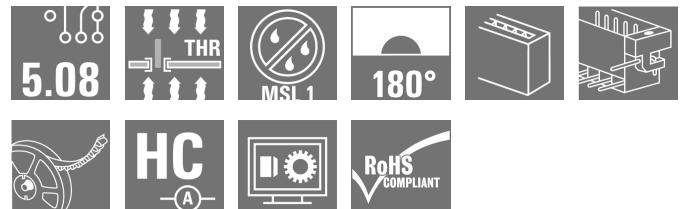


**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/04/180LF 1.5SN BK RL**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Germany
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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

Type	SL-SMT 5.08HC/04/180LF 1.5SN BK RL
Order No.	1776384001
Version	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 5.08 mm, Number of poles: 4, 180°, Solder pin length (l): 1.5 mm, tinned, black, Tape
GTIN (EAN)	4032248163502
Qty.	250 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Tape

Creation date May 3, 2020 1:00:24 PM CEST

OMNIMATE Signal - series BL/SL 5.08

SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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Technical data

Dimensions and weights

Width	30.12 mm	Width (inches)	1.186 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	4.572 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	4	Number of solder pins per pole	1
Solder pin length (l)	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)	1.5 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.	9 N
Pulling force/pole, max.	7 N		

Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 175	Insulation strength	≥ 10 ⁸ 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 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.	-30 °C
Temperature range, installation, max.	100 °C		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	27.5 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	24 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		

**OMNIMATE Signal - series BL/SL 5.08
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Technical data**Rated data acc. to CSA**

Institute (CSA)



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)
18.5 AReference to approval values
Specifications are maximum values, details - 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	Tape	VPE length	90 mm
VPE width	330 mm	VPE height	330 mm
Tape depth (T2)	17.5 mm	Tape width (W)	44 mm
Tape pocket depth (K0)	17 mm	Tape pocket height (A0)	8.2 mm
Tape pocket width (B0)	34 mm	Tape pocket separation (P1)	16 mm
Tape hole separation (E)	1.75 mm	Tape pocket separation (F)	20.2 mm
Tape reel diameter \varnothing (A)	330 mm	Surface resistance	$R_s = 10^9 - 10^{12} \Omega$
Width Pick & Place Pad (W_{PPP})	9.6 mm	Length Pick & Place Pad (L_{PPP})	12.36 mm
Diameter of the withdrawal surface ($\varnothing D_{max}$)	8.5 mm	Protrusion 1 Pick & Place Pad ($L_{01 (PPP)}$)	2 mm
Protrusion 2 Pick & Place Pad ($P_{02 (PPP)}$)	2.3 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

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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Technical data

Notes

Notes	<ul style="list-style-type: none"> • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Diameter of solder eyelet $D = 1.4 + 0.1 \text{ mm}$ • Solder eyelet diameter $D = 1.5 + 0.1 \text{ mm}$, from 9 poles • P on drawing = pitch • Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
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.

Approvals

Approvals



ROHS Conform

Downloads

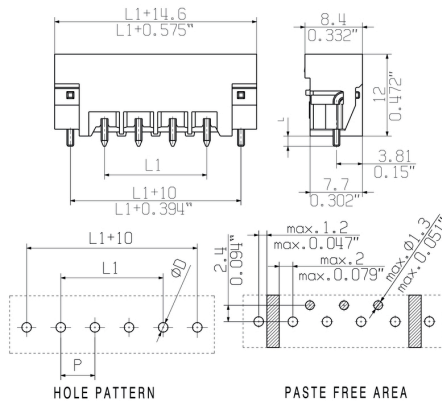
Approval/Certificate/Document of Conformity	CB Certificate CB Testreport Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB SMT EN FL DRIVES DE MB DEVICE MANUF. EN CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING 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
Engineering Data	STEP
White paper surface mount technology	Download Whitepaper

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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Drawings

Dimensional drawing



Example of use



Safe power transmission

Product benefits Proven properties

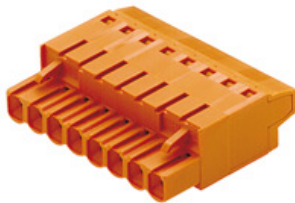


OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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.

General ordering data

Type	BLT 5.08HC/04/180B SN O ...	Version	Product data	Packaging
Order No.	1502060000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190166441	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	78 pc(s).			

BLZ 5.08/90



Female plugs with clamping-yoke screw connection. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZ 5.08/04/90 SN GY BX	Version	Product data	Packaging
Order No.	1552900000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 15 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190401566	90°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 10 A / AWG 26 - AWG 12	
Qty.	90 pc(s).			

OMNIMATE Signal - series BL/SL 5.08

SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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Mating connector (conditionally pluggable)

BLL 5.08/180



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

General ordering data

Type	BLL 5.08/04/180 4.5SN B ...	Version	Product data	Packaging
Order No.	1646270000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285616	connection, 5.08 mm, Number of poles: 4, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	100 pc(s).	4.5 mm, tinned, black, Box		
Type	BLL 5.08/04/180 3.2 SN ...	Version	Product data	Packaging
Order No.	1687580000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190853662	connection, 5.08 mm, Number of poles: 4, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	90 pc(s).	3.2 mm, tinned, Pebble grey, Box		
Type	BLL 5.08/04/180 4.5 SN ...	Version	Product data	Packaging
Order No.	1646160000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285500	connection, 5.08 mm, Number of poles: 4, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	90 pc(s).	4.5 mm, tinned, orange, Box		

BLL 5.08/90



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

General ordering data

Type	BLL 5.08/04/90 4.5 SN B ...	Version	Product data	Packaging
Order No.	1646050000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285395	connection, 5.08 mm, Number of poles: 4, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	90 pc(s).	4.5 mm, tinned, black, Box		

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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Mating connector (conditionally pluggable)

BLZ 5.08/180

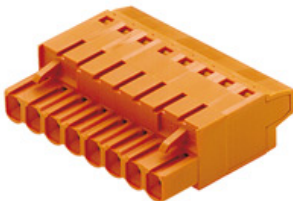


Female plugs with clamping-yoke screw for wire connection with straight (180°) outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZ 5.08/04/180 SN DKGN ...	Version	Product data	Packaging
Order No.	1526650000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 19 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190069056	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	100 pc(s).	Box		
Type	BLZ 5.08/04/180 SN OR B ...	Version	Product data	Packaging
Order No.	1594260000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 19 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190001537	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	90 pc(s).	Box		
Type	BLZ 5.08/04/180 SN GY BX	Version	Product data	Packaging
Order No.	1526600000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 19 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190287115	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	100 pc(s).	Box		

BLT 5.08HC



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.

General ordering data

Type	BLT 5.08HC/04/180 SN BL ...	Version	Product data	Packaging
Order No.	1499780000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248015467	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	90 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/04/180LF 1.5SN BK RL**

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Mating connector (conditionally pluggable)**BLZF 5.08/180**

Female plugs with tension-clamp wire connection system, straight 180° outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZF 5.08/04/180 SN DKG ...	Version	Product data	Packaging
Order No.	1707940000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 17 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190317355	180°, Tension-clamp connection, Clamping range, max.: 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	90 pc(s).	Box		

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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/04/180F SN ...	Version	Product data	Packaging
Order No.	1944350000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248618927	180°, Clamping yoke connection, Clamping range, max.: 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/180F SN ...	Version	Product data	Packaging
Order No.	1944110000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248617494	180°, Clamping yoke connection, Clamping range, max.: 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			

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/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 ²	Box
GTIN (EAN)	4032248722969	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG	12	
Qty.	60 pc(s).	Box		
Type	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 ²	Box
GTIN (EAN)	4032248723195	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG	12	
Qty.	60 pc(s).	Box		

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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/04/270LR SN ...	Version	Product data	Packaging
Order No.	1983100000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687190	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	
Type	BLF 5.08HC/04/270LR SN ...	Version	Product data	Packaging
Order No.	1982330000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686421	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	

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/04/270F SN ...	Version	Product data	Packaging
Order No.	1950570000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628704	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/270F SN ...	Version	Product data	Packaging
Order No.	1950330000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628445	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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

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

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/04/180F SN O ...	Version	Product data	Packaging
Order No.	1844010000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14	Box
GTIN (EAN)	4032248355938			
Qty.	60 pc(s).			
Type	BLT 5.08HC/04/180F SN B ...	Version	Product data	Packaging
Order No.	1844240000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14	Box
GTIN (EAN)	4032248356171			
Qty.	60 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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

Type	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 ²	Box
GTIN (EAN)	4032248817344	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	40 pc(s).	Box	26	
Type	BLDF 5.08/04/180F SN OR ...	Version	Product data	Packaging
Order No.	1059420000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817894	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	40 pc(s).	Box	26	

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/04/90LR SN O ...	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 ²	Box
GTIN (EAN)	4032248694464	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	
Type	BLF 5.08HC/04/90LR SN B ...	Version	Product data	Packaging
Order No.	1000430001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690398	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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

Type	BLF 5.08HC/04/180F SN O ...	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 ²	Box
GTIN (EAN)	4032248720866	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	
Type	BLF 5.08HC/04/180F SN B ...	Version	Product data	Packaging
Order No.	1012660000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720316	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	60 pc(s).	Box	12	

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/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 ²	Box
GTIN (EAN)	4032248498727	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	60 pc(s).			
Type	BLT 5.08HC/04/180LR SN ...	Version	Product data	Packaging
Order No.	1894150000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248508396	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	60 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

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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

Type	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 ²	Box
GTIN (EAN)	4032248817382	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	40 pc(s).	Box	26	
Type	BLDF 5.08/04/180LR SN O ...	Version	Product data	Packaging
Order No.	1065150000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817702	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	40 pc(s).	Box	26	

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/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 ²	Box
GTIN (EAN)	4032248853489	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/90LR SN ...	Version	Product data	Packaging
Order No.	1087270000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248854158	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			

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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

Type	BLZP 5.08HC/04/270LR SN ...	Version	Product data	Packaging
Order No.	1947780000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624171	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/270LR SN ...	Version	Product data	Packaging
Order No.	1947550000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248623846	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 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/04/90F SN B ...	Version	Product data	Packaging
Order No.	1950060000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627998	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/90F SN O ...	Version	Product data	Packaging
Order No.	1949820000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627745	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			

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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. 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/04/180LR SN ...	Version	Product data	Packaging
Order No.	1945080000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248620227	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			
Type	BLZP 5.08HC/04/180LR SN ...	Version	Product data	Packaging
Order No.	1944850000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248619450	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	60 pc(s).			

BLF 5.08HC/270F SN



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

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

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Mating connector (fully pluggable)

BLF 5.08HC/90F SN



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- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	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 ²	Box
GTIN (EAN)	4032248690206	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	
Type	BLF 5.08HC/04/90F SN OR ...	Version	Product data	Packaging
Order No.	1002110000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694068	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	60 pc(s).	Box	12	

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Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

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

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 clip-on connection or mounting for male and female connectors

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

General ordering data

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

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Accessories

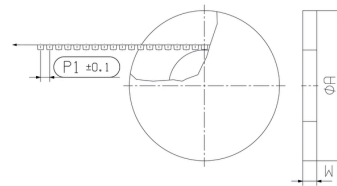
Type	SL AT OR	Version	Product data	Packaging
Order No.	1598300000	PCB plug-in connector, Accessories, Spacer, orange, Number of poles:		Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/04/180LF 1.5SN BK RL

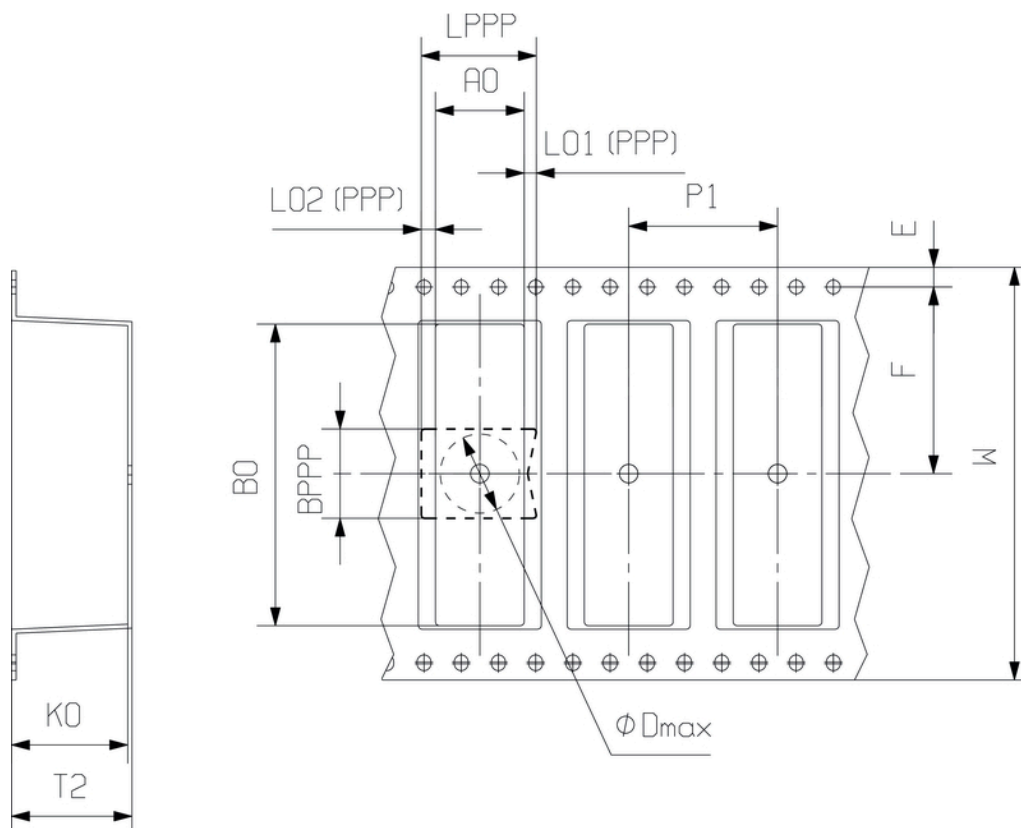
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Drawings

Dimensional drawing



Dimensional drawing



DIRECTION OF UNREELING →

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°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.

Recommended reflow soldering profile

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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 $\leq +3\text{K/s}$. 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 $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.