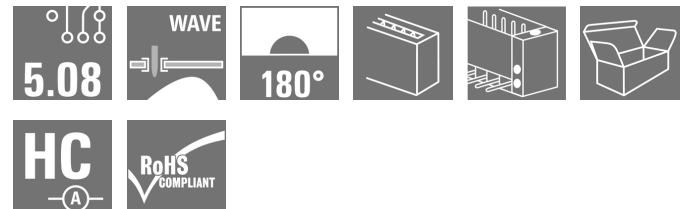


# OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
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Similar to illustration

Pin headers in glass-fibre-reinforced plastic with straight 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

Type	SL 5.08HC/20/180F 3.2SN OR BX
Order No.	<a href="#">1147720000</a>
Version	PCB plug-in connector, male header, Flange, THT solder connection, 5.08 mm, Number of poles: 20, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
GTIN (EAN)	4032248931385
Qty.	12 pc(s).
Product data	IEC: 400 V / 24 A UL: 300 V / 18.5 A
Packaging	Box

Creation date May 2, 2020 2:39:29 AM CEST

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

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### Technical data

#### Dimensions and weights

Width	111.6 mm	Width (inches)	4.394 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	8.95 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	180°			
Number of poles	20			
Number of solder pins per pole	1			
Solder pin length (l)	3.2 mm			
Solder pin length tolerance	+0.1 / -0.3 mm			
Tolerance of solder pin position	± 0.20 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	96.52 mm			
L1 in inches	3.8 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
		Recommended screw	Part number	<a href="#">PTSC KA 2.2X4.5 WN1412</a>

#### Material data

Insulating material	PA GF	Colour	orange
Colour chart (similar)	RAL 2000	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		

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**Technical data**
**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	24 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	21 A
Rated current, max. number of poles (Tu=40°C)	16.5 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV		

**Rated data acc. to CSA**

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)	18.5 A

**Rated data acc. to UL 1059**

Institute (cURus)		Certificate No. (cURus)	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	120 mm	VPE height	165 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	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• P on drawing = pitch</li> <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.

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# Technical data

## Approvals

Approvals



ROHS

Conform

## Downloads

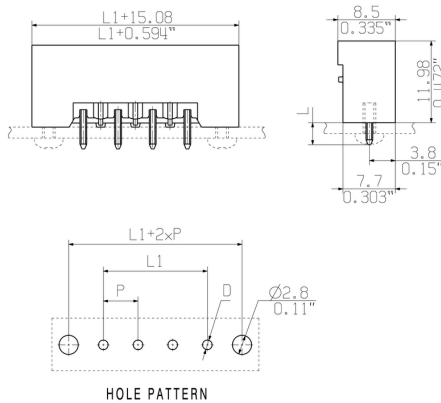
Approval/Certificate/Document of Conformity	<a href="#">CB Certificate</a> <a href="#">CB Testreport</a> <a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FL INDUSTR.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">STEP</a>

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

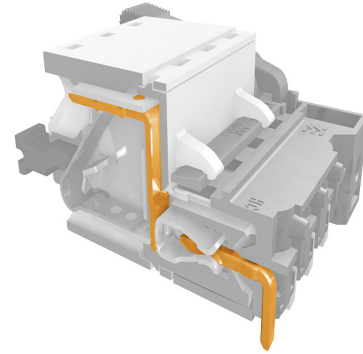
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## Drawings

### Dimensional drawing



### Product benefits



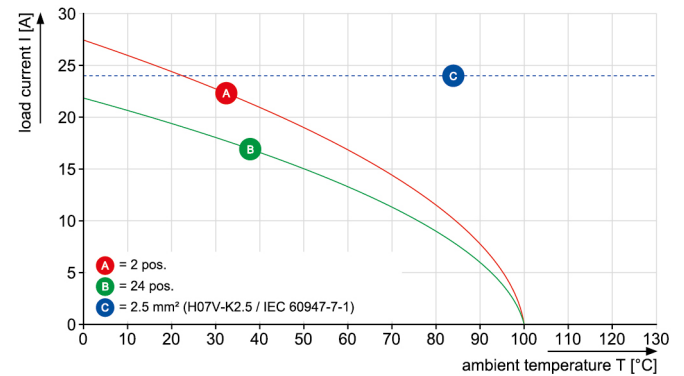
### Graph



### Graph

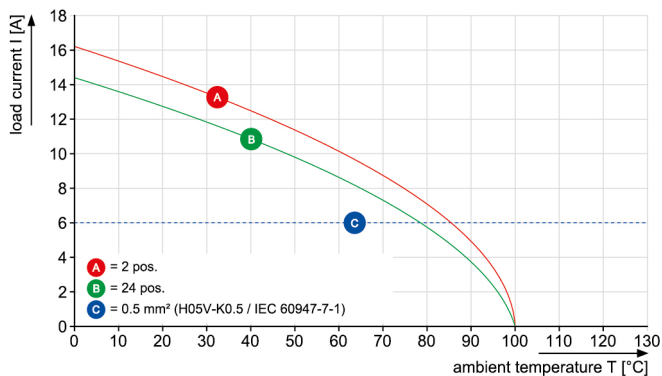
Safe power transmission  
Proven properties

BLF 5.08HC/.../180 - SL 5.08HC/.../180



### Graph

BLF 5.08HC/.../180 - SL 5.08HC/.../180



## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

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### Mating connector (fully pluggable)

#### 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.

#### General ordering data

Type	BLT 5.08HC/20/180F SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1844400000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248356331	180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	12 pc(s).			
Type	BLT 5.08HC/20/180F SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1844170000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248356096	180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	12 pc(s).			

#### 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

#### General ordering data

Type	BLF 5.08HC/20/90LR SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1002460000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248694624	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLF 5.08HC/20/90LR SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1000590001</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248690558	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

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www.weidmueller.com

### Mating connector (fully pluggable)

#### 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.

#### General ordering data

Type	BLT 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1894330000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248508655	180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	12 pc(s).			
Type	BLT 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1890400000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248498888	180°, TOP connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	12 pc(s).			

#### 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.

#### General ordering data

Type	BLZP 5.08HC/20/90F SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1950220000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248628155	90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLZP 5.08HC/20/90F SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1949980000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248627912	90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

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### Mating connector (fully pluggable)

#### 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

#### General ordering data

Type	BLF 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1014320000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248723034	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	
Type	BLF 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1014570000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248722808	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	

#### 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. 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

Type	BLZP 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1945240000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248620388	180°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLZP 5.08HC/20/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1945010000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248620135	180°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			



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**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**

Type	BLF 5.08HC/20/270LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1982490000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248686582	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	
Type	BLF 5.08HC/20/270LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1983260000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248687350	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	

**BLF 5.08HC/180F SN**

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

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- 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**

Type	BLF 5.08HC/20/180F SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1013280000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248721023	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	

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**Mating connector (fully pluggable)**

Type	BLF 5.08HC/20/180F SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1013020000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248720781	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	12 pc(s).	Box	12	

**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**

Type	BLZP 5.08HC/20/270LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1947710000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248624102	270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

Type	BLZP 5.08HC/20/270LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1947940000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248624430	270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

**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.

**General ordering data**

Type	BLZP 5.08HC/20/90LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1087200000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248854424	90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

Type	BLZP 5.08HC/20/90LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1087430000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248854394	90°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR 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

### Mating connector (fully pluggable)

#### 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.

#### General ordering data

Type	BLZP 5.08HC/20/270F SN ...	Version	Product data	Packaging
Order No.	<a href="#">1950490000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248628612	270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLZP 5.08HC/20/270F SN ...	Version	Product data	Packaging
Order No.	<a href="#">1950770000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248629176	270°, Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

#### BLL 5.08/90FI



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

#### General ordering data

Type	BLL 5.08/20/90FI 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1843930000</a>	PCB plug-in connector, female header, Inverted flange, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4032248355686	connection, 5.08 mm, Number of poles: 20, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	12 pc(s).	3.2 mm, tinned, orange, Box		

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

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Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmüller.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. 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

Type	BLZP 5.08HC/20/180F SN ...	Version	Product data	Packaging
Order No.	<a href="#">1944270000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248618859	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLZP 5.08HC/20/180F SN ...	Version	Product data	Packaging
Order No.	<a href="#">1944510000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248619085	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

#### 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

#### General ordering data

Type	BLF 5.08HC/20/270F SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1983070000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248687169	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			
Type	BLF 5.08HC/20/270F SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1982300000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248686391	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	12 pc(s).			

## OMNIMATE Signal - series BL/SL 5.08 SL 5.08HC/20/180F 3.2SN OR BX

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### Mating connector (fully pluggable)

#### BLF 5.08HC/90F SN



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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

Type	BLF 5.08HC/20/90F SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1000400001</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248690367	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	12 pc(s).	Box	12	
Type	BLF 5.08HC/20/90F SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1002270000</a>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248694433	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	12 pc(s).	Box	12	

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Dimensions without tolerances are no check dimensions

The English version is binding



24	116,84	4,600
23	111,76	4,400
22	106,68	4,200
21	101,60	4,000
20	96,52	3,800
19	91,44	3,600
18	86,36	3,400
17	81,28	3,200
16	76,20	3,000
15	71,12	2,800
14	66,04	2,600
13	60,96	2,400
12	55,88	2,200
11	50,80	2,000
10	45,72	1,800
9	40,64	1,600
8	35,56	1,400
7	30,48	1,200
6	25,40	1,000
5	20,32	0,800
4	15,24	0,600
3	10,16	0,400
2	5,08	0,200
n	L1 [mm]	L1 [Inch]

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to IEC 60326 part 3 very fine.

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

P=PITCH

SHOWN: SL 5.08HC/04/180F

STIFTLAENGE L PIN LENGTH L	TOLERANZ TOLERANCE
3,2	0,1 -0,3
4,5	0,1 -0,3

General tolerance:  
DIN ISO 2768-mK



99587/5  
22.11.17 HELIS\_MA 04  
Modification

Weidmüller

Cat.no.:  
3 50953 04  
Drawing no. Issue no.  
Sheet 04 of 05 sheets



Date	Name
Drawn 18.02.2011	HERTEL_S
Responsible	HERTEL_S
Checked 30.11.2017	HELIS_MA
Approved	LANG_T

SL 5.08HC/.. /180..  
STIFTELEISTE  
MALE HEADER

Scale: 2:1

Supersedes: .

Product file: SL5.08 HC

7377

## Recommended wave soldering profiles

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### 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  $260 \text{ °C}$ . In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.