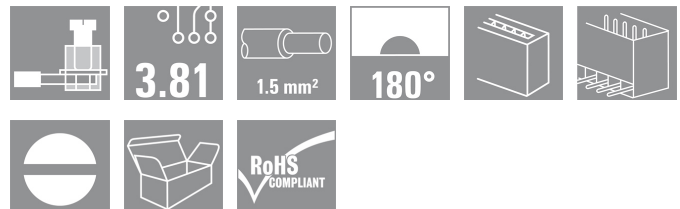


**BC/SC 3.81 series**  
**SCZ 3.81/02/180G SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-2083  
 www.weidmueller.com



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.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

|              |                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order No.    | <a href="#">1970010000</a>                                                                                                                                    |
| Type         | SCZ 3.81/02/180G SN BK BX                                                                                                                                     |
| Version      | PCB plug-in connector, male plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box |
| GTIN (EAN)   | 4032248679430                                                                                                                                                 |
| Qty.         | 50 pc(s).                                                                                                                                                     |
| Product data | IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 16                                                                         |
| Packaging    | Box                                                                                                                                                           |

Creation date June 30, 2012 6:35:24 AM CEST

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**Technical data**
**Dimensions**

Net weight 2 g

**System parameters**

|                                              |                        |                                            |                          |
|----------------------------------------------|------------------------|--------------------------------------------|--------------------------|
| Product family                               | BC/SC 3.81 series      | Conductor connection system                | Clamping yoke connection |
| Outgoing direction of conductor              | 180°                   | Pitch in mm (P)                            | 3.81 mm                  |
| Pitch in inches (P)                          | 0.15 inch              | No. of poles                               | 2                        |
| Number of rows                               | 1                      | Screwdriver blade                          | 0.4 x 2.5                |
| Screwdriver blade standard                   | DIN 5264               | Tightening torque, min.                    | 0.2 Nm                   |
| Tightening torque, max.                      | 0.25 Nm                | Clamping screw                             | M 2                      |
| Stripping length                             | 7 mm                   | L1 in mm                                   | 3.81 mm                  |
| L1 in inches                                 | 0.15 inch              | Touch-safe protection acc. to DIN VDE 0470 | IP 20                    |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |                                            |                          |

**Material data**

|                                  |                     |                                  |              |
|----------------------------------|---------------------|----------------------------------|--------------|
| Insulating material              | PA GF               | Colour                           | Black        |
| Colour chart                     | Similar to RAL 9011 | Flammability class UL 94         | V-0          |
| CTI                              | ≥ 550               | Contact material                 | Copper alloy |
| Contact surface                  | tinned              | Continuous operating temp., min. | -25 °C       |
| Continuous operating temp., max. | 120 °C              |                                  |              |

**Connectable conductors**

|                                                 |                          |                                                 |                     |
|-------------------------------------------------|--------------------------|-------------------------------------------------|---------------------|
| Clamping range, rated connection, min.          | 0.08 mm <sup>2</sup>     | Clamping range, rated connection, max.          | 1.5 mm <sup>2</sup> |
| 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 <sup>2</sup>      | Solid, max. H05(07) V-U                         | 1.5 mm <sup>2</sup> |
| Flexible, min. H05(07) V-K                      | 0.2 mm <sup>2</sup>      | Flexible, max. H05(07) V-K                      | 1.5 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, min.       | 0.2 mm <sup>2</sup>      | w. wire end ferrule, DIN 46228 pt 1, max.       | 1.5 mm <sup>2</sup> |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm <sup>2</sup>      | w. plastic collar ferrule, DIN 46228 pt 4, max. | 1.5 mm <sup>2</sup> |
| Plug gauge acc. to EN 60999 a x b; Ø            | 2.4 mm x 1.5 mm ; 2.4 mm |                                                 |                     |

**DIN IEC rating data**

|                                                                       |                  |                                                                           |        |
|-----------------------------------------------------------------------|------------------|---------------------------------------------------------------------------|--------|
| Rated current, min. no. of poles (Tu=20°C)                            | 17.5 A           | Rated current, max. no. of poles (Tu=20°C)                                | 17.1 A |
| Rated current, number of poles (Tu=40°C), min                         | 17.5 A           | Rated current, number of poles (Tu=40°C), max.                            | 15.2 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 |                                                                           |        |

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**Technical data**
**CSA rating data**

Institute (CSA)



Rated voltage (Use group B)

300 V

Rated current (use group B) 10 A

Rated voltage (use group D) 300 V

Rated current (use group D) 10 A

Wire cross-section, AWG, min. AWG 28

Wire cross-section, AWG, max. AWG 16

**UL 1059 rating data**

Rated voltage (use group B) 300 V

Rated current (use group B) 10 A

Rated voltage (use group D) 300 V

Rated current (use group D) 10 A

Wire cross-section, AWG, min. AWG 28

Wire cross-section, AWG, max. AWG 16

**Classifications**

UNSPSC 30-21-18-01

eClass 6.0

27-26-07-04

eClass 7.0 27-44-04-02

**Notes**

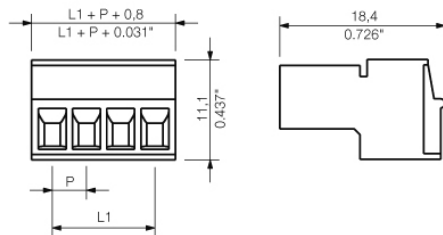
Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

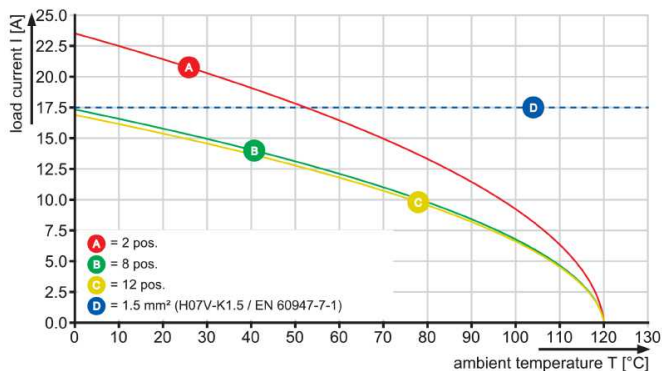
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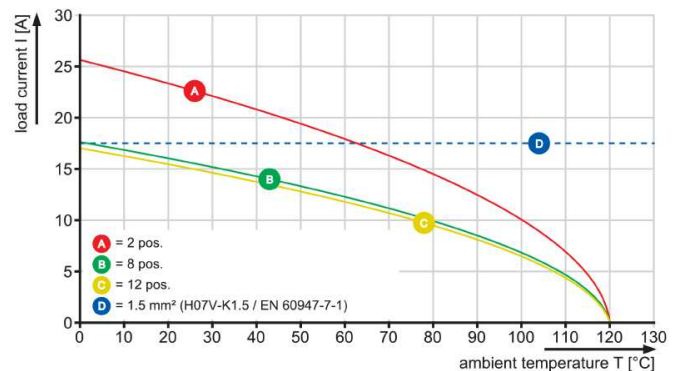
## Drawings



BCL-SMT 3.81/./180 - SCZ 3.81/./180



BCL-SMT 3.81/./180 - SCZ 3.81/./180



BCZ 3.81/./180 - SCZ 3.81/./180

