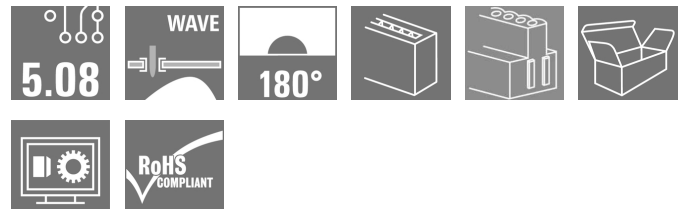


## OMNIMATE Signal - series BL/SL 5.08 BLL 5.08/21/180B 3.2SN OR BX

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### Product image



Similar to illustration

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

### General ordering data

Type	BLL 5.08/21/180B 3.2SN OR BX
Order No.	<a href="#">1682920000</a>
Version	PCB plug-in connector, female header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
GTIN (EAN)	4008 190474683
Qty.	12 pc(s).
Product data	IEC: 400 V / 23 A UL: 300 V / 15 A
Packaging	Box

Creation date May 3, 2020 2:34:17 PM CEST

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**Technical data**
**Dimensions and weights**

Net weight 32.917 g

**System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	21	Number of solder pins per pole	2
Solder pin length (l)	3.2 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Tolerance of solder pin position	± 0.20 mm	Solder pin dimensions	0.4 x 1.00 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	101.6 mm	L1 in inches	4 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Volume resistance	≤ 5mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	5 N	Pulling force/pole, max.	5 N

**Material data**

Insulating material	PBT GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	4-6 µm Sn hot-dip tinned	Layer structure of plug contact	4-6 µm Sn hot-dip tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		


**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	23 A
Rated current, max. number of poles (Tu=20°C)	16 A	Rated current, min. number of poles (Tu=40°C)	20 A
Rated current, max. number of poles (Tu=40°C)	14 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	Short-time withstand current resistance	3 x 1s with 120 A


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**Technical data****Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	10 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)	15 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	1 mm
VPE width	1 mm	VPE height	1 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"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• P on drawing = pitch</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> </ul>
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

**Data sheet****OMNIMATE Signal - series BL/SL 5.08  
BLL 5.08/21/180B 3.2SN OR BX**

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**Technical data****Approvals**

Approvals



ROHS

Conform

**Downloads**Approval/Certificate/Document of  
Conformity[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)  
[MB DEVICE MANUF. EN](#)  
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[CAT 2 PORTFOLIOGUIDE EN](#)  
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[FL ELEVATOR EN](#)  
[FL POWER SUPPLY EN](#)  
[FL 72H SAMPLE SER EN](#)  
[PO OMNIMATE EN](#)

Engineering Data

[EPLAN\\_WSCAD](#)

Engineering Data

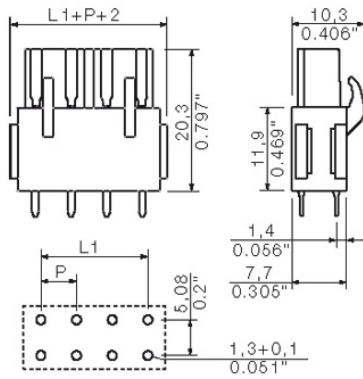
[BLL.zip](#)

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**Drawings**

**Dimensional drawing**



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**Mating connector (fully pluggable)**
**SL 5.08/90**


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/90 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1509960000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 400 V / 18 A	Box
GTIN (EAN)	4008190010591	connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		

**SL 5.08HC/180**


Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/180 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1146680000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4032248932764	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, orange, Box		
Type	SL 5.08HC/21/180 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1148530000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4032248935109	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, black, Box		

**OMNIMATE Signal - series BL/SL 5.08  
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**Mating connector (fully pluggable)**
**SLDV 5.08/180B**


Pin headers with solder pin length optimised for wave flow soldering. The male connectors provide space for labelling and can be coded. HC = High Current.

**General ordering data**

Type	SLD 5.08V/42/180B 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1726930000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 14 A	Box
GTIN (EAN)	4032248062829	solder connection, 5.08 mm, Number of poles: 42, 180°, Solder pin	UL: 300 V / 10 A	
Qty.	10 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**SL-SMT 5.08/180G Box**


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 5.08/21/180G 1.5 ...	Version	Product data	Packaging
Order No.	<a href="#">1776322001</a>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 400 V / 27.5 A	Box
GTIN (EAN)	4032248159109	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 1.5 mm, tinned, black, Box		
Type	SL-SMT 5.08HC/21/180G 3 ...	Version	Product data	Packaging
Order No.	<a href="#">1838400000</a>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 400 V / 27.5 A	Box
GTIN (EAN)	4032248348466	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, black, Box		

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**Mating connector (fully pluggable)**

**SL 5.08/135**



Male connectors with 135° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/135 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1603250000</a>	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 21, 135°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 17 A UL: 300 V / 15 A	Box
GTIN (EAN)	4008190112844			
Qty.	20 pc(s).			

**SL 5.08HC/180B**



Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/180B 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1150010000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 400 V / 24 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248106226			
Qty.	20 pc(s).			
Type	SL 5.08HC/21/180B 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1147930000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 24 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248934010			
Qty.	20 pc(s).			



**OMNIMATE Signal - series BL/SL 5.08  
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**Mating connector (fully pluggable)**
**SLDV 5.08/90B**


Pin headers with solder pin length optimised for wave flow soldering. The male connectors provide space for labelling and can be coded. HC = High Current.

**General ordering data**

Type	SLD 5.08V/42/90B 3.2 SN ...	Version	Product data	Packaging
Order No.	<a href="#">1726470000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 17 A	Box
GTIN (EAN)	4032248061440	solder connection, 5.08 mm, Number of poles: 42, 90°, Solder pin	UL: 300 V / 10 A	
Qty.	10 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**SL 5.08/180B**


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/180B 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1521460000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 18 A	Box
GTIN (EAN)	4008190080457	solder connection, 5.08 mm, Number of poles: 21, 180°, Solder pin	UL: 300 V / 15 A	
Qty.	20 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 5.08  
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**Mating connector (fully pluggable)**
**SL 5.08HC/90B**


Pin headers made from glass-fibre-reinforced plastic with 90° wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/90B 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1154980000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 24 A	Box
GTIN (EAN)	4050118050851	solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	length (l): 3.2 mm, tinned, orange, Box		
Type	SL 5.08HC/21/90B 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1155790000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 24 A	Box
GTIN (EAN)	4050118049961	solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	length (l): 3.2 mm, tinned, black, Box		

**SL 5.08HC/180G**


Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/180G 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1147180000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4032248933877	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, orange, Box		
Type	SL 5.08HC/21/180G 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1149270000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4032248935024	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, black, Box		

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**Mating connector (fully pluggable)**
**SL-SMT 5.08HC/90 Box**


High-temperature-resistant, 90° angled, open male 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 5.08/21/90 1.5SN ...	Version	Product data	Packaging
Order No.	<a href="#">1774952001</a>	PCB plug-in connector, male header, open side, THT/THR solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248155989			
Qty.	20 pc(s).			
Type	SL-SMT 5.08HC/21/90 3.2 ...	Version	Product data	Packaging
Order No.	<a href="#">1780140000</a>	PCB plug-in connector, male header, open side, THT/THR solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248165469			
Qty.	20 pc(s).			

**SL 5.08HC/90**


Pin headers made from glass-fibre-reinforced plastic with 90° wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/90 3.2SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1155280000</a>	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 400 V / 24 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4050118050622			
Qty.	20 pc(s).			
Type	SL 5.08HC/21/90 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1147150000</a>	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 24 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4050118051315			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08  
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**Mating connector (fully pluggable)**
**SL 5.08/135B**


Male connectors with 135° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/135B 3.2SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1605720000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 17 A	Box
GTIN (EAN)	4008190053932	solder connection, 5.08 mm, Number of poles: 21, 135°, Solder pin	UL: 300 V / 15 A	
Qty.	20 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**SLDV 5.08/180**


Pin headers with solder pin length optimised for wave flow soldering. The male connectors provide space for labelling and can be coded. HC = High Current.

**General ordering data**

Type	SLD 5.08V/42/180 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1725840000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 400 V / 14 A	Box
GTIN (EAN)	4032248062133	connection, 5.08 mm, Number of poles: 42, 180°, Solder pin length	UL: 300 V / 10 A	
Qty.	10 pc(s).	(l): 3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 5.08  
BLL 5.08/21/180B 3.2SN OR BX**

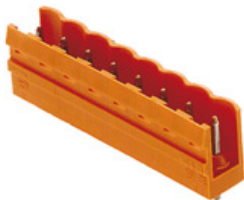
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**Mating connector (fully pluggable)**
**SL-SMT 5.08HC/90G Box**


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/21/90G 3. ...	Version	Product data	Packaging
Order No.	<a href="#">1780370000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248165698			
Qty.	20 pc(s).			
Type	SL-SMT 5.08/21/90G 1.5S ...	Version	Product data	Packaging
Order No.	<a href="#">1775192001</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A	Box
GTIN (EAN)	4032248156764			
Qty.	20 pc(s).			

**SL 5.08/180**


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/180 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1519160000</a>	PCB plug-in connector, male header, open side, THT solder connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 18 A UL: 300 V / 15 A	Box
GTIN (EAN)	4008190098407			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08  
BLL 5.08/21/180B 3.2SN OR BX**

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

**Mating connector (fully pluggable)**
**SLS 5.08/180 SN**


Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

**General ordering data**

Type	SLS 5.08/21/180 SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1644880000</a>	PCB plug-in connector, male plug, 5.08 mm, Number of poles: 21,	IEC: 400 V / 21.5 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190284091	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm <sup>2</sup> ,	UL: 300 V / 14 A / AWG 26 - AWG 12	
Qty.	12 pc(s).	Box		

**SL 5.08HC/90G**

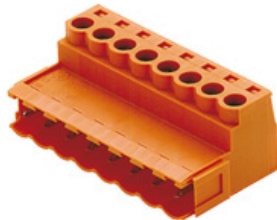

Pin headers made from glass-fibre-reinforced plastic with 90° wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

**General ordering data**

Type	SL 5.08HC/21/90G 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1147910000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4050118051087	connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l):	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		
Type	SL 5.08HC/21/90G 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1155530000</a>	PCB plug-in connector, male header, closed side, THT solder	IEC: 400 V / 24 A	Box
GTIN (EAN)	4050118050394	connection, 5.08 mm, Number of poles: 21, 90°, Solder pin length (l):	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	3.2 mm, tinned, black, Box		

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**Mating connector (fully pluggable)**
**SLS 5.08/180B**


Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

**General ordering data**

Type	SLS 5.08/21/180B SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1645190000</a>	PCB plug-in connector, male plug, 5.08 mm, Number of poles: 21,	IEC: 400 V / 21.5 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190284404	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm <sup>2</sup> ,	UL: 300 V / 14 A / AWG 26 - AWG 12	
Qty.	12 pc(s).	Box		

**SLDV 5.08/90**


Pin headers with solder pin length optimised for wave flow soldering. The male connectors provide space for labelling and can be coded. HC = High Current.

**General ordering data**

Type	SLD 5.08V/42/90 3.2 SN ...	Version	Product data	Packaging
Order No.	<a href="#">1725360000</a>	PCB plug-in connector, male header, open side, THT solder	IEC: 400 V / 17 A	Box
GTIN (EAN)	4032248060764	connection, 5.08 mm, Number of poles: 42, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	10 pc(s).	3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 5.08  
BLL 5.08/21/180B 3.2SN OR BX**

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**Mating connector (fully pluggable)**
**SL 5.08/90B**


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

Type	SL 5.08/21/90B 3.2SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1512260000</a>	PCB plug-in connector, male header, Dovetails for fixing blocks, THT	IEC: 400 V / 18 A	Box
GTIN (EAN)	4008190179861	solder connection, 5.08 mm, Number of poles: 21, 90°, Solder pin	UL: 300 V / 15 A	
Qty.	20 pc(s).	length (l): 3.2 mm, tinned, orange, Box		

**SL-SMT 5.08/180 Box**


High-temperature-resistant, straight, open pin header. Packed in box or tape. On tape and 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/21/180 3. ...	Version	Product data	Packaging
Order No.	<a href="#">1838170000</a>	PCB plug-in connector, male header, open side, THT/THR solder	IEC: 400 V / 27.5 A	Box
GTIN (EAN)	4032248348237	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 3.2 mm, tinned, black, Box		
Type	SL-SMT 5.08/21/180 1.5S ...	Version	Product data	Packaging
Order No.	<a href="#">1775792001</a>	PCB plug-in connector, male header, open side, THT/THR solder	IEC: 400 V / 27.5 A	Box
GTIN (EAN)	4032248158454	connection, 5.08 mm, Number of poles: 21, 180°, Solder pin length	UL: 300 V / 18.5 A	
Qty.	20 pc(s).	(l): 1.5 mm, tinned, black, Box		



**OMNIMATE Signal - series BL/SL 5.08  
BLL 5.08/21/180B 3.2SN OR BX**

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**Accessories****Blocks for PCB mounting****Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the whole plug connection by

- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

**General ordering data**

Type	SLA BB1R SW	Version	Product data	Packaging
Order No.	<a href="#">1723480000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366032		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB6R SW	Version	Product data	Packaging
Order No.	<a href="#">1723520000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366070		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB1R OR	Version	Product data	Packaging
Order No.	<a href="#">1723430000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190365981		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB5R OR	Version	Product data	Packaging
Order No.	<a href="#">1723460000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190366018		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB2R SW	Version	Product data	Packaging
Order No.	<a href="#">1723490000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366049		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB11R OR	Version	Product data	Packaging
Order No.	<a href="#">1604120000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190182977		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB2R OR	Version	Product data	Packaging
Order No.	<a href="#">1723440000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190365998		of poles: 1	
Qty.	20 pc(s).			

## OMNIMATE Signal - series BL/SL 5.08 BLL 5.08/21/180B 3.2SN OR BX

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### Accessories

Type	SLA BB11R SW	Version	Product data	Packaging
Order No.	<a href="#">1692340000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190864965	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB12R SW	Version	Product data	Packaging
Order No.	<a href="#">1626880000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190198213	poles: 1		
Qty.	100 pc(s).			
Type	SLA BB6R OR	Version	Product data	Packaging
Order No.	<a href="#">1723470000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190366025	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB5R SW	Version	Product data	Packaging
Order No.	<a href="#">1723510000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190366063	poles: 1		
Qty.	20 pc(s).			
Type	SLA BB12R OR	Version	Product data	Packaging
Order No.	<a href="#">1593450000</a>	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190122164	of poles: 1		
Qty.	100 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

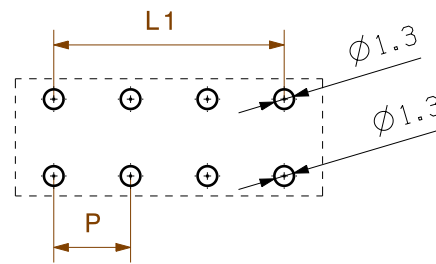
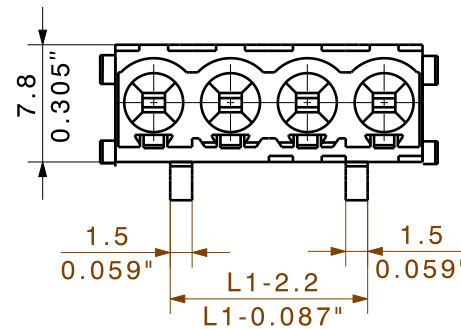
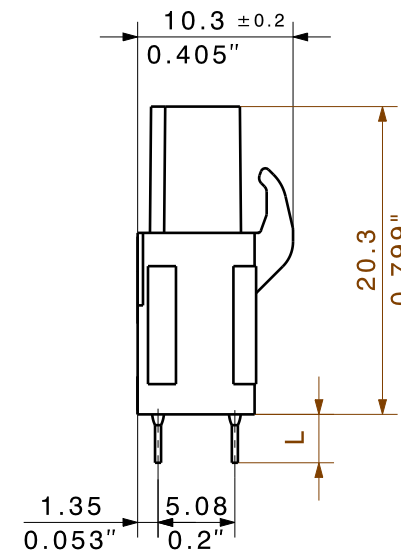
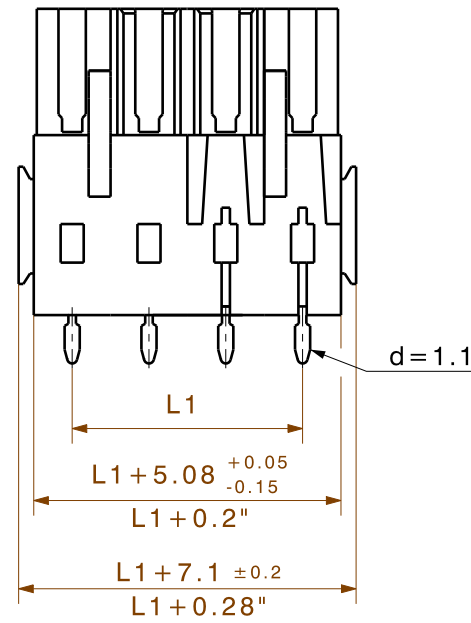
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<a href="#">1545710000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

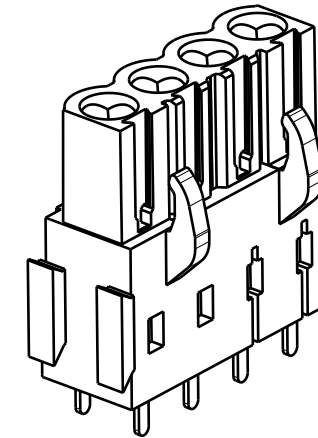
DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING

WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.  
 ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER-, ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.  
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HOLE PATTERN



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

3,2	0,1 -0,3
4,5	0,1 -0,3
<b>PINLÄNGE L</b>	<b>TOLERANZ</b>
<b>PIN LENGTH L</b>	<b>TOLERANCE</b>

P=PITCH/RASTER  
 SHOWN: BLL 5.08/04/90B

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.

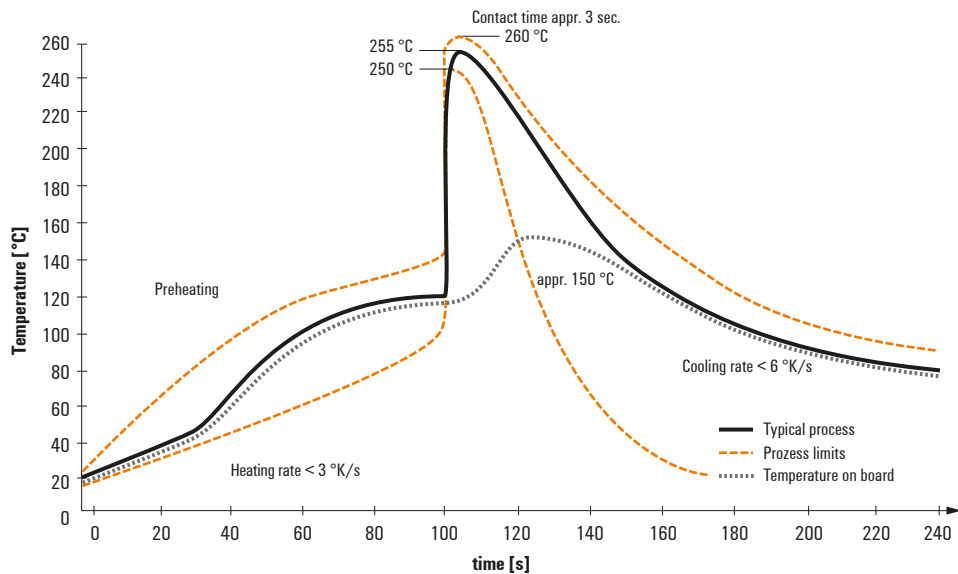
Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05	58473/0 13.05.11 HOHLBEIN_K	01	CAT.NO.:	
	MODIFICATION		<b>Weidmüller</b>	
	DRAWN 24.09.2003 GROESCHL_A	DATE 13.05.2011 HECKERT_M	<b>C 23110</b> <b>10</b> DRAWING NO. ISSUE NO.	
SCALE: 2:1 SUPERSEDES:	RESPONSIBLE HECKERT_S	CHECKED HECKERT_M	SHEET 02 OF 02 SHEETS	
APPROVED HECKERT_M	PRODUCT FILE: BLL 5.08		<b>BLL 5.08/.../90B/180B</b> BUCHSENLEISTE SOCKET BLOCK	
				7138

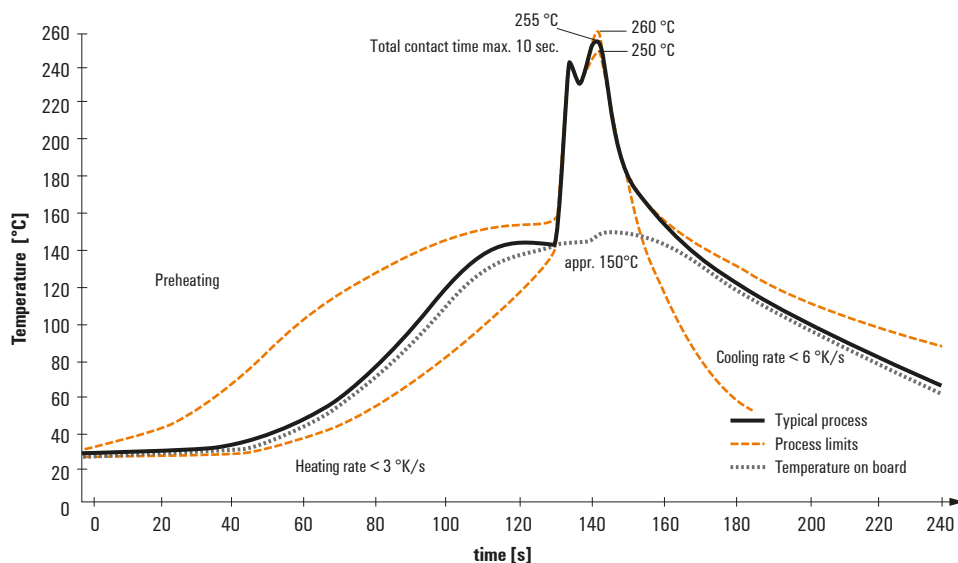
## Recommended wave soldering profiles

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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.