

SLD 5.08V/20/180 3.2SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Pin headers with solder pin length optimised for wave flow soldering. The male connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Version	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 20, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	1725730000
Type	SLD 5.08V/20/180 3.2SN OR BX
GTIN (EAN)	4032248062027
Qty.	20 pc(s).
Product data	IEC: 320 V / 14 A UL: 300 V / 10 A
Packaging	Box

Creation date June 4, 2024 3:20:53 AM CEST

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Technical data

Dimensions and weights

Depth	28.65 mm	Depth (inches)	1.128 inch
Height	22 mm	Height (inches)	0.866 inch
Height of lowest version	22.2 mm	Width	53.34 mm
Width (inches)	2.1 inch	Net weight	18.45 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 "	Outgoing elbow	180°
Number of poles	20	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)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0, 1 mm
L1 in mm	45.72 mm	L1 in inches	1.8 "
Number of rows	2	Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	finger-safe unplugged/ back-of-hand-safe plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Protection degree	IP20	Volume resistance	≤5 mΩ
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	UL 94 flammability rating	V-0
Contact material	Cu-alloy	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)	14 A
Rated current, max. number of poles (Tu=20°C)	8.5 A	Rated current, min. number of poles (Tu=40°C)	11 A
Rated voltage for surge voltage class / pollution degree II/2	320 V	Rated voltage for surge voltage class / pollution degree III/2	250 V
Rated voltage for surge voltage class / pollution degree III/3	250 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	400 V
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

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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	183 mm
VPE width	130 mm	VPE height	31 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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	ECLASS 13.0	27-46-02-01

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Technical data

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	<ul style="list-style-type: none"> • Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • Spacing between rows: see hole layout • 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. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Product Change Notification	20230206 Changed surface for solder pins of SLDV 5.08 20230206 Umgestellte Oberfläche bei Lötstiften der SLDV 5.08
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE 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 PO OMNIMATE EN

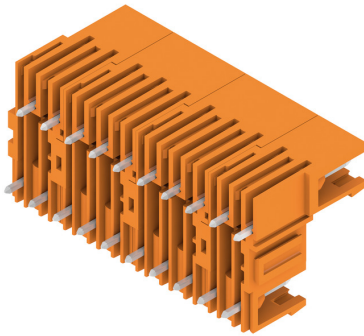
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Drawings

Product image



Dimensional drawing



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www.weidmueller.com**Accessories****Additional accessories****No task is too small when creating the perfect solution.** br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

General ordering data

Type	SL AT SW	Version	Product data	Packaging
Order No.	1770240000	PCB plug-in connector, Accessories, Spacer, black, Number of poles: 1		Box
GTIN (EAN)	4032248117710			
Qty.	100 pc(s).			
Type	SL AT OR	Version	Product data	Packaging
Order No.	1598300000	PCB plug-in connector, Accessories, Spacer, orange, Number of poles: 1		Box
GTIN (EAN)	4008190189266			
Qty.	100 pc(s).			

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Accessories

Blocks for PCB mounting

**Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the whole plug connection by

- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

General ordering data

Type	SLA BB 14 SW	Version	Product data	
Order No.	1774460000	PCB plug-in connector, Accessories, Mounting block, black, Number of		
GTIN (EAN)	4032248148813	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB 14 OR	Version	Product data	Packaging
Order No.	1594200000	PCB plug-in connector, Accessories, Mounting block, orange, Number		
GTIN (EAN)	4008190184988	of poles: 1		
Qty.	20 pc(s).			
				Box

Coding elements

**Only connects what is supposed to be connected: the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.

The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.

The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
				Box

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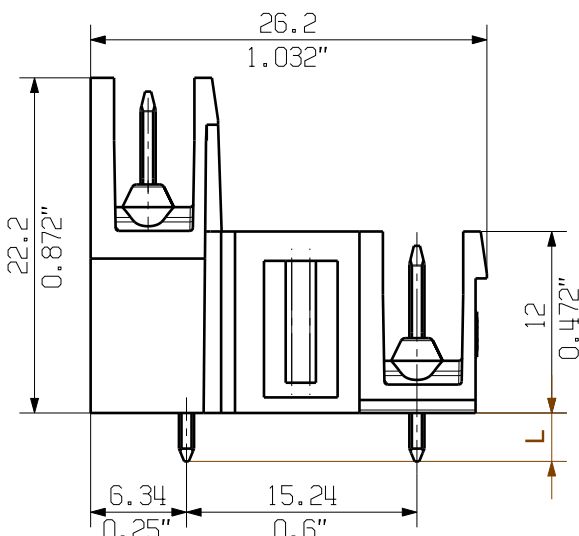
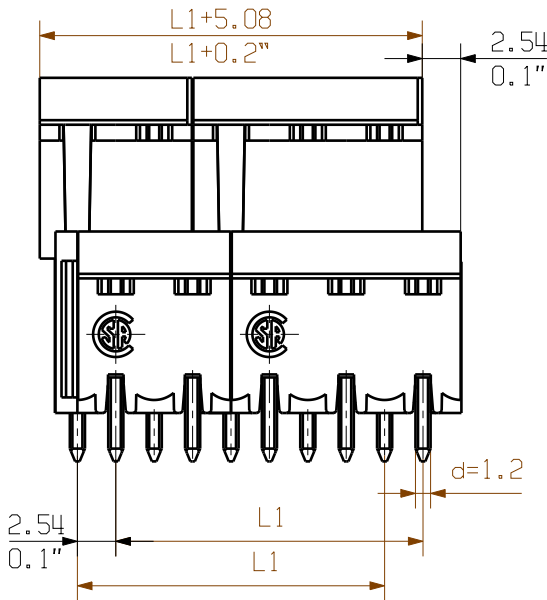
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www.weidmueller.com**Accessories**

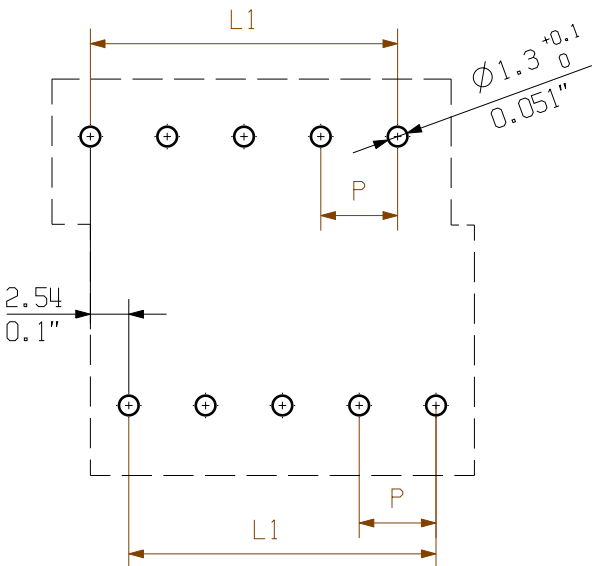
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

Dimensions without tolerances are no check dimensions

The English version is binding



1/1



P = pitch
n = no of poles
shown:SLD 5.08V/10/180

3,2	0,1
	-0,3
4,5	0,1
	-0,3
Stiftlänge L pin length L	Toleranz Tolerance

48	116,84	4,600	+0.40 - 0.24
46	111,76	4,400	
44	106,68	4,200	
42	101,60	4,000	+0.35 - 0.21
40	96,52	3,800	
38	91,44	3,600	
36	86,36	3,400	+0.30 - 0.18
34	81,28	3,200	
32	76,20	3,000	
30	71,12	2,800	+0.25 - 0.15
28	66,04	2,600	
26	60,96	2,400	
24	55,88	2,200	+0.20 - 0.12
22	50,80	2,000	
20	45,72	1,800	
18	40,64	1,600	+0.15 - 0.09
16	35,56	1,400	
14	30,48	1,200	
12	25,40	1,000	+0.10 - 0.06
10	20,32	0,800	
8	15,24	0,600	
6	10,16	0,400	+ 0.05 - 0.03
4	5,08	0,200	
n	L1 [mm]	L1 [Inch]	Toleranz/ tolerance L1 [mm]

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.

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.

General tolerance:
DIN ISO 2768-mK



Scale: 2/1

Supersedes: .

88610/5 24.08.16 HELIS_MA	00
Modification	

	Date	Name
Drawn	18.07.2003	KNOTH_G
Responsible		HERTEL_S
Checked	01.09.2016	HELIS_MA
Approved		LANG_T

Weidmüller

SLD 5.08V/.../180(B)
STIFTLASTE
PIN HEADER

Product file: SLD 5.08V

Cat.no.: .

3 26661 08

Drawing no. Issue no.
Sheet 01 of 02 sheets

7305

Recommended wave soldering profiles

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

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.