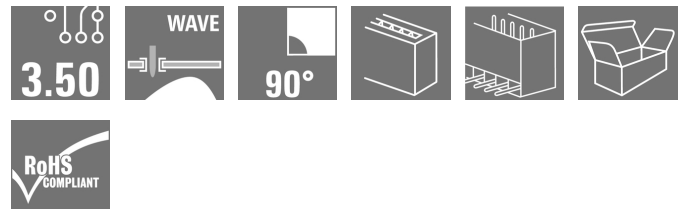
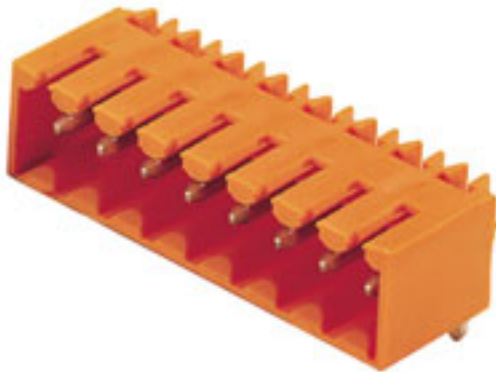


OMNIMATE Signal - series BL/SL 3.50
SL 3.50/05/90G 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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

Type	SL 3.50/05/90G 3.2SN BK BX
Order No.	1763000000
Version	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248049363
Qty.	50 pc(s).
Product data	IEC: / 17 A UL: 300 V / 10 A
Packaging	Box

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Technical data

Dimensions and weights

Width	18.9 mm	Width (inches)	0.744 inch
Height	10.7 mm	Height (inches)	0.421 inch
Height of lowest version	7.5 mm	Depth	11.1 mm
Depth (inches)	0.437 inch	Net weight	1.7 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°
No. of poles	5	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Tolerance of solder pin position	± 0.1 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	14 mm
L1 in inches	0.551 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	Volume resistance	6.00 mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	10 N	Pulling force/pole, max.	10 N

Material data

Insulating material	PBT	Colour code	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
CTI	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact base material	CuSn	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.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
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. no. of poles (Tu=20°C)	17 A
Rated current, max. no. of poles (Tu=20°C)	12 A	Rated current, min. no. of poles (Tu=40°C)	14.5 A
Rated current, max. no. of poles (Tu=40°C)	10 A		

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Technical data
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) 10 A

Rated current (Use group D / CSA) 10 A

Reference to approval values

Specifications are
 maximum values, details -
 see approval certificate.

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) 10 A

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	35 mm
VPE width	70 mm	VPE height	85 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

Notes

Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- 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.

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.

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Technical data**Approvals**

Approvals



ROHS

Conform

DownloadsApproval/Certificate/Document of
Conformity[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)
[MB SMT EN](#)
[FL DRIVES DE](#)
[MB DEVICE MANUF. EN](#)
[FL BUILDING SAFETY EN](#)
[FL APPL LED LIGHTING EN](#)
[FL INDUSTR.CONTROLS EN](#)
[FL MACHINE SAFETY EN](#)
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[FL APPL INVERTER EN](#)
[FL_BASE_STATION_EN](#)
[FL ELEVATOR EN](#)
[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

Engineering Data

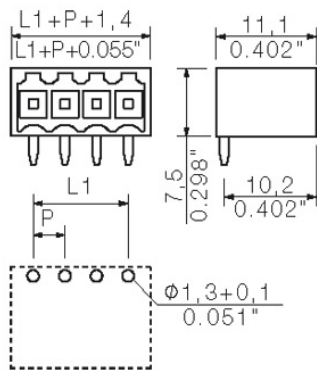
[SL.zip](#)
[STEP](#)

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Drawings

Dimensional drawing

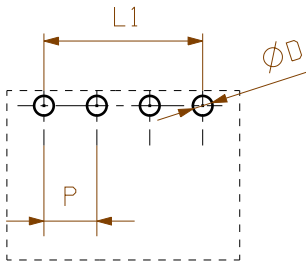
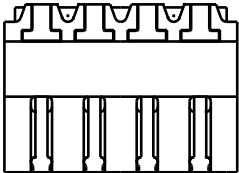
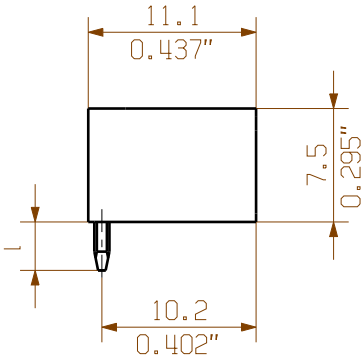
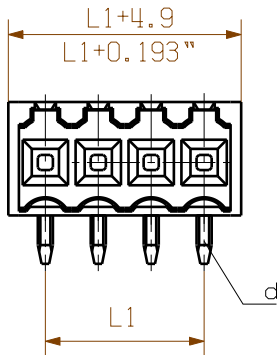


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Dimensions without tolerances are no check dimensions

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.