

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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



















#### 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**

Туре	SL 5.08HC/04/90F 3.2SN BK BX
Order No.	<u>1150110000</u>
Version	PCB plug-in connector, male header, Flange, THT solder connection, 5.08 mm, Number of poles: 4, 90°, Solder pin length (I): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248937028
Qty.	60 pc(s).
Product data	IEC: 400 V / 24 A UL: 300 V / 18.5 A
Packaging	Вох

Creation date May 2, 2020 7:20:43 AM CEST



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Technical data**

# **Dimensions and weights**

Width	30.48 mm	Width (inches)	1.2 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	2.33 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°				
Number of poles	4				
Number of solder pins per pole	1				
Solder pin length (I)	3.2 mm				
Solder pin length tolerance	+0.1 / -0.3 mm				
Tolerance of solder pin position	± 0.1 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	15.24 mm				
L1 in inches	0.6 inch				
Number of rows	1				
Pin series quantity	1				
Volume resistance	≤ 5mΩ				
Can be coded	Yes				
Plugging cycles	25				
Plugging force/pole, max.	10 N				
Pulling force/pole, max.	7.5 N				
Tightening torque	Torque type	PCB	, Screw flange		
	Usage information		Tightening torque	min.	0.1 Nm
				max.	0.15 Nm
		Red	commended screw	Part	PTSC KA
				number	2.2X4.5
					<u>WN1412</u>

## **Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
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.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C	<del>-</del>	



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Technical data**

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		Rated current, min. number of poles	
(Tu=20°C)	19 A	(Tu=40°C)	21 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	16.5 A	pollution degree II/2	400 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	320 V	pollution degree III/3	250 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	4 kV	class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage			

### Rated data acc. to CSA

class/ contamination degree III/3

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

## Rated data acc. to UL 1059

Institute (cURus)	- <b> </b>
	C # 100 U3

4 kV

Certificate No. (cURus)

· · · · · · · · · · · · · · · · · · ·	E00093
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	ile -

see approval certificate.

# **Packing**

Packaging	Вох	VPE length	35 mm
VPE width	115 mm	VPE height	170 mm
Classifications			

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	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
	<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>
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.



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Technical data**

-	
Approvals	C TOUS III KEMA

ROHS Conform

**Approvals** 

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
	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	STEP



Weidmüller Interface GmbH & Co. KG

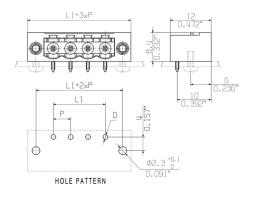
Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Drawings**

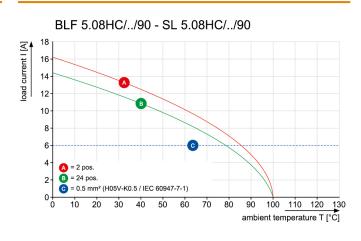
# **Dimensional drawing**



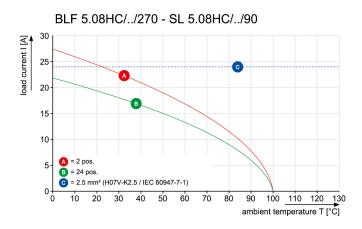
#### Graph

#### BLF 5.08HC/../90 - SL 5.08HC/../90 30 oad current I [A] 25 20 15 10 A = 2 pos. B = 24 pos. 5 © = 2.5 mm² (H07V-K2.5 / IEC 60947-7-1) 30 40 50 60 70 80 90 100 110 120 130

#### Graph

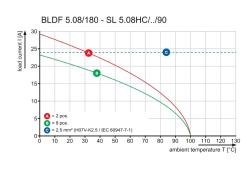


# Graph



# Graph

ambient temperature T [°C]





### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLZP 5.08HC/180F SN**



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### General ordering data

Туре	BLZP 5.08HC/04/180F SN	Version	Product data	Packaging
Order No.	<u>1944350000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248618927	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/180F SN	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/04/180F SN 1944110000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box

## **BLF 5.08HC/180LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

Туре	BLF 5.08HC/04/180LR SN	Version	Product data	Packaging
Order No.	1014390000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248722969	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Вох	12	
Туре	BLF 5.08HC/04/180LR SN	Version	Product data	Packaging
Order No.	1014140000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
Order No. GTIN (EAN)	1014140000 4032248723195	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²	, ,	



## Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLF 5.08HC/270LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

## **General ordering data**

Туре	BLF 5.08HC/04/270LR SN	Version	Product data	Packaging
Order No.	<u>1983100000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248687190	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	
Туре	BLF 5.08HC/04/270LR SN	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/04/270LR SN 1982330000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
			IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Вох

# **BLZP 5.08HC/270F SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/04/270F SN	Version	Product data	Packaging
Order No.	<u>1950570000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248628704	270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	60 pc(s).			
Туре	BLZP 5.08HC/04/270F SN	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/04/270F SN 1950330000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
			IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLL 5.08/90FI**



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

## **General ordering data**

Туре	BLL 5.08/04/90FI 3.2SN	Version	Product data	Packaging
Order No.	<u>1843770000</u>	PCB plug-in connector, female header, Inverted flange, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4032248355525	connection, 5.08 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	60 pc(s).	3.2 mm, tinned, orange, Box		

## **BLT 5.08HC/180F**



Female plugs with TOP screw connection system for connecting wires with straight outlet direction and screw flange. The female connectors provide space for labelling and can be coded. HC = High Current.

Туре	BLT 5.08HC/04/180F SN O	Version	Product data	Packaging
Order No.	<u>1844010000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248355938	180°, TOP connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 17 A / AWG 26 - AWG 1	4
Qty.	60 pc(s).			
Туре	BLT 5.08HC/04/180F SN B	Version	Product data	Packaging
Order No.	<u>1844240000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
CTINI (FANI)	4032248356171	180°, TOP connection, Clamping range, max.: 2.5 mm <sup>2</sup> , Box	UL: 300 V / 17 A / AWG 26 - AWG 1	4
GTIN (EAN)	4032240330171	100 , 101 connection, clamping range, max. : 2.5 mm , box	02.000 V / 1771 / 71W G 20 71W G 1	•



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLDF 5.08/180F SN**



The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5A current-carrying capacity. The large clamping capacity (up to 2.5mm² wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop. Four flange variations, including the patented release latch, allow for user-friendly unplugging designs.

### General ordering data

Туре	BLDF 5.08/04/180F SN BK	Version	Product data	Packaging
Order No.	1000960000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248817344	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	40 pc(s).	Box	26	
Туре	BLDF 5.08/04/180F SN OR	Version	Product data	Packaging
Type Order No.	BLDF 5.08/04/180F SN OR 1059420000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box

## **BLF 5.08HC/90LR SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

<b>-</b> 0				
Туре	BLF 5.08HC/04/90LR SN 0	Version	Product data	Packaging
Order No.	1002300000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248694464	$90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.} : 3.31 \text{mm}^{2}\text{,}$	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	
Туре	BLF 5.08HC/04/90LR SN B	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/04/90LR SN B 1000430001	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
• •			IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Вох



## Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLF 5.08HC/180F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

## **General ordering data**

Туре	BLF 5.08HC/04/180F SN 0	Version	Product data	Packaging
Order No.	1013110000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248720866	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	
Туре	BLF 5.08HC/04/180F SN B	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/04/180F SN B 1012660000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
			IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box

# **BLT 5.08HC/180LR**



Female plugs with TOP screw connection system for connecting wires with straight wire outlet and release latch mechanism. The female connectors provide space for labelling and can be coded. HC = High Current.

Туре	BLT 5.08HC/04/180LR SN	Version	Product data	Packaging
Order No.	1890240000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248498727	180°, TOP connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 17 A / AWG 26 - AWG 1	4
Qty.	60 pc(s).			
Туре	BLT 5.08HC/04/180LR SN	Version	Product data	Packaging
Type Order No.	BLT 5.08HC/04/180LR SN 1894150000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
				Вох



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLDF 5.08/180LR SN**



The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5 A current-carrying capacity. The large clamping capacity (up to 2.5mm² wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop. Four flange variations, including the patented release latch, so you can design the interlock based on the requirements of the user.

### **General ordering data**

Туре	BLDF 5.08/04/180LR SN B	Version	Product data	Packaging
Order No.	1001030000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248817382	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	40 pc(s).	Box	26	
Туре	BLDF 5.08/04/180LR SN O	Version	Product data	Packaging
Type Order No.	BLDF 5.08/04/180LR SN O 1065150000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
• •	, ,		IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box

## **BLZP 5.08HC/90LR**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/04/90LR SN	Version	Product data	Packaging
Order No.	1087040000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248853489	90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	ox UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Туре	BLZP 5.08HC/04/90LR SN	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/04/90LR SN 1087270000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
• •				Вох



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

## **BLZP 5.08HC/270LR SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### General ordering data

Туре	BLZP 5.08HC/04/270LR SN	Version	Product data	Packaging
Order No.	<u>1947780000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248624171	$270^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4 \text{mm}^{2}\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	60 pc(s).			
,-	F - (-):			
Туре	BLZP 5.08HC/04/270LR SN	Version	Product data	Packaging
		Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
Туре	BLZP 5.08HC/04/270LR SN		IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box

## **BLZP 5.08HC/90F SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/04/90F SN B	Version	Product data	Packaging
Order No.	<u>1950060000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248627998	$90^{\circ}\text{, Clamping yoke connection, Clamping range, max.}:4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Туре	BLZP 5.08HC/04/90F SN 0	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/04/90F SN O 1949820000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
				Вох



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

# **BLZP 5.08HC/180LR SN**



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### General ordering data

Туре	BLZP 5.08HC/04/180LR SN	Version	Product data	Packaging
Order No.	<u>1945080000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248620227	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Otto	60 ma(a)			
Qty.	60 pc(s).			
Туре	BLZP 5.08HC/04/180LR SN	Version	Product data	Packaging
	,	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
Туре	BLZP 5.08HC/04/180LR SN		IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Вох

## **BLF 5.08HC/270F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user.
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

Туре	BLF 5.08HC/04/270F SN 0	Version	Product data	Packaging
Order No.	<u>1982910000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248687008	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², UL: 300 V / 18.5 A / AWG 26 - AW		
Qty.	60 pc(s).	Box	12	
Туре	BLF 5.08HC/04/270F SN B	Version	Product data	Packaging
Order No.	<u>1982140000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
Order No. GTIN (EAN)	<u>1982140000</u> 4032248686230	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	, ,	



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Mating connector (fully pluggable)

# **BLF 5.08HC/90F SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

Туре	BLF 5.08HC/04/90F SN BK	Version	Product data	Packaging
Order No.	1000240001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248690206	$90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.}: 3.31 \text{mm}^{2}\text{,}$	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	
_				
Туре	BLF 5.08HC/04/90F SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/04/90F SN OR 1002110000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Вох



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Blocks for PCB mounting**

Accessories





## 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.	<u>1604120000</u>	1604120000 PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190182977	.008190182977 of poles: 1		
Qty.	20 pc(s).			
Туре	SLA BB11R SW	Version	Product data	Packaging
1,00	SLA DD I III SW	version	rioduci dala	rackaging
Order No.	<u>1692340000</u>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
				0 0



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **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

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 2,3/1	Version	Product data	Packaging
Order No.	1636670000	PCB plug-in connector, Accessories, Flood-light display, Transparent,		Box
GTIN (EAN)	4008190409975	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 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).			
Туре	SL FLA 9.0/24	Version	Product data	
Order No.	1595870000	PCB plug-in connector, Accessories, Flood-light display, Transparent,		
GTIN (EAN)	4008190079796	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).			



### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# **Accessories**

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	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).			

### **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 OR BX	Version	Product data	Packaging
Order No.	<u>1573010000</u>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
_				
Туре	BLZ/SL KO BK BX	Version	Product data	Packaging
Type Order No.	BLZ/SL KO BK BX 1545710000	Version PCB plug-in connector, Accessories, Coding element, black, Number	Product data	Packaging Box
	,		Product data	0 0



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 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

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



Weidmüller Interface GmbH & Co. KG

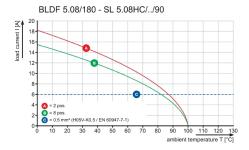
Klingenbergstraße 26 D-32758 Detmold

Germany Fon: +49 5231 14-0 Fax: +49 5231 14-292083

www.weidmueller.com

# **Drawings**

# Graph



116,84

111,76

106.68

101,60

96.52

91,44

86,36

81,28

76.20

71,12

66,04

60,96

55.88

50.80

45,72

40,64

35,56

30,48

48753

24

23

22

21

20 19

18

17

16

15

14

13

12

11

10

9

8

4,600

4,400

4.200

4.000

3.800

3,600 3,400

3.200

3.000

2,800

2,600

2.400

2.200

2.000

1,800

1,600

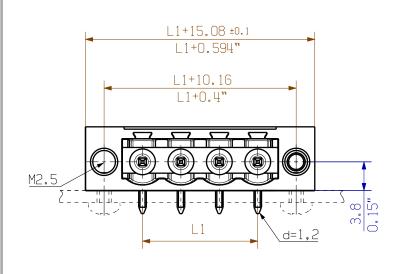
1,400

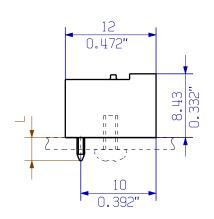
1,200

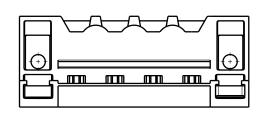
04

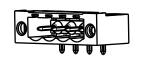
Issue no

sheets

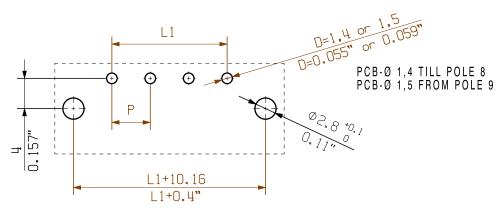








1/1



### HOLE PATTERN

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

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 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 corrosive stress will be satisfied.

### P = PITCH

SHOWN: SL 5.08HC/04/90F

DIN ISO 2768-m

			Cat.r	10.:.	
	4,5	-0,3	n	L1 [mm]	L1 [inch]
ı	4,5	0,1	2	5,08	0,200
	3,2	-0,3	3	10,16	0,400
Ì		0.1	4	15,24	0,600
	PIN LENGTH L	TOLERANCE	5	20,32	0,800
	STIFTLAENGE L	TOLERANZ	6	25,40	1,000

ROHS 101482/5 07.02.18 HELIS\_MA Weidmüller 🏂 Modification Date Name 18.10.2010 | HERTEL\_S Drawn HERTEL S Responsible Scale: 2:1 Checked HELIS MA 27.02.2018 Supersedes: . LANG T Approved

SL 5.08HC/../90...

Drawing no.

04

Sheet

STIFTLEISTE MALE HEADER

Product file: SL-HP 5.08 7377



# 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.