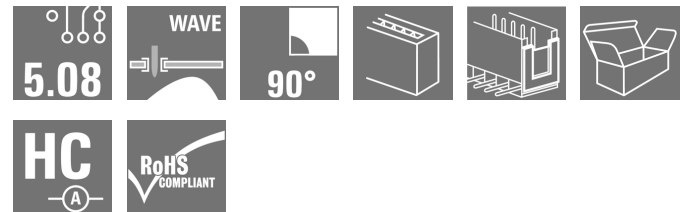


**OMNIMATE Signal - series BL/SL 5.08  
SL 5.08HC/10/90B 3.2SN BK BX**

**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 made from glass-fibre-reinforced plastic with 90° wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/10/90B 3.2SN BK BX
Order No.	<a href="#">1155670000</a>
Version	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, No. of poles: 10, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4050118050271
Qty.	50 pc(s).
Product data	IEC: 400 V / 24 A UL: 300 V / 18.5 A
Packaging	Box

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

Width	52.56 mm	Width (inches)	2.069 inch
Height	11.7 mm	Height (inches)	0.461 inch
Height of lowest version	8.5 mm	Depth	12 mm
Depth (inches)	0.472 inch	Net weight	3.053 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°
No. of poles	10	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	45.72 mm
L1 in inches	1.8 inch	Number of rows	1
Pin series quantity	1	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	10 N
Pulling force/pole, max.	7.5 N		

**Material data**

Insulating material	PA GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	II
CTI	≥ 550	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	CuMg
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.	-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)	24 A
Rated current, max. no. of poles (Tu=20°C)	19 A	Rated current, min. no. of poles (Tu=40°C)	21 A
Rated current, max. no. of poles (Tu=40°C)	16.5 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		

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

**Data sheet**

**OMNIMATE Signal - series BL/SL 5.08  
SL 5.08HC/10/90B 3.2SN BK BX**

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**Technical data**

**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V  
 Rated current (Use group B / UL 1059) 18.5 A  
 Reference to approval values Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V  
 Rated current (Use group D / UL 1059) 10 A

**Packaging**

Packaging	Box	VPE length	35 mm
VPE width	115 mm	VPE height	170 mm

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	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.

**Approvals**

Approvals



ROHS

Conform

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

Approval/Certificate/Document of  
Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

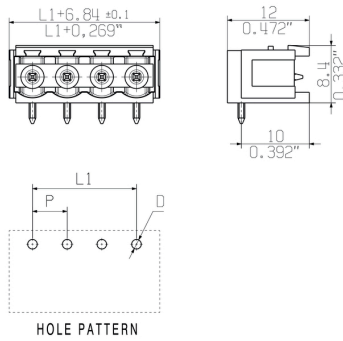
[FL DRIVES EN](#)  
[MB DEVICE MANUF. EN](#)  
[FL DRIVES DE](#)  
[CAT 2 PORTFOLIOGUIDE EN](#)  
[FL BUILDING SAFETY EN](#)  
[FL APPL LED LIGHTING EN](#)  
[FL INDUSTR.CONTROLS EN](#)  
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[FL 72H SAMPLE SER EN](#)  
[PO OMNIMATE EN](#)

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**Drawings**

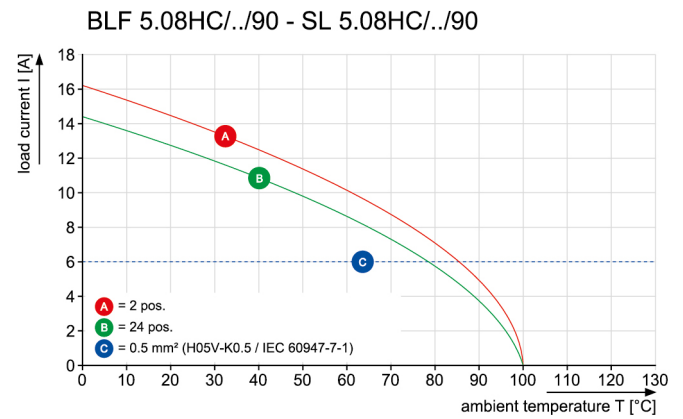
**Dimensional drawing**



**Graph**



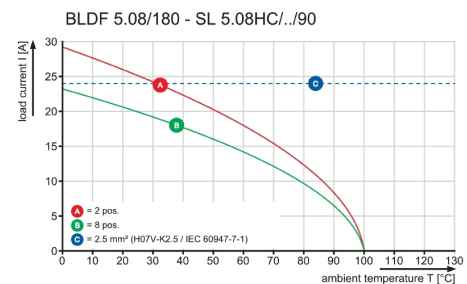
**Graph**



**Graph**



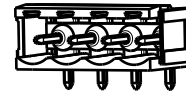
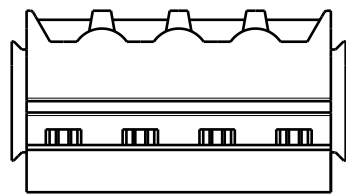
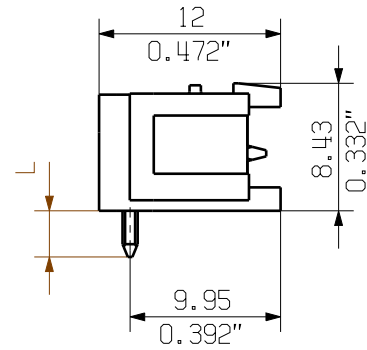
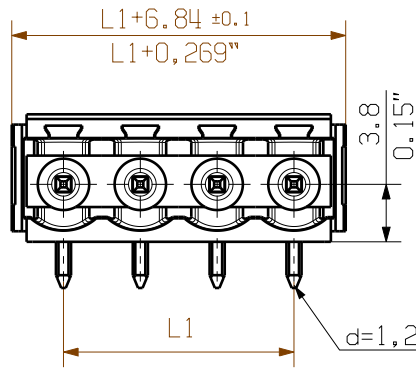
**Graph**



**Data sheet****OMNIMATE Signal - series BL/SL 5.08  
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**Drawings****Graph**



1/1



HOLE PATTERN

PCB-Ø 1,4 TILL POLE 8  
PCB-Ø 1,5 FROM POLE 9

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
n	L1 [mm]	L1 [inch]

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.

P=PITCH  
SHOWN: SL 5.08/4/90 B

STIFTLAENGE L PIN LENGTH L	TOLERANZ TOLERANCE
3,2	0,1
	-0,3
4,5	0,1
	-0,3

	DIN ISO 2768-m	101482/5 07.02.18 HELIS_MA 00		Cat.no.: . . .	
	Modification			<b>3 48753</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">04</span>	Drawing no.
	Date	Name	Sheet 02	of 05	sheets
Scale: 2:1	Drawn	18.10.2010	HERTEL_S	<b>SL 5.08HC/.. /90...</b> STIFTLAISTE MALE HEADER	
Supersedes: .	Responsible		HERTEL_S		
	Checked	27.02.2018	HELIS_MA		
	Approved		LANG_T	Product file: SL-HP 5.08	7377

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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.