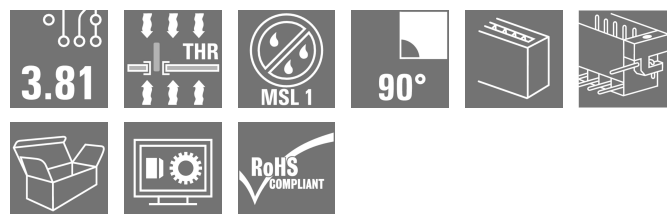
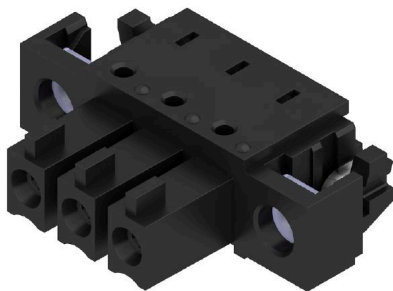


**BCL-SMT 3.81/03/90LFI 1.5SN BK BX**
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)
**Product image**


The inverted BCL-SMT socket block for the PCB offers three significant advantages:

- The BCL-SMT offers touch-safe security on the PCB which makes it ideal for live, current-carrying outputs.
- The BCL-SMT widens the range of applications with board-to-board connections between component assemblies.
- The BCL-SMT is reflow-compatible and can be seamlessly integrated into the automatic assembly and soldering process.

Two outlet directions give you a choice of position and thus more design flexibility.

- 180° standing
- 90° recumbent

Two housing variants are available for the BCL-SMT:

- Without flange
- With inverted solder flange ("LFI", with nut)
  - Fastened to PCB without additional screw
  - Fastened with screw to the SCZ FI

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of customary connectors and offer space for labelling and coding.

**General ordering data**

Version	PCB plug-in connector, female header, Solder flange inverted, THT/THR solder connection, 3.81 mm, Number of poles: 3, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box
Order No.	<a href="#">1028730000</a>
Type	BCL-SMT 3.81/03/90LFI 1.5SN BK BX
GTIN (EAN)	4032248758029
Qty.	50 items
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

**BCL-SMT 3.81/03/90LFI 1.5SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Approvals**

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E60693

**Dimensions and weights**

Net weight 1.98 g

**Environmental Product Compliance**

RoHS Compliance Status Compliant without exemption

REACH SVHC No SVHC above 0.1 wt%

**System specifications**

Product family OMNIMATE Signal - series BC/SC 3.81

Type of connection Board connection

Mounting onto the PCB THT/THR solder connection

Pitch in mm (P) 3.81 mm

Pitch in inches (P) 0.150 "

Outgoing elbow 90°

Number of poles 3

Number of solder pins per pole 2

Solder pin length (l) 1.5 mm

Solder pin length tolerance 0 / -0.02 mm

Solder pin dimensions d = 0.8 mm

Solder pin dimensions = d tolerance +0.05 / -0.05 mm

Solder eyelet hole diameter (D) 1.2 mm

Solder eyelet hole diameter tolerance (D) +0.1 mm

Outside diameter of solder pad 1.9 mm

Template aperture diameter 1.6 mm

L1 in mm 7.62 mm

L1 in inches 0.300 "

Number of rows 1

Pin series quantity 1

Touch-safe protection acc. to DIN VDE 57 106 Safe from back-of-hand touch

Touch-safe protection acc. to DIN VDE 0470 IP20 plugged

Volume resistance ≤5 mΩ

Can be coded Yes

Plugging force/pole, max. 9.5 N

Pulling force/pole, max. 6 N

Tightening torque	Torque type		Mounting screw, PCB		
	Usage information		Tightening torque	min.	0.1 Nm
				max.	0.15 Nm
			Recommended screw	Part number	<a href="#">PTSC KA 2.2X4.5 WN1412</a>

**BCL-SMT 3.81/03/90LFI 1.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

www.weidmueller.com

**Technical data****Material data**

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIla
Comparative Tracking Index (CTI)	≥ 175	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact material	Cu-alloy
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.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	15.4 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	13.7 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 76 A

**Rated data acc. to CSA**

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated current (Use group B / CSA)	11 A	Rated current (Use group C / CSA)	11 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Rated data acc. to UL 1059**

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 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	20.00 mm
VPE width	60.00 mm	VPE height	145.00 mm

**Important note**

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.		
Notes	<ul style="list-style-type: none"> <li>Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>P on drawing = pitch</li> </ul>		

**BCL-SMT 3.81/03/90LFI 1.5SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data**

- 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.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

**Classifications**

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

## BCL-SMT 3.81/03/90LFI 1.5SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

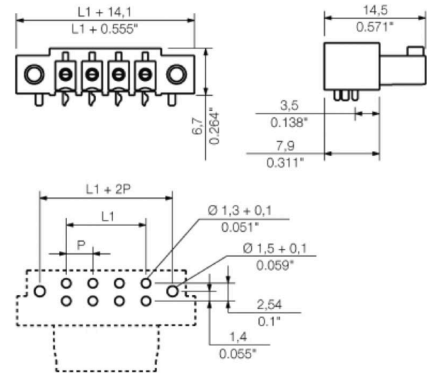
[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

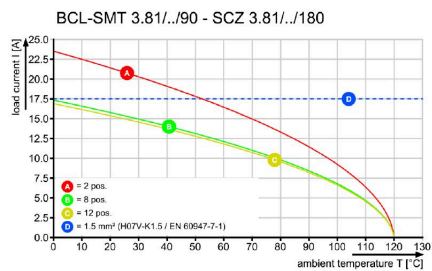
### Product image



### Dimensional drawing



### Graph



### Graph

