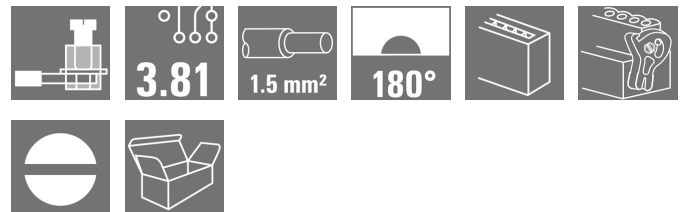


**OMNIMATE Signal - series BC/SC 3.81
SCZ 3.81/02/180LR SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Product image


The inverted SCZ pin plug with clamping-yoke screw connection is designed for straight wire connections in 3.81-mm pitch. It can be used in two ways:

- for wire-to-wire connections together with the BCZ
- as a mating plug for the touch-safe BCL socket block on the PCB.

The SCZ is available in four different versions:

- Without flange ("G", closed)
- With standard flange ("F", with socket nut)
- With inverted flange ("FI", with screw)
- and with Weidmüller's patented release latch for a tool-free, no-strain disconnect

The SCZ provides space for labelling and can be coded.

General ordering data

Type	SCZ 3.81/02/180LR SN OR BX
Order No.	2442050000
Version	PCB plug-in connector, male plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box
GTIN (EAN)	4050118543742
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box

OMNIMATE Signal - series BC/SC 3.81 SCZ 3.81/02/180LR SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data

Dimensions and weights

Height	15.2 mm	Height (inches)	0.598 inch
Depth	21.9 mm	Depth (inches)	0.862 inch
Net weight	5.12 g		

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

system parameters

Product family	OMNIMATE Signal - series BC/SC 3.81	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	Conductor outlet direction	180°
No. of poles	2	L1 in mm	3.81 mm
L1 in inches	0.15 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	6.00 mΩ	Can be coded	Yes
Stripping length	7 mm	Tightening torque, min.	0.2 Nm
Tightening torque, max.	0.25 Nm	Clamping screw	M 2
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25	Plugging force/pole, max.	8 N
Pulling force/pole, max.	5 N		

Material data

Insulating material	PA 66 GF 30	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
CTI	≥ 550	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	4-8 µm Sn	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min 0.2 mm ²	

**OMNIMATE Signal - series BC/SC 3.81
SCZ 3.81/02/180LR SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data

w. wire end ferrule, DIN 46228 pt 1, max. 1.5 mm²

Plug gauge in accordance with EN 60999 a x b; ø 2.4 mm x 1.5 mm ; 2.4 mm

Clampable conductor	Cross-section for conductor connection		Type	fine-wired
			nominal	0.5 mm ²
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection		Type	fine-wired
			nominal	0.75 mm ²
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection		Type	fine-wired
			nominal	1 mm ²
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection		Type	fine-wired
			nominal	1.5 mm ²
	AEH	Stripping length	nominal	7 mm

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P).

Max. clamping range 1.5 mm²

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. no. of poles (Tu=20°C)

17.1 A

Rated current, max. no. of poles (Tu=40°C)

15.2 A

Rated voltage for surge voltage class / pollution degree III/2

160 V

Rated impulse voltage for surge voltage class/ pollution degree II/2

2.5 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3

2.5 kV

Rated current, min. no. of poles (Tu=20°C)

17.5 A

Rated current, min. no. of poles (Tu=40°C)

17.5 A

Rated voltage for surge voltage class / pollution degree II/2

320 V

Rated voltage for surge voltage class / pollution degree III/3

160 V

Rated impulse voltage for surge voltage class/ pollution degree III/2

2.5 kV

Short-time withstand current resistance

3 x 1s with 76 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA) 300 V

Rated current (Use group B / CSA) 11 A

Wire cross-section, AWG, min. AWG 28

Rated voltage (Use group C / CSA) 50 V

Rated current (Use group C / CSA) 11 A

Wire cross-section, AWG, max. AWG 16

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated current (Use group B / UL 1059) 10 A

Wire cross-section, AWG, min. AWG 28

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, max. AWG 16

Packing

Packaging Box

VPE width 0

VPE length 0

VPE height 0

**OMNIMATE Signal - series BC/SC 3.81
SCZ 3.81/02/180LR SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002638	eClass 6.2	27-26-07-04
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09

Notes

Notes

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

**Downloads**

Engineering Data

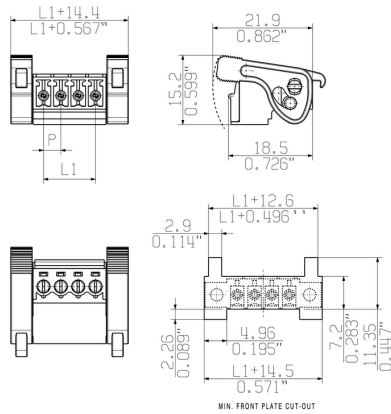
[STEP](#)

OMNIMATE Signal - series BC/SC 3.81 SCZ 3.81/02/180LR SN OR BX

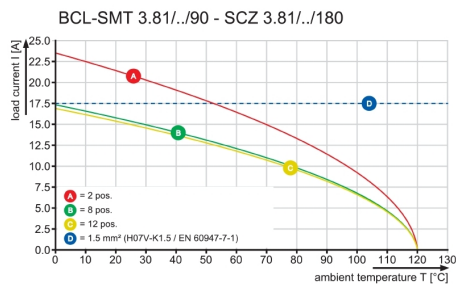
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

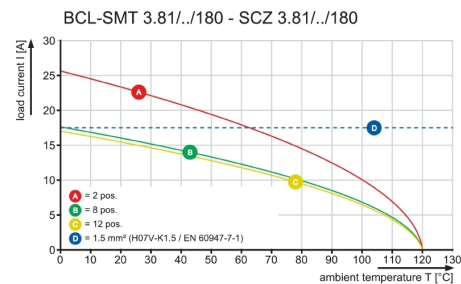
Dimensional drawing



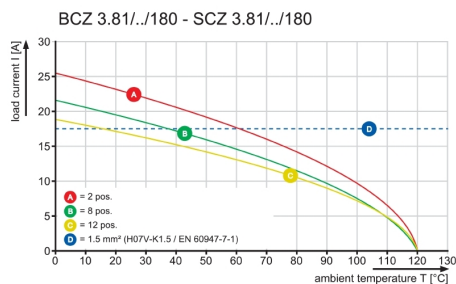
Graph



Graph



Graph

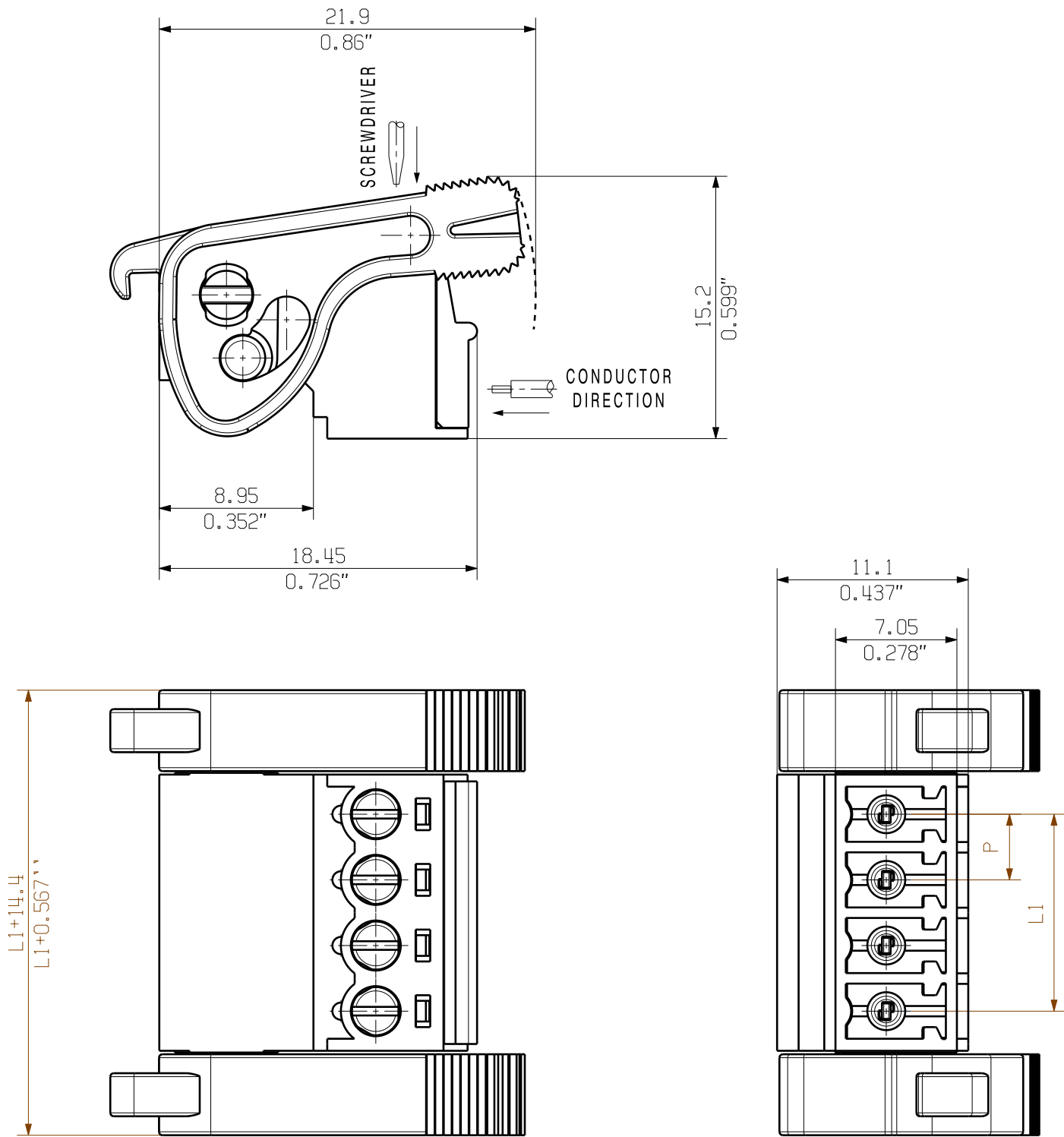


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmueller exclusively reserves the right to file for patents, utility models or designs.

© Weidmueller Interface GmbH & Co. KG

Dimensions without tolerances are no check dimensions

The English version is binding



KUNDENZEICHNUNG
CUSTOMER DRAWING

P = 3.81 RASTER
0.15" PITCH

12	41.91	1.651
11	38.10	1.501
10	34.29	1.351
9	30.48	1.201
8	26.67	1.051
7	22.86	0.901
6	19.05	0.751
5	15.24	0.600
4	11.43	0.450
3	7.62	0.300
2	3.81	0.150
N	L1 [mm]	L1 [inch]

GENERAL TOLERANCE:
DIN ISO 2768-m

RoHS
COMPLIANT

Max. nos.

Scale: 3/1

Supersedes: .

86251/0
26.05.16 XIANG_K

00

Modification

Date

17.02.2016

Name

XIANG_K

Responsible

XIANG_K

Checked

26.05.2016

ZHOU_N

Approved

XU_S

Cat.no.: .

C 63184

00

Drawing no.

Sheet 00

Issue no.

of 00 sheets

SCZ 3.81...180LR...

ZUGBUEGELANSCHLUSS STIFTSLEISTE

CLAMPING YOKE CONNECTION PIN HEADER

Product file: SCZ 3.81

7078