

#### 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

High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

### **General ordering data**

Туре	SL-SMT 5.08HC/07/180G 1.5SN BK BX
Order No.	<u>1775972001</u>
Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, Number of poles: 7, 180°, Solder pin length (I): 1.5 mm, tinned, black, Box
GTIN (EAN)	4032248158966
Qty.	50 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Вох

Creation date May 3, 2020 12:53:26 PM 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	38.76 mm	Width (inches)	1.526 inch
Height	13.5 mm	Height (inches)	0.531 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	3.52 g

### **System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	7	Number of solder pins per pole	1
Solder pin length (I)	1.5 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.4 mm	Solder eyelet hole diameter tolerand	ce (D)+ 0,1 mm
L1 in mm	30.48 mm	L1 in inches	1.2 inch
Number of rows	1	Pin series quantity	1
Volume resistance	≤ 5mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	9 N
Pulling force/pole, max.	7 N		

### **Material data**

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 175	Insulation strength	≥ 10 <sup>8</sup> Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
GWIT	930 °C	GWFI	960 °C
Contact material	CuMg	Contact surface	tinned
Layer structure of solder connection	1-3 μm Ni / 2-4 μm Sn	Layer structure of plug contact	1-3 μm Ni / 2-4 μm Sn
	matt		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.	-30 °C
Temperature range, installation, max.	100 °C		

### Rated data acc. to IEC

tested acc. to standard	JEC 00004 1 JEC 01004	Rated current, min. number of poles	27.5.4
	IEC 60664-1, IEC 61984	(Tu=20°C)	27.5 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	19 A	(Tu=40°C)	24 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			
class/ contamination degree III/3	4 kV		



### 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 CSA

Institute (CSA)	<b>€</b>	Certificate No. (CSA)	
	•		200039-1176845
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group D / CSA)		Reference to approval values	Specifications are maximum values, details -
	18.5 A		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) 18.5 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	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	UNSPSC	30-21-18-10

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	UNSPSC	30-21-18-10
Notes			
Notes	Gold-plated contact s	urfaces on request	
	Rated current related	to rated cross-section & min. No. of pol	les.
	Diameter of solder ey	elet D = 1.4+0.1mm	
	Solder eyelet diamete	er D = 1.5 + 0.1 mm, from 9 poles	
	• P on drawing = pitch		
	•	to the component itself. Clearance and lance with the relevant application star	I creepage distances to other components are to ndards.
IPC conformity	standards and norms an	d comply with the assured properties i	livered according international recognized in the data sheet resp. fulfill decorative propertie 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**

White paper surface mount technology

### **Approvals**

Approvals



**Download Whitepaper** 

ROHS Conform **Downloads** Approval/Certificate/Document of **CB** Certificate Conformity CB Testreport Declaration of the Manufacturer Brochure/Catalogue **FL DRIVES EN** MB SMT EN FL DRIVES DE MB DEVICE MANUF. EN 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 WSCAD** STEP **Engineering Data** 



Weidmüller Interface GmbH & Co. KG

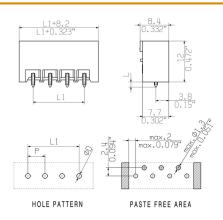
Klingenbergstraße 26 D-32758 Detmold

Germany

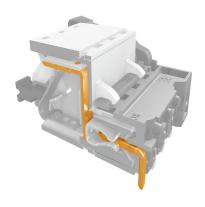
Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

# **Drawings**

### **Dimensional drawing**



### **Product benefits**



Safe power transmission **Product benefits** Proven properties





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 (conditionally pluggable)

### **BLT 5.08HC/180B**



Female plugs with TOP screw connection system for connecting wires with straight 180° outlet direction. The female connectors provide space for labelling and can be coded. HC = High Current.

Туре	BLT 5.08HC/07/180B SN O	Version	Product data	Packaging
Order No.	<u>1502360000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190014346	180°, TOP connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 17 A / AWG 26 - AWG 1	4
Qty.	48 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

### Mating connector (fully pluggable)

### **BLDF 5.08/180 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 5.08/07/180 SN OR	Version	Product data	Packaging
Order No.	<u>1001200000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248817535	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	32 pc(s).	Box	26	
Туре	BLDF 5.08/07/180 SN BK	Version	Product data	Packaging
Type Order No.	BLDF 5.08/07/180 SN BK 1000910000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	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>	Вох

### **BLC 5.08R**



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Packaging
Box
i 14
Packaging
Packaging Box
0 0
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)

### BLL 5.08/180



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

### **General ordering data**

Туре	BLL 5.08/07/180 4.5SN B	Version	Product data	Packaging
Order No.	<u>1646300000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285647	connection, 5.08 mm, Number of poles: 7, 180°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	50 pc(s).	4.5 mm, tinned, black, Box		
Туре	BLL 5.08/07/180 3.2 SN	Version	Product data	Packaging
Order No.	<u>1630760000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190204181	connection, 5.08 mm, Number of poles: 7, 180°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	48 pc(s).	3.2 mm, tinned, orange, Box		

### **BLF 5.08HC/270 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/07/270 SN BK	Version	Product data	Packaging
Order No.	<u>1981980000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248684670	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Туре	BLF 5.08HC/07/270 SN OR	Version	Product data	Packaging
Order No.	1982750000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Вох
Order No. GTIN (EAN)	, ,		, ,	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 5.08/180B**



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

### **General ordering data**

Туре	BLL 5.08/07/180B 3.2SN	Version	Product data	Packaging
Order No.	<u>1682780000</u>	PCB plug-in connector, female header, Dovetails for fixing blocks, THT	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190474546	solder connection, 5.08 mm, Number of poles: 7, 180°, Solder pin	UL: 300 V / 15 A	
Qty.	48 pc(s).	length (I): 3.2 mm, tinned, orange, Box		

### **BLZP 5.08HC/225B SN**



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) 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.

Туре	BLZP 5.08HC/07/225B SN	Version	Product data	Packaging
Order No.	<u>1946030000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248621569	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	48 pc(s).			
Туре	BLZP 5.08HC/07/225B SN	Version	Product data	Packaging
Order No.	<u>1945800000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
Order No. GTIN (EAN)	<u>1945800000</u> 4032248621279	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7, $225^\circ$ , Clamping yoke connection, Clamping range, max. : 4 mm², 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)

### **BLZP 5.08HC/90 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/07/90 SN BK	Version	Product data	Packaging
Order No.	<u>1948290000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248624812	90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 1:	2
Qty.	48 pc(s).			
Туре	BLZP 5.08HC/07/90 SN OR	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/07/90 SN OR 1948050000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
• •				Вох

### **BLDT 5.08B**



Female plugs with two clamping-yoke screw connections per pole for wire connections with 90° and 270° outlet directions. The female plugs provide space for labelling and can be coded.

Туре	BLDT 5.08/07/-B SN OR BX	Version	Product data	Packaging
Order No.	<u>1651790000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190400477	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 10 A / AWG 26 - AWG 1:	2
Qty.	40 pc(s).	Box		
Туре	DLDT F OO (O7 / D CNLDY DV	Version	D 1 . 1 .	
Type	BLDT 5.08/07/-B SN BK BX	version	Product data	Packaging
Order No.	1673830000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
	, ,		IEC: 400 V / 14 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/90 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/07/90 SN BK	Version	Product data	Packaging
Order No.	1000080001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248690015	$90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.} : 3.31 \text{ mm}^2\text{,}$	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Туре	BLF 5.08HC/07/90 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/07/90 SN OR 1001580000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	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

### **BLDT 5.08**



Female plugs with two clamping-yoke screw connections per pole for wire connections with 90° and 270° outlet directions. The female plugs provide space for labelling and can be coded.

Туре	BLDT 5.08/07/- SN BK BX	Version	Product data	Packaging
Order No.	<u>1660760000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190417215	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 10 A / AWG 26 - AWG 1:	2
Qty.	40 pc(s).	Box		
Type	BLDT 5.08/07/- SN OR BX	Version	Product data	Packaging
Type Order No.	BLDT 5.08/07/- SN OR BX 1644780000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	Product data  IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
• •	, ,			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)

### **BLZP 5.08HC/225 SN**



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) 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/07/225 SN O	Version	Product data	Packaging
Order No.	<u>1946300000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248621873	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	48 pc(s).			
_				
Type	BLZP 5.08HC/07/225 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/07/225 SN B 1946610000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	Product data IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
• •			IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box

### **BLC 5.08BR**



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Туре	BLC 5.08/07/180BR OR BX	Version	Product data	Packaging
Order No.	1649420000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190294533	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4
Qty.	50 pc(s).			
Туре	BLC 5.08/07/180BR BK BX	Version	Product data	Packaging
Order No.	1712160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 21 A	Box
Order No.	17 12 100000	reb plug-in connector, lemale plug, 5.06 mm, Number of poles. 7,	IEC. 400 V / 21 A	DOX
GTIN (EAN)	4008190935177	180°, Crimp connection, Clamping range, max.: 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 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)

### **BLF 5.08HC/180 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/07/180 SN OR	Version	Product data	Packaging
Order No.	1013740000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248721856	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Туре	BLF 5.08HC/07/180 SN BK	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/07/180 SN BK 1013480000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
• •	, ,			Box

### **BLZP 5.08HC/180 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.

Туре	BLZP 5.08HC/07/180 SN 0	Version	Product data	Packaging
Order No.	<u>1943630000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248617630	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	48 pc(s).			
Type	BLZP 5.08HC/07/180 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/07/180 SN B 1943860000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	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>	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)**

### **BLL 5.08/90**



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

### **General ordering data**

Туре	BLL 5.08/07/90 3.2 SN O	Version	Product data	Packaging
Order No.	<u>1622990000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190194048	connection, 5.08 mm, Number of poles: 7, 90°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	48 pc(s).	3.2 mm, tinned, orange, Box		

### **BLZP 5.08HC/270 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/07/270 SN B	Version	Product data	Packaging
Order No.	<u>1949070000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248626526	$270^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	48 pc(s).			
Туре	BLZP 5.08HC/07/270 SN 0	Version	Product data	Packaging
	-, ,			
Order No.	1948840000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
Order No. GTIN (EAN)	, ,	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 7, 270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	, ,	



# **OMNIMATE Signal - series BL/SL 5.08**

# **SL-SMT 5.08HC/07/180G 1.5SN BK BX**

### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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

# Coding elements

Accessories



### 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 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).			
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).			

#### **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

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

- Test plugs ensure reliable pick-up from diagnostic
- 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.	1770240000	PCB plug-in connector, Accessories, Spacer, black, Number of poles:	1	Box
GTIN (EAN)	4032248117710			
Otty	100 po/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**

Type S	SL AT OR	Version	Product data	Packaging
Order No. 1	1598300000	PCB plug-in connector, Accessories, Spacer, orange, Number of poles:		Box
GTIN (EAN) 4	1008190189266	1		
Qty. 1	100 pc(s).			

1:1

Letterter

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

25.50

4,600

4,400 4,200

4,000

3,800

3,600

3,400

3,200

3,000

2,800

2,600

2,400

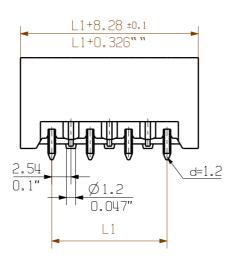
2,200

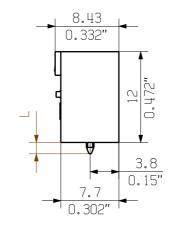
2,000

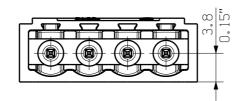
1,800

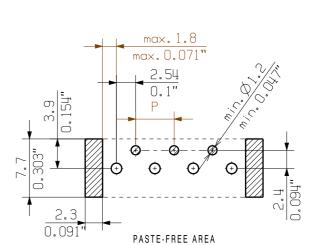
1,600

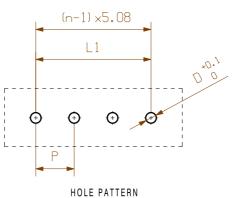
7280











D = 1.4/0.055" or 1.5/0.059"(REFLOW SOLDERING) RECOMMENDATION FOR AUTOMATIC ASSEMBLY (1.4 mm FOR n = 2...8 / 1.5 mm for n = 9...24)

Responsible

Checked

Approved

n = POLZAH/ NO OF POLES

P = RASTER/PITCH

SHOWN: SL-SMT 5.08HC/04/180 G

TIETI AENOE I	TOLEDANIZ		145-1	14.0
4,5	-0,3	2	5,08	0,200
4.5	0,1	3	10,16	0,400
3,2	-0,3	4	15,24	0,600
	0,1	5	20,32	0,800
1,5	-0,3	Ľ.		
4.5	0,0	6	25,40	1,000
		7	30,48	1,200
		0	33,36	1,400

STIFTLAENGE L TOLERANZ n L1 [mm] L1 [lnch] Cat.no.:. DIN ISO 2768-m Weidmüller 🏂 30.07.18 HERTEL\_S 00 Drawing no. Issue no Modification Sheet 02 of 04 sheets Name Date 30.11.2007 | HELIS\_MA Drawn

HERTEL\_S

LANG T

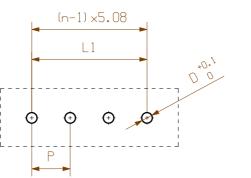
01.08.2018 KOCH\_JG

The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine. Scale: 2:1 corrosive stress will be satisfied. Supersedes:

SL-SMT 5.08HC/../180... STIFTLEISTE

MALE HEADER

Product file: SL-SMT 5.08HC



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

For the mounting of PCBs, it should be noted that the

The neccessary creepage and clearance paths must be observed in connection with the respective applicant in

rated data relates only to the PCB components

accordance to IEC 664 / VDE 0110.



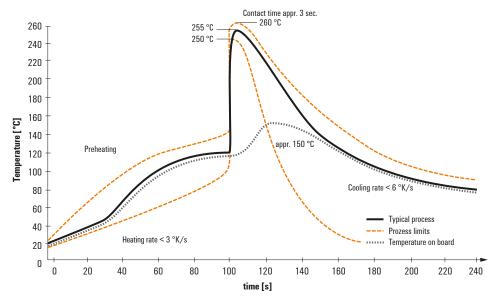
### Recommended wave solderding profiles

#### 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.

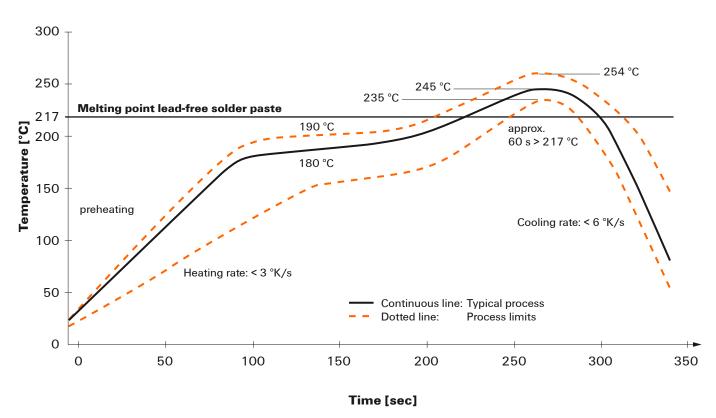


### Recommended reflow soldering profile

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold Germany

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



### Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- · Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- · Maximum heating rate
- · Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically  $\leq +3$ K/s. In parallel the solder paste is ,activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at  $\geq$  -6K/s solder is cured. Board and components cool down while avoiding cold cracks.