

## SLD 3.50V/18/90G 3.2SN OR BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

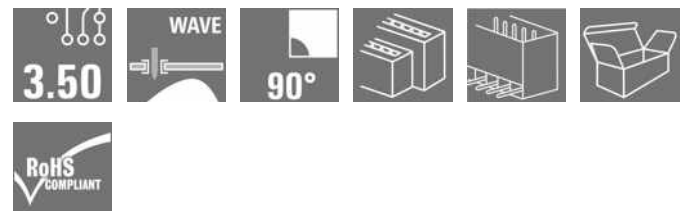
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### Product image



Double-level, staggered pin header for wave soldering at 3.50 mm pitch. They are available in closed and flanged versions. The male connectors 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: 18, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	<a href="#">1890620000</a>
Type	SLD 3.50V/18/90G 3.2SN OR BX
GTIN (EAN)	4032248499649
Qty.	20 pc(s).
Product data	IEC: 200 V / 10.5 A UL: 300 V / 8 A
Packaging	Box

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## Technical data

## Dimensions and weights

Depth	24.2 mm	Depth (inches)	0.953 inch
Height	25.2 mm	Height (inches)	0.992 inch
Height of lowest version	22 mm	Width	32.9 mm
Width (inches)	1.295 inch	Net weight	11.9 g

## Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
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## System specifications

Product family	OMNIMATE Signal - series BL/SL 3.50	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	18	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	0 / -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	28 mm	L1 in inches	1.102 inch
Number of rows	2	Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	finger-safe plugged/ back-of-hand-safe unplugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Volume resistance	≤5 mΩ	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	8 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	CuSn	Contact surface	tinned
Layer structure of solder connection	2...3 μm Ni / 5...7 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	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	10.5 A
Rated current, max. number of poles (Tu=20°C)	8 A	Rated current, min. number of poles (Tu=40°C)	9 A
Rated current, max. number of poles (Tu=40°C)	7 A	Rated voltage for surge voltage class / pollution degree II/2	200 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	125 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 80 A

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## Technical data

### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	8 A	Rated current (Use group D / CSA)	8 A

### Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	8 A	Rated current (Use group D / UL 1059)	8 A

Reference to approval values  
Specifications are maximum values, details - see approval certificate.

### Packing

Packaging	Box	VPE length	63 mm
VPE width	100 mm	VPE height	115 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

### 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
  - Rated current related to rated cross-section & min. No. of poles.
  - Spacing between rows: see hole layout
  - 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.
  - 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

Creation date May 4, 2023 9:38:05 AM CEST

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[info@weidmueller.com](mailto:info@weidmueller.com)[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

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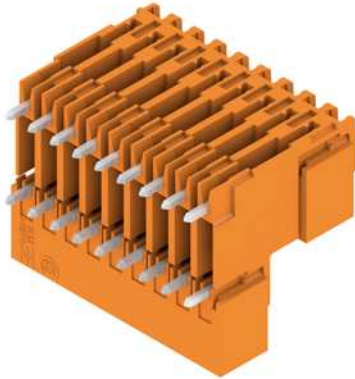
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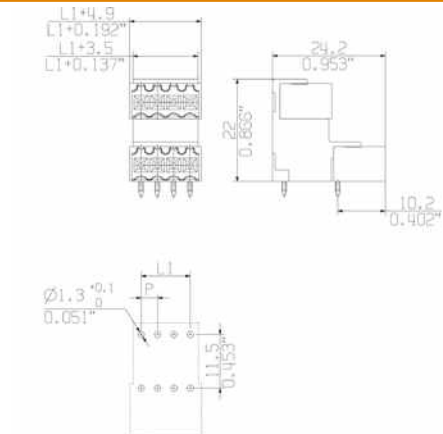
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**Drawings**

**Product image**



**Dimensional drawing** [info@weidmueller.com](mailto:info@weidmueller.com)



AUSFUEHRUNG/TYP: SLD 3.50V/./90F..

AUSFUEHRUNG/TYP SLD 3.50V/./90..

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46	80,50	77,00	81,90	87,50
42	73,50	70,00	74,90	80,50
38	66,50	63,00	67,90	73,50
34	59,50	56,00	60,90	66,50
30	52,50	49,00	53,90	59,50
26	45,50	42,00	46,90	52,50
22	38,50	35,00	39,90	45,50
18	31,50	28,00	32,90	38,50
14	24,50	21,00	25,90	31,50
10	17,50	14,00	18,90	24,50
6	10,50	7,00	11,90	17,50
n	L	L1	L2	L3

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to IEC 60326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermal and corrosive stress will be satisfied.

General tolerance: DIN ISO 2768-mK 	99080/5	Cat.no.: .	
	20.10.17 HELIS_MA 06	<b>3 21372</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">15</span> Drawing no. Issue no.	
	Modification	Sheet 00 of 00 sheets	
Scale: 2:1	Drawn: 13.08.2004 LANG_T Responsible: LANG_T Checked: 01.11.2017 HELIS_MA Approved: HECKERT_M	<b>SLD 3.50V/./90...</b> STIFTLISTE MALE HEADER	
Supersedes: .	Product file: SLD 3.50V	7302	

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## Recommended wave soldering profiles

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 Germany  
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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.