

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, Solder flange, THT solder connection, 5.08 mm, Number of poles: 11, 90°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1150440000</u>
Туре	SL 5.08HC/11/90LF 3.2SN BK BX
GTIN (EAN)	4032248937387
Qty.	24 pc(s).
Product data	IEC: 400 V / 24 A
	UL: 300 V / 18.5 A
Packaging	Box

Creation date May 30, 2025 2:42:26 AM CEST



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

## **Dimensions and weights**

Depth	12 mm	Depth (inches)	0.472 inch
Height	11.7 mm	Height (inches)	0.461 inch
Height of lowest version	8.5 mm	Width	65.68 mm
Width (inches)	2.586 inch	Net weight	5.048 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	11	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)	1.5 mm	Solder eyelet hole diameter tolerance ([	0)+ 0,1 mm
L1 in mm	50.8 mm	L1 in inches	2 "
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 unplugged
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	black
Colour chart (similar)	RAL 9011	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		Rated current, min. number of poles	
	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	4,000 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		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

### Rated data acc. to CSA

Institute (CSA)	€P:	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)

E60693

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

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

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.

### **Packing**

Packaging	Box	VPE length VPE height	168 mm
VPE width	115 mm		35 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 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

### **Environmental Product Compliance**

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



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

#### Important note

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
	<ul> <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>
	<ul> <li>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</li> </ul>
	<ul> <li>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

### **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



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

### **Downloads**

Approval/Certificate/Document of Con-	
formity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
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 APPL INVERTER EN FL APPL INVERTER EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

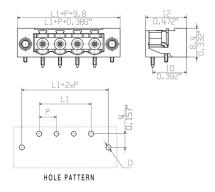
www.weidmueller.com

# **Drawings**

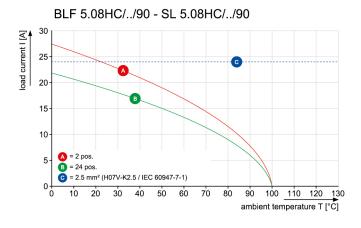
## **Product image**



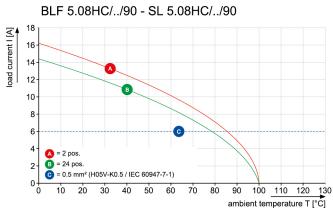
## **Dimensional drawing**



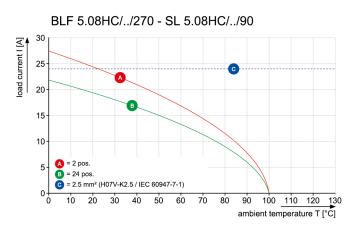
### Graph



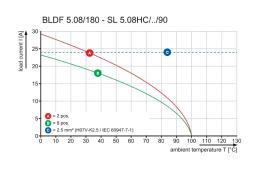
## Graph



### Graph



### Graph





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

,

# **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**

Туре	SLA BB11R SW	Version	Product data	Packaging
Order No.	<u>1692340000</u>	PCB plug-in connector, Accessories, Mounting block, black, Number	ck, black, Number of	
GTIN (EAN)	4008190864965	poles: 0		
Qty.	20 pc(s).			
Туре	SLA BB11R OR	Version	Product data	Packaging
Order No.	1604120000	PCB plug-in connector, Accessories, Mounting block, orange, Number	r	Box
GTIN (EAN)	4008190182977	of poles: 0		
Qty.	20 pc(s).			



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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 clipon connection or mounting for male and female connectors

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

### **General ordering data**

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

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		
Otv	50 pc(s).			

Creation date May 30, 2025 2:42:26 AM CEST



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# Accessories **S**

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

### **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

## **General ordering data**

Туре	SL FLA 1.5/24	Version	Product data				
Order No.	1595850000	PCB plug-in connector, Accessories, Flood-light display, Transparent,					
GTIN (EAN)	4008190092573	Number of poles: 1					
Qty.	10 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	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 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					
Qty.	10 pc(s).						



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# Accessories

Туре	SL FLA 2,3/24	Version	Product data	Packaging
Order No.	<u>1636680000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Вох
GTIN (EAN)	4008190409968	Number of poles: 1		
Qty.	10 pc(s).			
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 9.0/1	Version	Product data	Packaging
Order No.	<u>1580120000</u>	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Вох
GTIN (EAN)	4008190031909	Number of poles: 1		
Qty.	100 pc(s).			



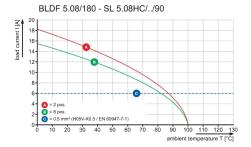
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

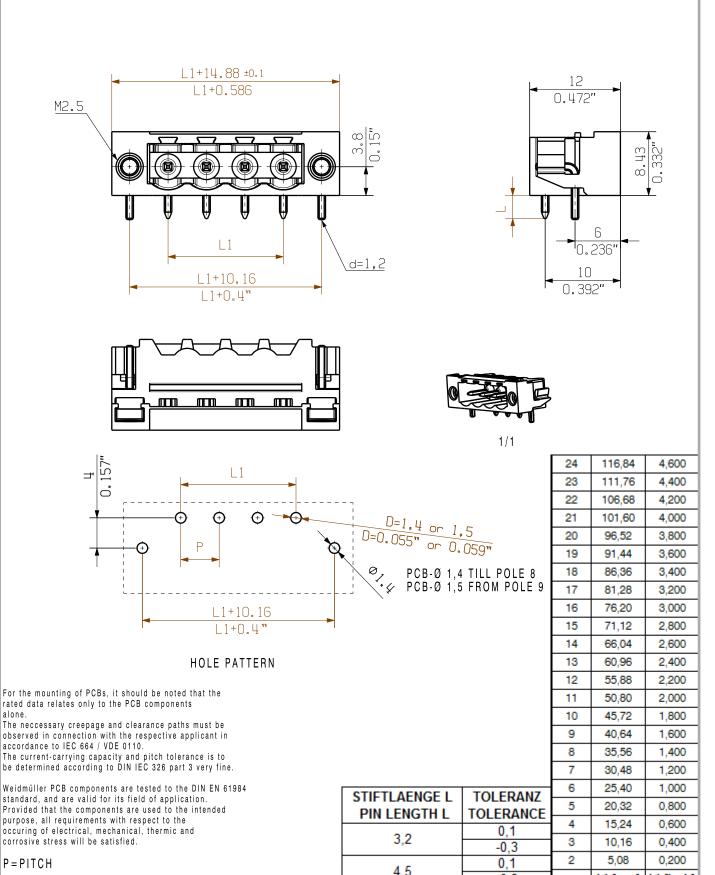
www.weidmueller.com

# **Drawings**

## Graph







SHOWN: SL 5.08HC/04/90LF				4,0	-0,3	n	L1 [mm]	L1 [inch]
DIN ISO 2768-m						Cat	t.no.:.	
ROMS DIN 150 2/08-111	101482/5 07.02.18 HE	LIS_WA	We	eidmülle.		3 Drawing no.	4875	3 04
	Modifi	ication				Sheet 0	5 of 05	sheets
		Date	Name					
	Drawn	18.10.201	O HERTEL_S	SI F	5.08HC//90			
	Responsible		HERTEL_S		STIETI E		<b>U</b>	

Product file: SL-HP 5.08

STIFTLEISTE

MALE HEADER

7377

Downloaded from Arrow.com.

Scale: 2:1

Supersedes: .

Checked

Approved

27.02.2018 | HELIS MA

LANG T



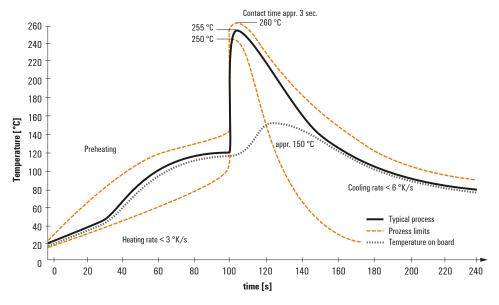
## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

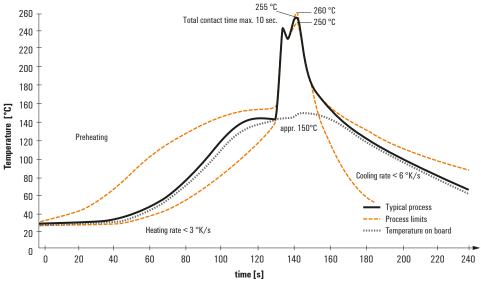
Klingenbergstraße 16 D-32758 Detmold Germany

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.