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OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/18/90G 1.5SN BK BX

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/18/90G 1.5SN BK BX
Order No.	1775162001
Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, Number of poles: 18, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box
GTIN (EAN)	4032248156733
Qty.	20 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Box

Creation date May 3, 2020 12:37:12 PM CEST

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Technical data

Dimensions and weights

Width	94.64 mm	Width (inches)	3.726 inch
Height	9.9 mm	Height (inches)	0.39 inch
Height of lowest version	8.4 mm	Depth	12 mm
Depth (inches)	0.472 inch	Net weight	8.45 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	90°
Number of poles	18	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	± 0.20 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	86.36 mm	L1 in inches	3.4 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		

Creation date May 3, 2020 12:37:12 PM CEST

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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 B / CSA)	18.5 A	Rated current (Use group D / CSA)	18.5 A
Reference 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	Box	VPE length	47 mm
VPE width	63 mm	VPE height	218 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

Notes

Notes	• Gold-plated contact surfaces on request
	• Rated current related to rated cross-section & min. No. of poles.
	• Diameter of solder eyelet D = 1.4+0.1mm
	• Solder eyelet diameter D = 1.5 + 0.1 mm, from 9 poles
	• P on drawing = pitch
	• 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.

Creation date May 3, 2020 12:37:12 PM CEST

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Technical data

Approvals

Approvals	
ROHS	Conform

Downloads

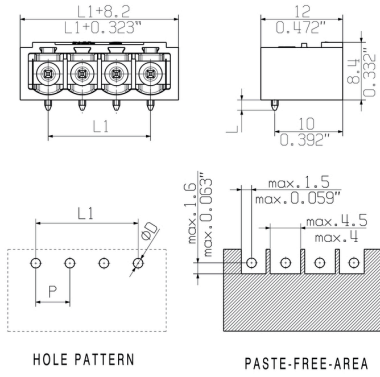|	
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN
	MB SMT EN
	FL DRIVES DE
	MB DEVICE MANUF. EN
	CAT 2 PORTFOLIOGUIDE EN
	FL BUILDING SAFETY EN
	FL APPL LED LIGHTING EN
	FL INDUSTR.CONTROLS EN
	FL MACHINE SAFETY EN
	FL HEATING ELECTR EN
	FL APPL_INVERTER EN
	FL_BASE_STATION_EN
	FL ELEVATOR EN
	FL POWER SUPPLY EN
	FL 72H SAMPLE SER EN
	PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP
White paper surface mount technology	Download Whitepaper

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Drawings

Dimensional drawing

HOLE PATTERN

PASTE-FREE-AREA

Graph

BLZP 5.08/../180 - SL-SMT 5.08/../90

A = 2.pos
B = 24.pos
C = 2.5 mm² (H07V-K2.5 / IEC 60947-7-1)

Graph

BLT 5.08HC/../180 - SL-SMT 5.08HC/../90

A = 24 pos.
B = 12 pos.
C = 2 pos.
D = 2.5 mm² (H07V-K2.5 / IEC 60947-7-1)
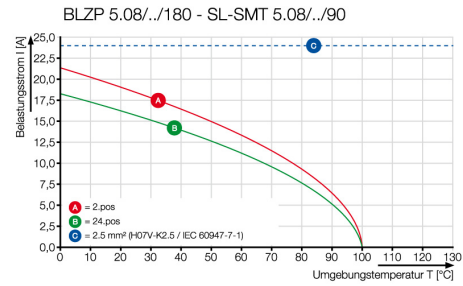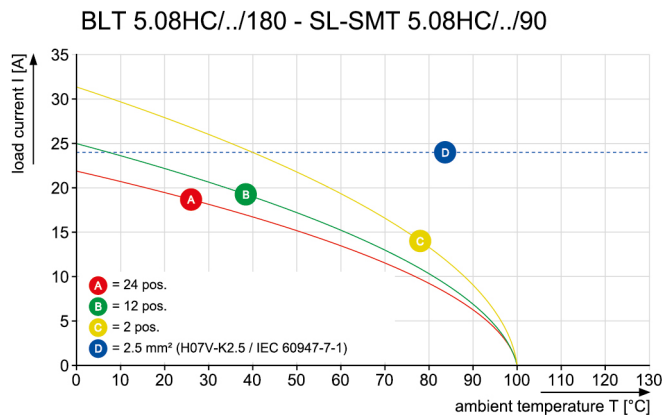
Product benefits

Safe power transmission
Proven properties

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Mating connector (conditionally pluggable)
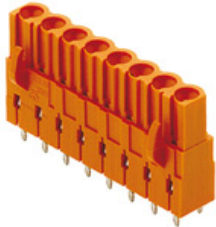
BLT 5.08HC/180B
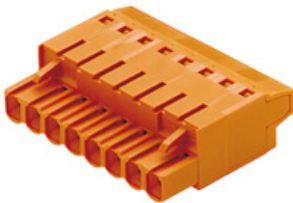
Female plugs with TOP screw connection system for connecting wires with straight 180° outlet direction. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	BLT 5.08HC/18/180B SN O ...	Version		Product data	Packaging
Order No.	1503460000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 27 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4008190181215	180°, TOP connection, Clamping range, max. : 2.5 mm², Box		UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	18 pc(s).				

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6

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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

Type	BLL 5.08/18/180 3.2 SN ...	Version	Product data	Packaging
Order No.	1648950000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190293437	connection, 5.08 mm, Number of poles: 18, 180°, Solder pin length	UL: 300 V / 15 A	
Qty.	18 pc(s).	(l): 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

General ordering data

Type	BLF 5.08HC/18/270 SN BK ...	Version	Product data	Packaging
Order No.	1982090000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248685783	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	
Type	BLF 5.08HC/18/270 SN OR ...	Version	Product data	Packaging
Order No.	1982860000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248686957	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	

Creation date May 3, 2020 12:37:12 PM CEST

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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

Type	BLL 5.08/18/180B 3.2SN ...	Version	Product data	Packaging
Order No.	1682890000	PCB plug-in connector, female header, Dovetails for fixing blocks, THT	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190474652	solder connection, 5.08 mm, Number of poles: 18, 180°, Solder pin	UL: 300 V / 15 A	
Qty.	18 pc(s).	length (l): 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.

General ordering data

Type	BLZP 5.08HC/18/225B SN ...	Version	Product data	Packaging
Order No.	1945910000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 17.5 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248621439	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	18 pc(s).			
Type	BLZP 5.08HC/18/225B SN ...	Version	Product data	Packaging
Order No.	1946140000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 17.5 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248621712	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	18 pc(s).			

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8

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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

Type	BLZP 5.08HC/18/90 SN OR ...	Version		Product data	Packaging
Order No.	1948170000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248624591	90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box		UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	18 pc(s).				
Type	BLZP 5.08HC/18/90 SN BK ...	Version		Product data	Packaging
Order No.	1948400000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248624928	90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box		UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	18 pc(s).				

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

Type	BLF 5.08HC/18/90 SN BK ...	Version		Product data	Packaging
Order No.	1000190001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248690145	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,		UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box		12	
Type	BLF 5.08HC/18/90 SN OR ...	Version		Product data	Packaging
Order No.	1001690000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248693498	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,		UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box		12	

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Mating connector (fully pluggable)

BLZ 5.00/270

Female plugs with clamping-yoke screw for wire connection with 270° outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZ 5.00/18/270 SN DKGN ...	Version		Product data	Packaging
Order No.	1650050000	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 18,	IEC: 400 V / 15 A / 0.5 - 2.5 mm²		Box
GTIN (EAN)	4008190296643	270°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 10 A / AWG 26 - AWG 12		
Qty.	20 pc(s).	Box			

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

Type	BLZP 5.08HC/18/225 SN O ...	Version		Product data	Packaging
Order No.	1946410000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 17.5 A / 0.2 - 4 mm²		Box
GTIN (EAN)	4032248622184	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12		
Qty.	18 pc(s).				
Type	BLZP 5.08HC/18/225 SN B ...	Version		Product data	Packaging
Order No.	1946720000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 17.5 A / 0.2 - 4 mm²		Box
GTIN (EAN)	4032248622498	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12		
Qty.	18 pc(s).				

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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

Type	BLF 5.08HC/18/180 SN BK ...	Version	Product data	Packaging
Order No.	1013610000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248721740	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	
Type	BLF 5.08HC/18/180 SN OR ...	Version	Product data	Packaging
Order No.	1013860000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248721962	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	18 pc(s).	Box	12	

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.

General ordering data

Type	BLZP 5.08HC/18/180 SN B ...	Version	Product data	Packaging
Order No.	1943970000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248618125	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	18 pc(s).			
Type	BLZP 5.08HC/18/180 SN O ...	Version	Product data	Packaging
Order No.	1943740000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248617753	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	18 pc(s).			

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11

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

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

Type	BLL 5.08/18/90 3.2 SN O ...	Version	Product data	Packaging
Order No.	1648470000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190292942	connection, 5.08 mm, Number of poles: 18, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	18 pc(s).	3.2 mm, tinned, orange, Box		

BLZ 5.00/180

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 5.00/18/180 SN DKGN ...	Version	Product data	Packaging
Order No.	1646980000	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 18,	IEC: 400 V / 19 A / 0.5 - 2.5 mm²	Box
GTIN (EAN)	4008190288334	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	20 pc(s).	Box		

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OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Mating connector (fully pluggable)

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.

General ordering data

Type	BLZP 5.08HC/18/270 SN O ...	Version		Product data		Packaging
Order No.	1948950000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 23 A / 0.2 - 4 mm²		Box
GTIN (EAN)	4032248626403	270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box		UL: 300 V / 20 A / AWG 26 - AWG 12		
Qty.	18 pc(s).					
Type	BLZP 5.08HC/18/270 SN B ...	Version		Product data		Packaging
Order No.	1949180000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 18,		IEC: 400 V / 23 A / 0.2 - 4 mm²		Box
GTIN (EAN)	4032248626632	270°, Clamping yoke connection, Clamping range, max. : 4 mm², Box		UL: 300 V / 20 A / AWG 26 - AWG 12		
Qty.	18 pc(s).					

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![Weidmüller logo]

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Accessories

LED Light guides

Effective: the link between LED and front panel.
Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.
The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.
The advantages compared to conventional solutions:

• No additional LED circuit board required behind the front panel
• No "long-legged" LEDs with separate mounting required
• Bent fibre-optic cable line for maximum light efficiency
• Uncomplicated front plate bore holes due to circular shape of outgoing light beam
• Easy to maintain correct clearance and creepage distance
• Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

General ordering data

Type	SL FLA 3.8/1	Version		Product data		Packaging
Order No.	1580110000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				Box
GTIN (EAN)	4008190050740	Number of poles: 1				
Qty.	100 pc(s).					
Type	SL FLA 2,3/1	Version		Product data		Packaging
Order No.	1636670000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				Box
GTIN (EAN)	4008190409975	Number of poles: 1				
Qty.	100 pc(s).					
Type	SL FLA 2,3/24	Version		Product data		Packaging
Order No.	1636680000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				Box
GTIN (EAN)	4008190409968	Number of poles: 1				
Qty.	10 pc(s).					
Type	SL FLA 3.8/24	Version		Product data		
Order No.	1595860000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				
GTIN (EAN)	4008190140892	Number of poles: 1				
Qty.	10 pc(s).					
Type	SL FLA 9.0/24	Version		Product data		
Order No.	1595870000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				
GTIN (EAN)	4008190079796	Number of poles: 1				
Qty.	10 pc(s).					
Type	SL FLA 9.0/1	Version		Product data		Packaging
Order No.	1580120000	PCB plug-in connector, Accessories, Flood-light display, Transparent,				Box
GTIN (EAN)	4008190031909	Number of poles: 1				
Qty.	100 pc(s).					

Creation date May 3, 2020 12:37:12 PM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

14

Weidmüller

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Accessories

Type	SL FLA 1.5/1	Version		Product data	Packaging
Order No.	1580100000	PCB plug-in connector, Accessories, Flood-light display, Transparent,			Box
GTIN (EAN)	4008190152475	Number of poles: 1			
Qty.	100 pc(s).				
Type	SL FLA 1.5/24	Version		Product data	
Order No.	1595850000	PCB plug-in connector, Accessories, Flood-light display, Transparent,			
GTIN (EAN)	4008190092573	Number of poles: 1			
Qty.	10 pc(s).				

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).				

Creation date May 3, 2020 12:37:12 PM CEST

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/18/90G 1.5SN BK BX

Accessories

Additional accessories

No task is too small when creating the perfect solution. br />
Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

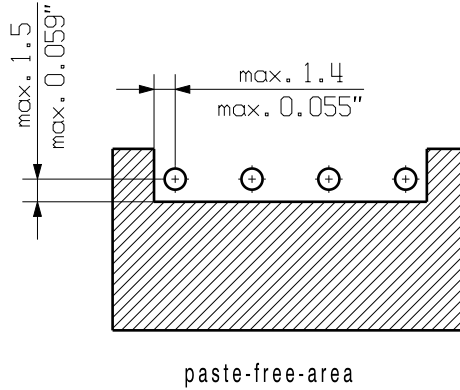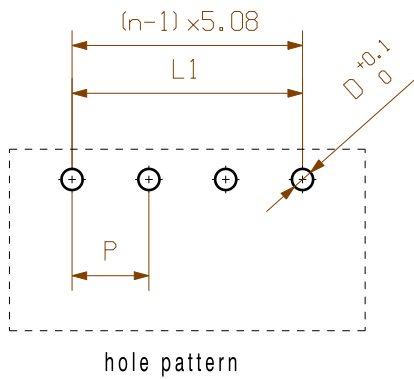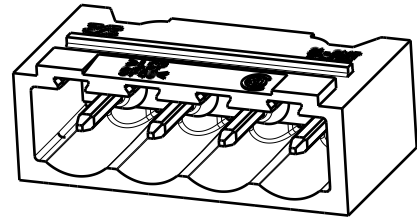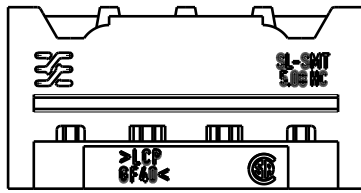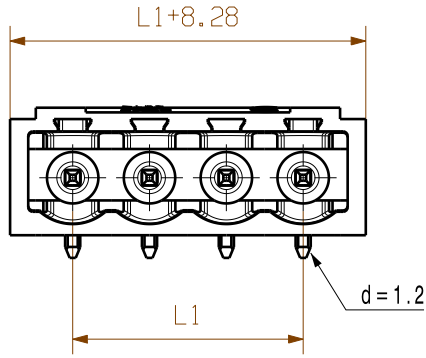A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant 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).				
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).				

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L1+8.28

L1

d=1.2

12
0.472"

7.7
0.302"

8.4
0.332"

10
0.392"

SL-SMT
5.08 HC

>LCP
GF40<

(n-1) ×5.08

L1

D +0.1 0

P

hole pattern

max. 1.5
max. 0.059"

max. 1.4
max. 0.055"
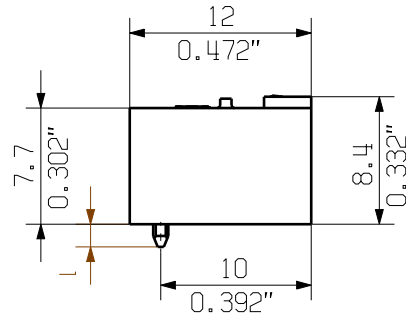
paste-free-area

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

n = Polzahl / no of poles
P = Raster / pitch

For the mounting of PCBs, it should be noted that the
rated data relates only to the PCB components
alone.
The neccessary creepage and clearance paths must be
observed in connection with the respective applicant in
accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to
be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984
standard, and are valid for its field of application.
Provided that the components are used to the intended
purpose, all requirements with respect to the
occuring of electrical, mechanical, thermic and
corrosive stress will be satisfied.

shown: SL-SMT 5.08HC/04/90G

no.of poles	L1 [mm]	L1 [inch]	tolerance L1
24	116.84	4.600	+/- 0.2
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	+/- 0.15
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	+/- 0.1
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	

	tolerance
4.5	0.1/-0.3
3.2	0.1/-0.3
2.1	0.1/-0.3
1.5	-0.3
1	tolerance

Recommended wave solderding profiles

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

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 ≤ +3K/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 ≥ -6K/s solder is cured. Board and components cool down while avoiding cold cracks.

We reserve the right to make technical changes.