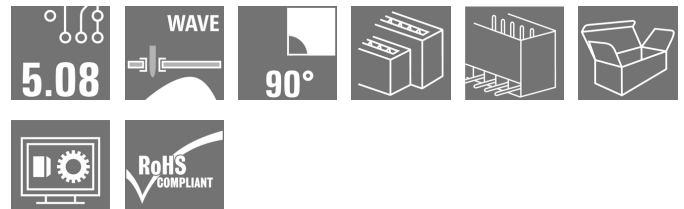


## OMNIMATE Signal - series BL/SL 5.08 SLD 5.08/16/90G 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
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www.weidmueller.com

### Product image



2-tier male header with parallel pin arrangement. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

### General ordering data

Type	SLD 5.08/16/90G 3.2SN OR BX
Order No.	<a href="#">1601850000</a>
Version	PCB plug-in connector, male header, closed side, THT solder connection, 5.08 mm, Number of poles: 16, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box
GTIN (EAN)	4008 1901 12028
Qty.	20 pc(s).
Product data	IEC: 400 V / 11 A UL: 300 V / 10 A
Packaging	Box

Creation date 09 September 2020 07:12:14 CEST

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**Technical data****Dimensions and weights**

Width	42.6 mm	Width (inches)	1.677 inch
Height	31.25 mm	Height (inches)	1.23 inch
Height of lowest version	28.05 mm	Depth	22 mm
Depth (inches)	0.866 inch	Net weight	16.15 g

**System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	90°
Number of poles	16	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)	1.3 mm
Solder eyelet hole diameter tolerance (D)+	0,1 mm	L1 in mm	35.56 mm
L1 in inches	1.4 inch	Number of rows	2
Pin series quantity	2	Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch
Volume resistance	≤ 5mΩ	Can be coded	Yes
Plugging cycles	25		

**Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	1...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 2...4 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.	-25 °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)	11 A
Rated current, max. number of poles (Tu=20°C)	8.5 A	Rated current, min. number of poles (Tu=40°C)	9.5 A
Rated current, max. number of poles (Tu=40°C)	7 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	1 x 1s with 120 A

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## Technical data

### Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
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	52 mm
VPE width	99 mm	VPE height	181 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	UNSPSC	30-21-18-10

### Notes

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Spacing between rows: see hole layout</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>
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.

**Data sheet****OMNIMATE Signal - series BL/SL 5.08  
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**Technical data****Approvals**

Approvals



ROHS

Conform

**Downloads**Approval/Certificate/Document of  
Conformity[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)  
[MB DEVICE MANUF. EN](#)  
[FL DRIVES DE](#)  
[CAT 2 PORTFOLIOGUIDE EN](#)  
[FL BUILDING SAFETY EN](#)  
[FL APPL LED LIGHTING EN](#)  
[FL INDUSTR.CONTROLS EN](#)  
[FL MACHINE SAFETY EN](#)  
[FL HEATING ELECTR EN](#)  
[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

[WSCAD](#)

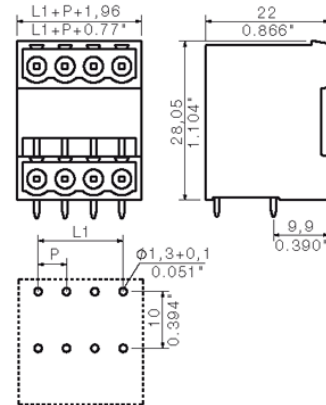
**Data sheet**

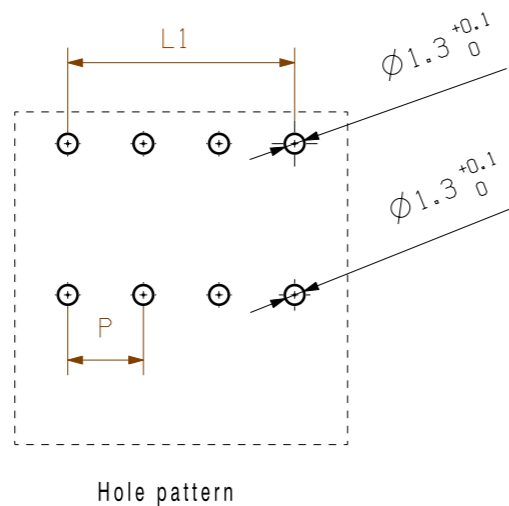
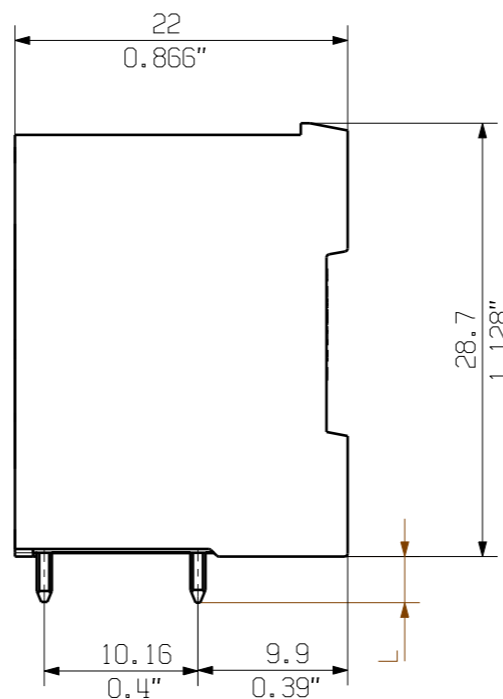
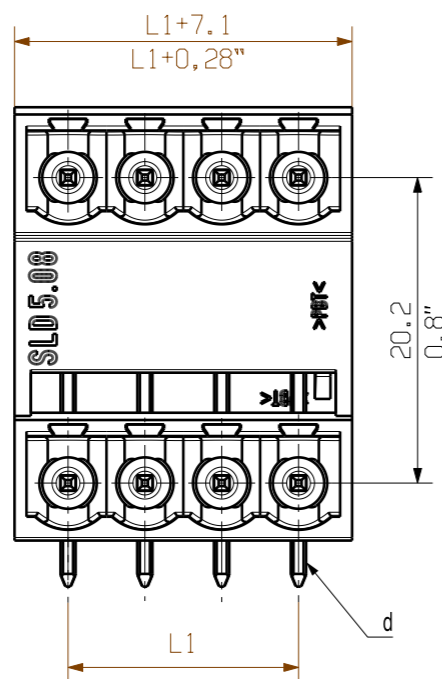
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**Drawings**

**Dimensional drawing**





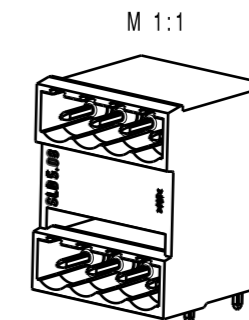
Hole pattern

P = 5.08 Raster Pitch  
 D = Ø1.3<sup>+0.1</sup>  
 Ø0.051<sup>+0.1</sup>  
 d = 1,2mm oktogonal  
 0.047" octogonal

n = no of poles

P = pitch

Shown: SLD 5.08/08/90G



3,2	0,1 -0,3
4,5	0,1 -0,3
<b>Solder pin length L</b>	<b>Tolerance</b>

24	116,84	4,600
23	111,76	4,400
22	106,68	4,200
21	101,60	4,000
20	96,52	3,800
19	91,44	3,600
18	86,36	3,400
17	81,28	3,200
16	76,20	3,000
15	71,12	2,800
14	66,04	2,600
13	60,96	2,400
12	55,88	2,200
11	50,80	2,000
10	45,72	1,800
9	40,64	1,600
8	35,56	1,400
7	30,48	1,200
6	25,40	1,000
5	20,32	0,800
4	15,24	0,600
3	10,16	0,400
2	5,08	0,200
<b>n</b>	<b>L1 [mm]</b>	<b>L1 [inch]</b>

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 DIN IEC 326 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, thermic and corrosive stress will be satisfied.

General tolerance: DIN ISO 2768-mK		102002/5 20.02.18 HELIS_MA 00		Cat.no.: .															
		Modification																	
		<table border="1"> <tr><td>Drawn</td><td>19.08.2003</td><td>Name</td><td>#AttributeError: Benutzer None nicht gefunde</td></tr> <tr><td>Responsible</td><td></td><td>HERTEL_S</td><td></td></tr> <tr><td>Checked</td><td>27.02.2018</td><td>HELIS_MA</td><td></td></tr> <tr><td>Approved</td><td></td><td>LANG_T</td><td></td></tr> </table>		Drawn	19.08.2003	Name	#AttributeError: Benutzer None nicht gefunde	Responsible		HERTEL_S		Checked	27.02.2018	HELIS_MA		Approved		LANG_T	
Drawn	19.08.2003	Name	#AttributeError: Benutzer None nicht gefunde																
Responsible		HERTEL_S																	
Checked	27.02.2018	HELIS_MA																	
Approved		LANG_T																	
Scale: 2:1		Supersedes: .		SLD 5.08/.../90 STIFTLISTE MALE HEADER															
		Product file: SLD 5.08		7304															

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
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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.