

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image



















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

Version	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 5, 90°, Solder pin length (I): 3.2 mm, tinned, orange, Box
Order No.	<u>1148130000</u>
Туре	SL 5.08HC/05/90B 3.2SN OR BX
GTIN (EAN)	4050118051018
Qty.	50 pc(s).
Product data	IEC: 400 V / 24 A
	UL: 300 V / 18.5 A
Packaging	Вох

Creation date May 6, 2025 4:30:38 AM CEST



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Technical data

Dimensions and weights

Depth	12 mm	Depth (inches)	0.472 inch
Height	11.63 mm	Height (inches)	0.458 inch
Height of lowest version	8.43 mm	Width	27.16 mm
Width (inches)	1.069 inch	Net weight	2.16 g

System specifications

Product family	OMNIMATE Signal - series	Type of connection	
	BL/SL 5.08		Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 "	Outgoing elbow	90°
Number of poles	5	Number of solder pins per pole	1
Solder pin length (I)	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)	1.4 mm	Solder eyelet hole diameter tolerance ([O)+ 0,1 mm
L1 in mm	20.32 mm	L1 in inches	0.8 "
Number of rows	1	Pin series quantity	1
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 un- plugged
Protection degree	IP20	Volume resistance	≤5 mΩ
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	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	13 µm Ni / 24 µm Sn matt	Layer structure of plug contact	13 µm Ni / 24 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	JEO 00004 4 JEO 04004	Rated current, min. number of poles	0.4.4
	IEC 60664-1, IEC 61984	(Tu=20°C)	24 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	21 A
Rated current, max. number 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		



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27-46-02-01

27-46-02-01

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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)	18.5 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 (cURus)		Certificate No. (cURus)	
	L TATE III		

mum values, details - see approval certificate.

27-46-02-01

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27-46-02-01

			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)	18.5 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maxi-		

Packing

ECLASS 11.0

ECLASS 13.0

ECLASS 15.0

Packaging	Вох	VPE length	166 mm
VPE width	69 mm	VPE height	42 mm
Classifications			
ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02

ECLASS 12.0

ECLASS 14.0

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%



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Technical data

Important note

-	
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized stan- dards 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	Additional variants on request
	Gold-plated contact surfaces on request
	Rated current related to rated cross-section & min. No. of poles.
	• Diameter of solder eyelet D = 1.4+0.1mm
	• Solder eyelet diameter D = 1.5 + 0.1 mm, from 9 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.
	 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	OF C THE US KEMA
Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319244/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693



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Technical data

Downloads

Approval/Certificate/Document of Con-	•
formity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Product Change Notification	EN - Change of packaging
	DE - Change of packaging
Catalogues	<u>Catalogues in PDF-format</u>
Brochures	<u>FL DRIVES EN</u>
	MB DEVICE MANUF. EN
	<u>FL DRIVES DE</u>
	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



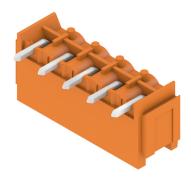
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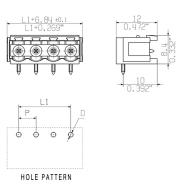
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Drawings

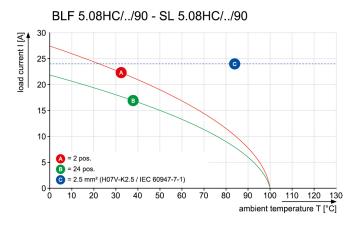
Product image



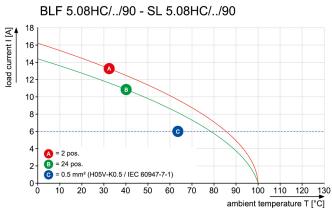
Dimensional drawing



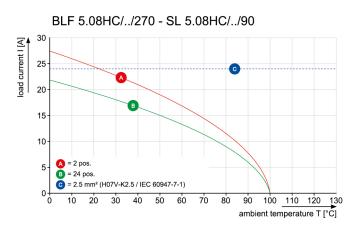
Graph



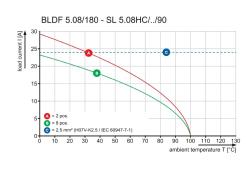
Graph



Graph



Graph





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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.

Туре	SLA BB11R OR	Version	Product data	Packaging
Order No.	1604120000	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190182977	of poles: 0		
Qty.	20 pc(s).			
_	01 A BB44B 0141			
Туре	SLA BB11R SW	Version	Product data	Packaging
Order No.	1692340000	Version PCB plug-in connector, Accessories, Mounting block, black, Number of		Packaging Box
				0 0



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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 clipon connection or mounting for male and female connectors

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

Туре	SL AT OR	Version	Product data	Packaging
Order No.	<u>1598300000</u>	PCB plug-in connector, Accessories, Spacer, orange, Number of poles	s:	Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			
Туре	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).			



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Accessories

LED Light guides



Effective: the link between LED and front panel.

Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.

The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.

The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

Gonorai	ordorning data			
Туре	SL FLA 3.8/1	Version	Product data	Packaging
Order No.	<u>1580110000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190050740	Number of poles: 1		
Qty.	100 pc(s).			
Туре	SL FLA 2,3/24	Version	Product data	Packaging
Order No.	<u>1636680000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190409968	Number of poles: 1		
Qty.	10 pc(s).			
Туре	SL FLA 9.0/1	Version	Product data	Packaging
Order No.	<u>1580120000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190031909	Number of poles: 1		
Qty.	100 pc(s).			
Туре	SL FLA 9.0/24	Version	Product data	
Order No.	<u>1595870000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		
GTIN (EAN)	4008190079796	Number of poles: 1		
Qty.	10 pc(s).			
Туре	SL FLA 1.5/1	Version	Product data	Packaging
Order No.	<u>1580100000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190152475	Number of poles: 1		
Qty.	100 pc(s).			
Туре	SL FLA 1.5/24	Version	Product data	
Order No.	<u>1595850000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		
GTIN (EAN)	4008190092573	Number of poles: 1		
Qty.	10 pc(s).			



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Accessories

Туре	SL FLA 2,3/1	Version	Product data	Packaging
Order No.	<u>1636670000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190409975	Number of poles: 1		
Qty.	100 pc(s).			
Туре	SL FLA 3.8/24	Version	Product data	
Order No.	<u>1595860000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		
GTIN (EAN)	4008190140892	Number of poles: 1		

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.

Туре	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<u>1545710000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
Туре	BLZ/SL KO OR BX	Version	Product data	Packaging
Type Order No.	BLZ/SL KO OR BX 1573010000	Version PCB plug-in connector, Accessories, Coding element, orange, Numbe		Packaging Box
• •	· ·			= =
Order No.	<u>1573010000</u>	PCB plug-in connector, Accessories, Coding element, orange, Number		



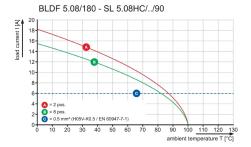
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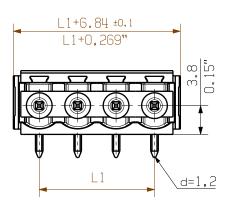
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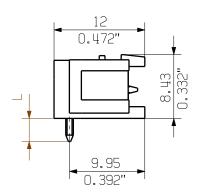
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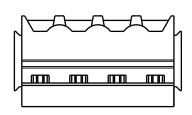
Drawings

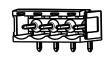
Graph











1/1

L1 D=1,4 or 1,5 D=0.055" or 0.059" ၢ (\pm) 0 PCB-Ø 1,4 TILL POLE 8 HOLE PATTERN PCB-Ø 1,5 FROM POLE 9 24 116,84 23 111,76 22 106,68

> 21 101,60 4,000 3.800 20 96.52 19 91,44 3,600 86,36 18 3,400

4.600

4,400

4,200

17 81,28 3,200 76,20 3.000 16

15 71,12 2.800 14 66,04 2,600 13 60,96 2,400

12 55,88 2,200 50,80 2.000 11

10 45,72 1,800 9 40,64 1,600 35,56 8 1,400

30,48 1,200 1,000 6 25,40

TOLERANZ STIFTLAENGE L 5 20,32 0.800 PIN LENGTH L TOLERANCE 4 15,24 0,600 0,1 3,2 3 10,16 0.400 -0,3 2 5,08 0,200 0,1 4,5

-0,3

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 occuring of electrical, mechanical, thermic and

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

The neccessary 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

corrosive stress will be satisfied.

P = PITCH

ROHS

alone.

SHOWN: SL 5.08/4/90 B

DIN ISO 2768-m 101482/5 07.02.18 HELIS_MA Weidmüller 🐔 Modification

3 48753 Drawing no.

n

Cat.no.:.

04 Issue no Sheet 02 sheets

L1 [mm]

L1 [inch]

Date Name Drawn 18.10.2010 | HERTEL_S HERTEL S Responsible Scale: 2:1 HELIS_MA Checked 27.02.2018 Supersedes: . LANG T Approved

SL 5.08HC/../90... STIFTLEISTE MALE HEADER

Product file: SL-HP 5.08 7377

Downloaded from Arrow.com.



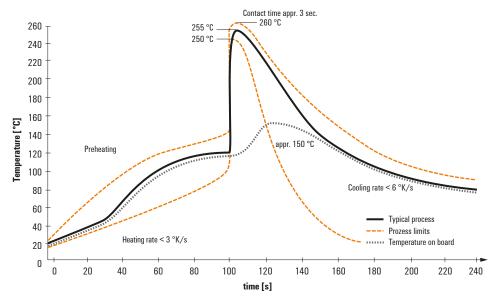
Recommended wave solderding profiles

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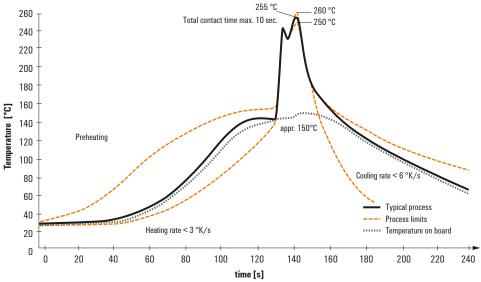
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Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

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.