

## Pitch 3.81 mm (0.150 inch) SC-SMT 3.81/06/90G 3.2SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
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 www.weidmueller.com



High-temperature-resistant pin header (SC-SMT 90G) in 3.81-mm pitch (0.15 inch)

- Plugging direction parallel to PCB (recumbent)
- Closed (G)
- Packed either in box (BX) or on anti-static roll (tape-on-reel, RL)
- Pin length of either 1.5 mm or 3.2 mm

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

- 320 V (IEC) / 300 V (UL)
- 14.9 A (IEC) / 10 A (UL)

### General ordering data

Order No.	<a href="#">1862510000</a>
Part designation	SC-SMT 3.81/06/90G 3.2SN BK BX
Version	PCB plug-in connector, male header, 3.81 mm, No. of poles: 6, 90°, Solder pin length: 3.2 mm, tinned, black, Reflow solder connection, Box
GTIN (EAN)	4032248427642
Qty.	50 pc(s).
Packaging	Box

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**Technical data**
**System parameters**

Fitted to PCB	Reflow solder connection	Outgoing elbow	90°
Pitch in mm	3.81 mm	Pitch in inch	0.15 inch
No. of poles	6	Solder pin length	3.2 mm
Can be coded	Yes	No. of rows	1
Number of solder pins per pole	1	Diameter of solder eyelet	1.3 mm
Tolerance of the diameter of the solder eyelet	+ 0,1 mm	L1 in mm	19.05 mm
L1 in inch	0.75 inch	Insulation resistance	10 <sup>3</sup> Ω
Electric shock protection to DIN VDE 0470	IP 20	Electric shock protection to DIN VDE 57 106	Safe from finger touch

**Material data**

Insulating material	LCP GF	Colour	black
Insulating material group	IIIa	Flammability class UL 94	V-0
CTI	≥ 175	Contact material	Copper alloy
Contact surface	tinned	Highest continuous operating temperature, min.	-25 °C
Highest continuous operating temperature, max.	120 °C	Max. relative humidity during storage	85 %

**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)	13.9 A
Rated current, no. of poles (Tu=40°C), min.	17 A	Rated current, no. of poles (Tu=40°C), max.	12.4 A
Rated voltage at overvoltage category/pollution degree III/3	160 V	Rated impulse withstand voltage for overvoltage class/pollution severity III/3	2.5 kV
Rated voltage for overvoltage class/pollution severity III/2	160 V	Rated impulse withstand voltage for overvoltage class/pollution severity III/2	2.5 kV
Rated voltage for overvoltage class/pollution severity II/2	320 V	Rated impulse withstand voltage for overvoltage class/pollution severity II/2	2.5 kV
Short-time withstand current resistance	3 x 1s with 76 A		

**CSA 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

**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

**Approvals**

Approvals institutes CSA; CURUS; ROHS

**Classifications**

ETIM 3.0	EC001284	eClass 5.1	27-26-07-04
eClass 6.0	27-26-07-04		

**Datasheet**

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**Technical data****Notes**

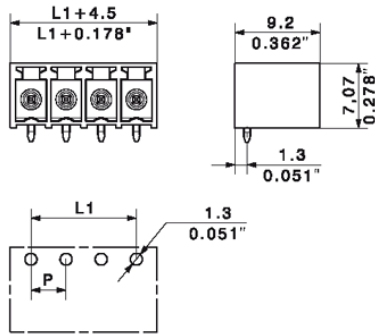
Notes

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- 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.

**Datasheet**

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**Drawings**

**Pitch 3.81 mm (0.150 inch)**  
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## Counterpart

### BCZ 3.81/180



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
- Flange with screw (F)
- Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.

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.

- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1940770000</a>	BCZ 3.81/06/180 SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248656066	50 pc(s).	Box
<a href="#">1792900000</a>	BCZ 3.81/06/180 SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248226986	50 pc(s).	Box
<a href="#">1792810000</a>	BCZ 3.81/06/180 SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248226795	50 pc(s).	Box

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## Counterpart

### BCZ 3.81/270



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
- Flange with screw (F)
- Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.

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.

- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1940230000</a>	BCZ 3.81/06/270 SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248656608	50 pc(s).	Box
<a href="#">1798970000</a>	BCZ 3.81/06/270 SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243754	50 pc(s).	Box
<a href="#">1799050000</a>	BCZ 3.81/06/270 SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243945	50 pc(s).	Box

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## Counterpart

### BCZ 3.81/90



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
- Flange with screw (F)
- Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.

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.

- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1798730000</a>	BCZ 3.81/06/90 SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243419	50 pc(s).	Box
<a href="#">1798590000</a>	BCZ 3.81/06/90 SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243235	50 pc(s).	Box
<a href="#">1939870000</a>	BCZ 3.81/06/90 SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248656950	50 pc(s).	Box

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## Counterpart

### BCZ 3.81/180F



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
  - Flange with screw (F)
  - Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.
- 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.
- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1941050000</a>	BCZ 3.81/06/180F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248655793	50 pc(s).	Box
<a href="#">1792990000</a>	BCZ 3.81/06/180F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248227075	50 pc(s).	Box
<a href="#">1793080000</a>	BCZ 3.81/06/180F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248227167	50 pc(s).	Box



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## Counterpart

### BCZ 3.81/180LR



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
  - Flange with screw (F)
  - Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.
- 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.
- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1941440000</a>	BCZ 3.81/06/180LR SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248698363	50 pc(s).	Box
<a href="#">1941630000</a>	BCZ 3.81/06/180LR SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248698554	50 pc(s).	Box
<a href="#">1941820000</a>	BCZ 3.81/06/180LR SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248698745	50 pc(s).	Box

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## Counterpart

### BCZ 3.81/90F



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

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- 270° wire perpendicular and below plugging direction

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- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1940020000</a>	BCZ 3.81/06/90F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248656806	50 pc(s).	Box
<a href="#">1798890000</a>	BCZ 3.81/06/90F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243570	50 pc(s).	Box
<a href="#">1798810000</a>	BCZ 3.81/06/90F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248243495	50 pc(s).	Box

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## Counterpart

### BCZ 3.81/270F



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

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There are three housing shapes, covering many different requirements, to choose from:

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- 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.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1940500000</a>	BCZ 3.81/06/270F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248656332	50 pc(s).	Box
<a href="#">1799210000</a>	BCZ 3.81/06/270F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248244102	50 pc(s).	Box
<a href="#">1799130000</a>	BCZ 3.81/06/270F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 6, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248244027	50 pc(s).	Box