
UL File Number Search	E60693

## **Downloads**

Engineering Data	<u>STEP</u>	



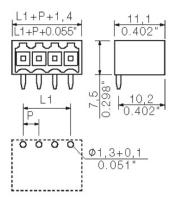
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# **Drawings**

# **Dimensional drawing**





# Recommended wave solderding 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.