

SLD 3.50/48/90F 3.2SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

Two-tier pin header for wave soldering in 3.50 mm pitch.
The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 48, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1139090000
Type	SLD 3.50/48/90F 3.2SN BK BX
GTIN (EAN)	4032248920495
Qty.	10 pc(s).
Product data	IEC: 200 V / 10.5 A UL: 300 V / 8 A
Packaging	Box

Creation date September 16, 2022 12:27:31 AM CEST

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Technical data

Dimensions and weights

Depth	24.7 mm	Depth (inches)	0.972 inch
Height	26.5 mm	Height (inches)	1.043 inch
Height of lowest version	23.3 mm	Width	91 mm
Width (inches)	3.583 inch	Net weight	31.3 g

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	48			
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	80.5 mm			
L1 in inches	3.169 inch			
Number of rows	2			
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			
Volume resistance	≤5 mΩ			
Can be coded	Yes			
Plugging force/pole, max.	10 N			
Pulling force/pole, max.	8 N			
Tightening torque	Torque type		Mounting screw, PCB	
	Usage information		Tightening torque	min. 0.1 Nm
				max. 0.15 Nm
			Recommended screw	Part number PTSC KA 2.2X4.5 WN1412

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	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		

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Technical data

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

Rated data acc. to CSA

Institute (CSA)		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)	8 A	Rated current (Use group D / CSA)	8 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	107 mm
VPE width	99 mm	VPE height	60 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	• 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

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Technical data

Downloads

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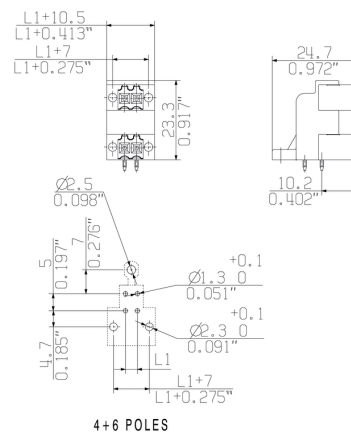
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Drawings

Dimensional drawing



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Dimensions without tolerances are no check dimensions

The English version is binding

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

AUSFUEHRUNG/TYPE 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.

Weidmueller 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, thermic and corrosive stress will be satisfied.

General tolerance: DIN ISO 2768-mK		99080/5 20.10.17 HELIS_MA 06		Cat.no.: .	
		Modification		Weidmüller	
		Drawn	13.08.2004	LANG_T	SLD 3.50V/./90... STIFTELEISTE MALE HEADER
		Responsible		LANG_T	
		Checked	01.11.2017	HELIS_MA	
Supersedes: .		Approved		HECKERT_M	Product file: SLD 3.50V 7302

Drawing no. 3 21372 15
Sheet 00 of 00 sheets

Recommended wave soldering 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.

We reserve the right to make technical changes.