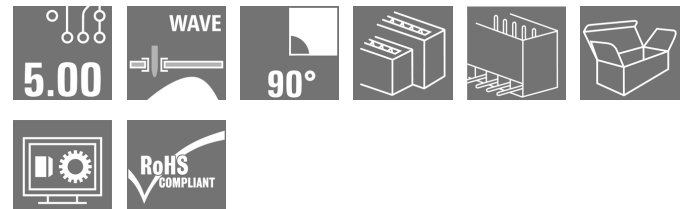


**OMNIMATE Signal - series BL/SL 5.00  
SLD 5.00/24/90G 3.2 SN OR BX**

**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

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 5.00/24/90G 3.2 SN OR BX
Order No.	<a href="#">1614450000</a>
Version	PCB plug-in connector, male header, closed side, THT solder connection, 5.00 mm, No. of poles: 24, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box
GTIN (EAN)	4008190030780
Qty.	10 pc(s).
Product data	IEC: 400 V / 11 A UL: 300 V / 10 A
Packaging	Box

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

Width	61.96 mm	Width (inches)	2.439 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	23.7 g

**System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.00	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	Outgoing elbow	90°
No. of poles	24	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	± 0.15 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	55 mm
L1 in inches	2.165 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	6.70 mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	3 N
Pulling force/pole, max.	3 N		

**Material data**

Insulating material	PBT	Colour	Orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
CTI	≥ 200	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	CuSn
Contact surface	tinned	Layer structure of solder connection	1-3 μm Ni / 2-4 μm Sn matt
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.	-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. no. of poles (Tu=20°C)	11 A
Rated current, max. no. of poles (Tu=20°C)	8.5 A	Rated current, min. no. of poles (Tu=40°C)	9.5 A
Rated current, max. no. 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

## OMNIMATE Signal - series BL/SL 5.00 SLD 5.00/24/90G 3.2 SN OR BX

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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.		

### Packaging

Packaging	Box	VPE length	70 mm
VPE width	120 mm	VPE height	160 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	<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> </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 5.00  
SLD 5.00/24/90G 3.2 SN OR BX**

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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](#)  
[FLIndustr.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](#)

Engineering Data

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

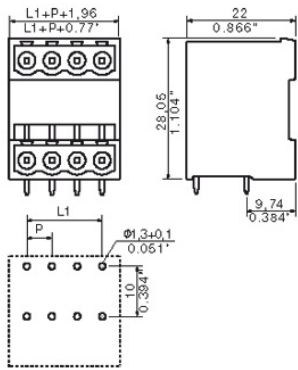
**Data sheet**

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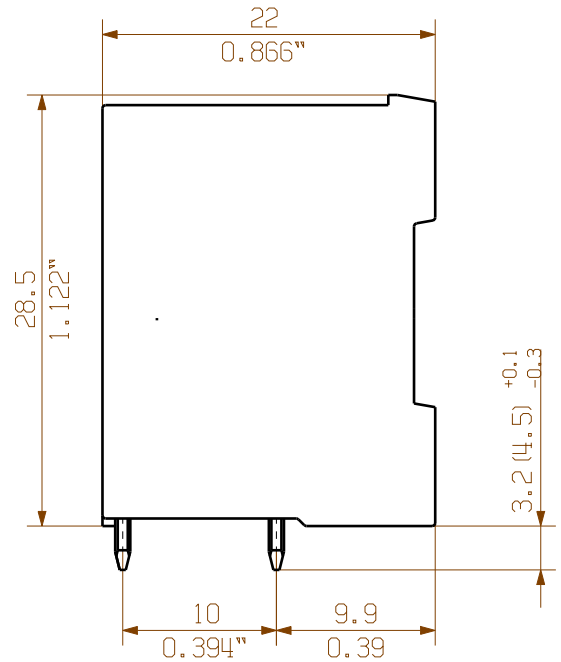
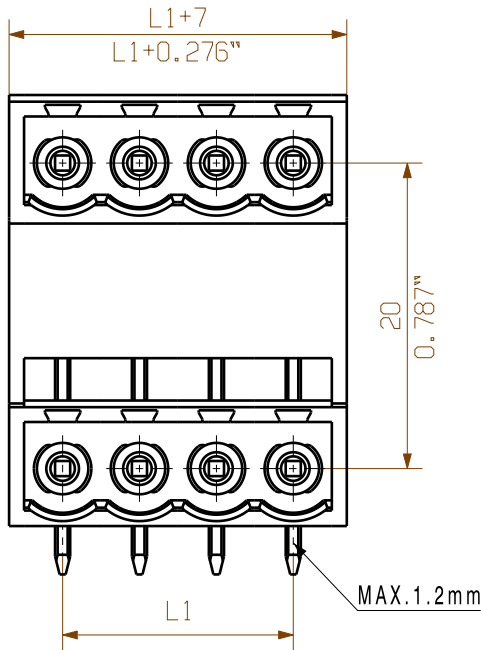
**Drawings**

**Dimensional drawing**

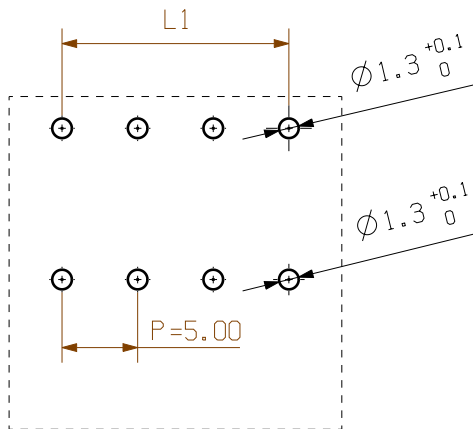


MASSE OHNE TOLERANZ SIND KEINE PRUEFFASSE  
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH  
THE GERMAN VERSION IS BINDING



HOLE PATTERN



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.

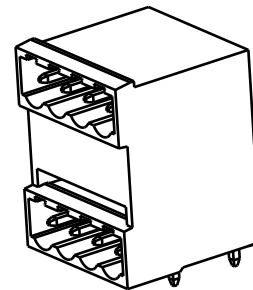
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.

The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application.

Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

M 1/1



48	115,00	4,531
46	110,00	4,334
44	105,00	4,137
42	100,00	3,940
40	95,00	3,743
38	90,00	3,546
36	85,00	3,349
34	80,00	3,152
32	75,00	2,955
30	70,00	2,758
28	65,00	2,561
26	60,00	2,364
24	55,00	2,167
22	50,00	1,970
20	45,00	1,773
18	40,00	1,576
16	35,00	1,379
14	30,00	1,182
12	25,00	0,985
10	20,00	0,788
8	15,00	0,591
6	10,00	0,394
4	5,00	0,197
n	L1 [mm]	L1 [Inch]

SHOWN:SLD 5.00/08/90G

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05	51665/0 05.10.10 HERTEL_S 01	CAT.NO.:	
	MODIFICATION		<b>C 19817 09</b> DRAWING NO. ISSUE NO. SHEET 01 OF 01 SHEETS	
	DATE 15.12.2009	NAME HELIS_MA	<b>SLD 5.00/.. /90G....</b> STIFTLISTE PIN HEADER	
SCALE: 2/1	CHECKED 08.10.2010	HECKERT_M		
SUPERSEDES: .	APPROVED	HECKERT_M		
PRODUCT FILE: SLD 5.00			7303	

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## 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.