

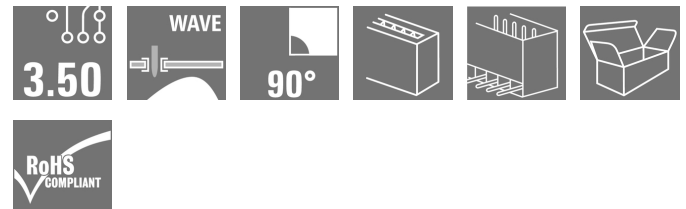
SL 3.50/07/90G 3.2SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

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: 7, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1766000000
Type	SL 3.50/07/90G 3.2SN BK BX
GTIN (EAN)	4050118369205
Qty.	50 pc(s).
Product data	IEC: 320 V / 17 A UL: 300 V / 10 A
Packaging	Box

Creation date September 16, 2022 10:54:58 AM CEST

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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	Width	25.9 mm
Width (inches)	1.02 inch	Net weight	1.931 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	7	Number of solder pins per pole	1
Solder pin length (l)	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	21 mm	L1 in inches	0.827 inch
Number of rows	1	Pin series quantity	1
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.	10 N
Pulling force/pole, max.	10 N		

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...4 µm Ni / 5...8 µm Sn glossy	Layer structure of plug contact	2...4 undefined Ni / 5...8 undefined 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)	17 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	14.5 A
Rated current, max. number of poles (Tu=40°C)	10 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	2,500 V
Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV		

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)	10 A	Rated current (Use group D / CSA)	10 A

Packing

Packaging	Box	VPE length	101 mm
VPE width	91 mm	VPE height	39 mm

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www.weidmueller.com**Technical data****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

ROHS	Conform
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Downloads

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

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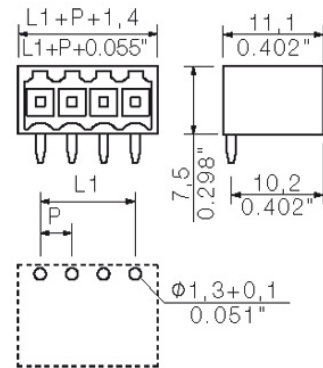
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Drawings

Product image



Dimensional drawing

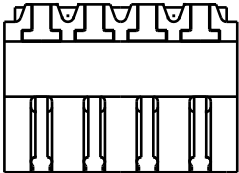
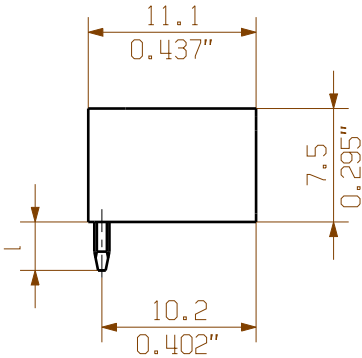


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Dimensions without tolerances are no check dimensions

The English version is binding



hole pattern

P = 3.50 Raster Pitch

D = Ø1,3 +0.1
Ø0.051" +0.1

d = 1,2mm oktagonale
0.047" oktagonale

SHOWN: SL 3.50/04/90G

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 with VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 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.

1,5	0,1
	-0,3
3,2	0,1
	-0,3
4,5	0,1
	-0,3
pin length l/ Stiftlänge l	tolerance/ Toleranz

24	80.5	+/-0.2
23	77.0	
22	73.5	
21	70.0	
20	66.5	
19	63.0	
18	59.5	
17	56.0	
16	52.5	+/-0.15
15	49.0	
14	45.5	
13	42.0	
12	38.5	+/-0.1
11	35.0	
10	31.5	
9	28.0	
8	24.5	
7	21.0	
6	17.5	
5	14.0	
4	10.5	Toleranz/ tolerance L1
3	7.0	
2	3.5	
n Polzahl/ no of poles	L1	Toleranz/ tolerance L1

General tolerance: DIN ISO 2768-mK		96310/5 06.07.17 HELIS_MA		00	Cat.no.: .	
		Modification				
	Drawn	21.08.2008	HELIS_MA	SL 3.50/.. /90... STIFTLISTE MALE HEADER		
	Responsible		AMANN_A			
	Checked	20.09.2017	HERTEL_S			
Scale: 5/1	Approved		LANG_T	Product file: SL 3.50		
Supersedes: .				7296		

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.