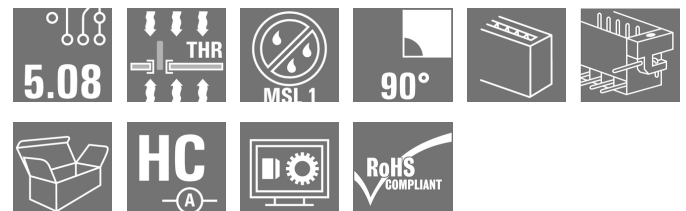


OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/12/90LF 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
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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/12/90LF 3.2SN BK BX
Order No.	1780510000
Version	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 5.08 mm, Number of poles: 12, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248165834
Qty.	24 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Box

Creation date May 3, 2020 1:36:56 PM CEST

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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Technical data**Dimensions and weights**

Width	70.76 mm	Width (inches)	2.786 inch
Height	11.7 mm	Height (inches)	0.461 inch
Height of lowest version	8.5 mm	Depth	12 mm
Depth (inches)	0.472 inch	Net weight	6.44 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	12	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.15 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	55.88 mm	L1 in inches	2.2 inch
Number of rows	1	Pin series quantity	1
Volume resistance	≤ 5mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	9 N
Pulling force/pole, max.	7 N		

Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	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 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	50 mm
VPE width	97 mm	VPE height	175 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	<ul style="list-style-type: none"> • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of 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.
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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

Data sheet**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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Technical data**Downloads**

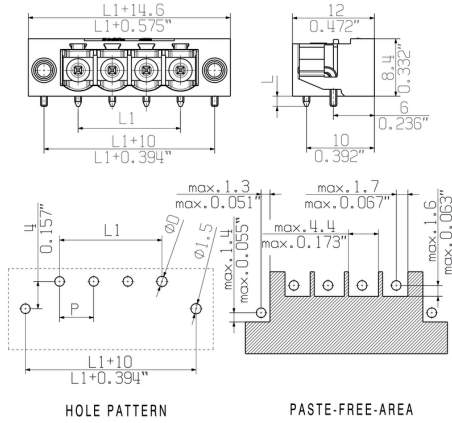
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB SMT EN FL DRIVES DE MB DEVICE MANUF. EN CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER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

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

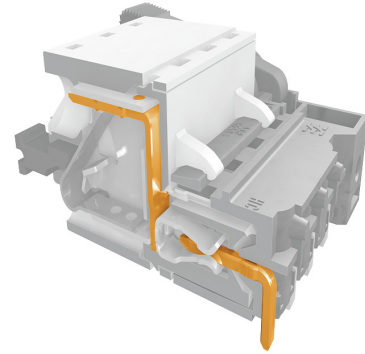
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Drawings

Dimensional drawing

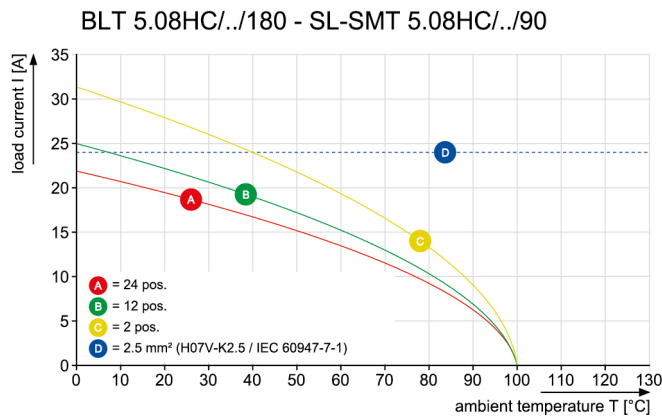


Product benefits



Safe power transmission
Proven properties

Graph



Product benefits



**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

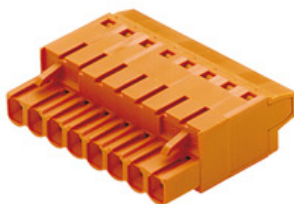
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Mating connector (conditionally pluggable)
BLZ 5.00/270


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 5.00/12/270 SN DKGN ...	Version	Product data	Packaging
Order No.	1649990000	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 12,	IEC: 400 V / 15 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4008190296575	270°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 10 A / AWG 26 - AWG 12	
Qty.	50 pc(s).	Box		

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/12/180B SN O ...	Version	Product data	Packaging
Order No.	1502860000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190069155	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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	Version	Product data	Packaging
BLL 5.08/12/180 4.5 SN ...	PCB plug-in connector, female header, closed side, THT solder connection, 5.08 mm, Number of poles: 12, 180°, Solder pin length (l): 4.5 mm, tinned, black, Box	IEC: 400 V / 23 A UL: 300 V / 15 A	Box
Order No. 1646350000			
GTIN (EAN) 4008190285692			
Qty. 50 pc(s).			
BLL 5.08/12/180 4.5SN O ...	PCB plug-in connector, female header, closed side, THT solder connection, 5.08 mm, Number of poles: 12, 180°, Solder pin length (l): 4.5 mm, tinned, orange, Box	IEC: 400 V / 23 A UL: 300 V / 15 A	Box
Order No. 1646240000			
GTIN (EAN) 4008190285586			
Qty. 50 pc(s).			

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	Version	Product data	Packaging
BLZ 5.08/12/180 SN DKGN ...	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12, 180°, Clamping yoke connection, Clamping range, max.: 3.31 mm², Box	IEC: 400 V / 19 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12	Box
Order No. 1527450000			
GTIN (EAN) 4008190146542			
Qty. 40 pc(s).			
BLZ 5.08/12/180 SN OR B ...	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12, 180°, Clamping yoke connection, Clamping range, max.: 3.31 mm², Box	IEC: 400 V / 19 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12	Box
Order No. 1695761001			
GTIN (EAN) 4008190875527			
Qty. 30 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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Mating connector (conditionally pluggable)

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 5.00/12/180 SN DKGN ...	Version	Product data	Packaging
Order No.	1646920000	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 12,	IEC: 400 V / 19 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4008190288211	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	50 pc(s).	Box		

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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/12/180F SN ...	Version	Product data	Packaging
Order No.	1944430000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248619009	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/180F SN ...	Version	Product data	Packaging
Order No.	1944190000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248618774	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 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/12/180LR SN ...	Version	Product data	Packaging
Order No.	1014480000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248722884	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLF 5.08HC/12/180LR SN ...	Version	Product data	Packaging
Order No.	1014230000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248723119	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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/12/270LR SN ...	Version	Product data	Packaging
Order No.	1982410000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686506	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	
Type	BLF 5.08HC/12/270LR SN ...	Version	Product data	Packaging
Order No.	1983180000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687275	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 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/12/270F SN ...	Version	Product data	Packaging
Order No.	1950690000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628995	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/270F SN ...	Version	Product data	Packaging
Order No.	1950410000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628537	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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 5.08/12/90FI 3.2SN ...	Version	Product data	Packaging
Order No.	1843850000	PCB plug-in connector, female header, Inverted flange, THT solder connection, 5.08 mm, Number of poles: 12, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 23 A UL: 300 V / 15 A	Box
GTIN (EAN)	4032248355600			
Qty.	24 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/12/180F SN B ...	Version	Product data	Packaging
Order No.	1844320000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12, 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)	4032248356256			
Qty.	24 pc(s).			
Type	BLT 5.08HC/12/180F SN O ...	Version	Product data	Packaging
Order No.	1844090000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12, 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)	4032248356010			
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
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Mating connector (fully pluggable)
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/12/90LR SN B ...	Version	Product data	Packaging
Order No.	1000510001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690473	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	
Type	BLF 5.08HC/12/90LR SN O ...	Version	Product data	Packaging
Order No.	1002380000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694549	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	

BLF 5.08HC/180F 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/12/180F SN O ...	Version	Product data	Packaging
Order No.	1013190000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720941	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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Mating connector (fully pluggable)

Type	BLF 5.08HC/12/180F SN B ...	Version	Product data	Packaging
Order No.	1012750000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720392	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 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/12/180LR SN ...	Version	Product data	Packaging
Order No.	1894230000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248508570	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	24 pc(s).			
Type	BLT 5.08HC/12/180LR SN ...	Version	Product data	Packaging
Order No.	1890320000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248498802	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	24 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/12/90LR SN ...	Version	Product data	Packaging
Order No.	1087130000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248854219	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/90LR SN ...	Version	Product data	Packaging
Order No.	1087350000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248854233	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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

Mating connector (fully pluggable)
BLZP 5.08HC/270LR SN


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

General ordering data

Type	BLZP 5.08HC/12/270LR SN ...	Version	Product data	Packaging
Order No.	1947630000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624027	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/270LR SN ...	Version	Product data	Packaging
Order No.	1947860000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624355	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 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/12/90F SN O ...	Version	Product data	Packaging
Order No.	1949900000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627837	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/90F SN B ...	Version	Product data	Packaging
Order No.	1950140000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628070	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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/12/180LR SN ...	Version	Product data	Packaging
Order No.	1944930000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248620005	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLZP 5.08HC/12/180LR SN ...	Version	Product data	Packaging
Order No.	1945160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248620302	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	24 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/12/270F SN O ...	Version	Product data	Packaging
Order No.	1982990000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687084	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			
Type	BLF 5.08HC/12/270F SN B ...	Version	Product data	Packaging
Order No.	1982220000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686315	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	24 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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 www.weidmueller.com

Mating connector (fully pluggable)
BLF 5.08HC/90F SN


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

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

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

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

General ordering data

Type	BLF 5.08HC/12/90F SN BK ...	Version	Product data	Packaging
Order No.	1000320001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690282	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	
Type	BLF 5.08HC/12/90F SN OR ...	Version	Product data	Packaging
Order No.	1002190000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 12,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694341	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	

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SL-SMT 5.08HC/12/90LF 3.2SN BK BX**

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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).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/12/90LF 3.2SN BK BX

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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).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/12/90LF 3.2SN BK BX

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Accessories

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.

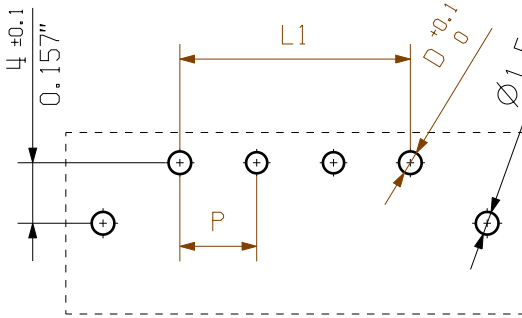
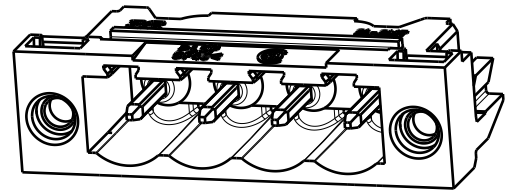
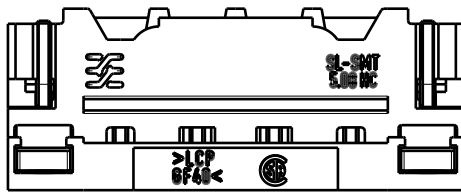
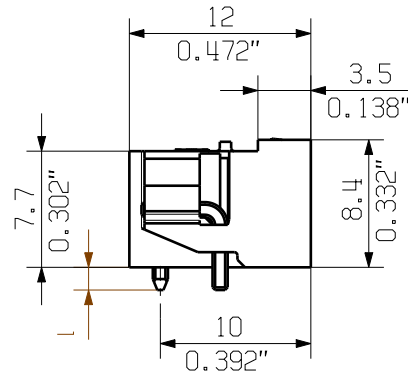
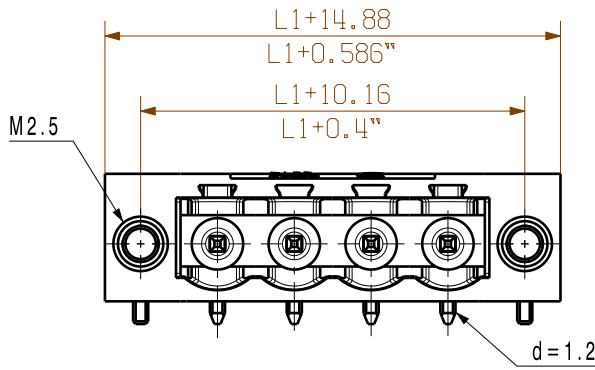
A system is not a system without small but useful details:

- 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

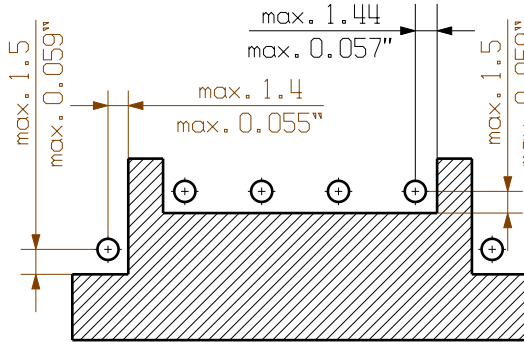
In tandem with the manufacturing process and application - more accessories = smaller workload

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



hole pattern



paste-free-area

D = 1.5/0.059" (REFLOW SOLDERING)
RECOMMENDATION FOR AUTOMATIC ASSEMBLY

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 necessary 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 occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

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

24	116.84	4.600	+/- 0.2
23	111.76	4.400	
22	106.68	4.200	+/- 0.15
21	101.60	4.000	
20	96.52	3.800	+/- 0.1
19	91.44	3.600	
18	86.36	3.400	+/- 0.1
17	81.28	3.200	
16	76.20	3.000	+/- 0.1
15	71.12	2.800	
14	66.04	2.600	+/- 0.1
13	60.96	2.400	
12	55.88	2.200	+/- 0.1
11	50.80	2.000	
10	45.72	1.800	+/- 0.1
9	40.64	1.600	
8	35.56	1.400	+/- 0.1
7	30.48	1.200	
6	25.40	1.000	+/- 0.1
5	20.32	0.800	
4	15.24	0.600	+/- 0.1
3	10.16	0.400	
2	5.08	0.200	+/- 0.1
1	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

	DIN ISO 2768-m		Cat.no.: . . .		
	106339/4	30.07.18 HERTEL_S	01		
Modification					
		Date	Name	SL-SMT 5.08HC/.. /90... STIFTLISTE MALE HEADER	
Scale: 2:1		Drawn	29.11.2007		HELIS_MA
Supersedes: .		Responsible			HERTEL_S
		Checked	01.08.2018		KOCH_JG
		Approved		LANG_T	
Product file: SL-SMT 5.08			7280		

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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.

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