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#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-2083 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)

Order No.	<u>1862550000</u>
Part designation	SC-SMT 3.81/10/90G 3.2SN BK BX
Version	PCB plug-in connector, male header, 3.81 mm, No. of poles: 10, 90°, Solder pin length: 3.2 mm, tinned, black, Reflow solder connection, Box
GTIN (EAN)	4032248427697
Qty.	50 pc(s).
Packaging	Вох



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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	10	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		L1 in mm	
eyelet	+ 0,1 mm		34.29 mm
L1 in inch	1.35 inch	Insulation resistance	10 <sup>3</sup> Ω
Electric shock protection to DIN VDE 0470 IP 20		Electric shock protection to DIN VD	E 57 106 Safe from finger touch

#### **Material data**

Insulating material	LCP GF	Colour	black	
Insulating material group	Illa	Flammability class UL 94	V-0	
СТІ	≥ 175	Contact material	Copper alloy	
Contact surface		Highest continous operating temperature,		
	tinned	min.	-25 °C	
Highest continous operating temper	erature,	Max. relative humidity during storage	ge	
max.	120 °C		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	n 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	n 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
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### Classifications

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



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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.



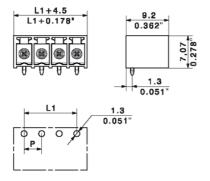
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# Drawings





#### Weidmüller Interface GmbH & Co. KG

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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 mm2 (IEC) / 28 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
1792830000	BCZ 3.81/10/180 SN BK BX	PCB plug-in connector, female	4032248226917	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1792920000	BCZ 3.81/10/180 SN GN BX	PCB plug-in connector, female	4032248227006	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1940810000	BCZ 3.81/10/180 SN OR BX	PCB plug-in connector, female	4032248656028	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², 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)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
	•		` ,		* *
<u>1798980000</u>	BCZ 3.81/10/270 SN BK BX	PCB plug-in connector, female	4032248243761	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1799070000	BCZ 3.81/10/270 SN GN BX	PCB plug-in connector, female	4032248243969	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1940270000	BCZ 3.81/10/270 SN OR BX	PCB plug-in connector, female	4032248656561	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², 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)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
1939910000	BCZ 3.81/10/90 SN OR BX	PCB plug-in connector, female	4032248656912	50 pc(s).	Box
		plug, 3.81 mm, No. of poles: 1	0,		
		90°, Clamping yoke connectio	n,		
		Clamping range, max.: 1.5			
		mm², Box			
1798610000	BCZ 3.81/10/90 SN BK BX	PCB plug-in connector, female	4032248243242	50 pc(s).	Вох
		plug, 3.81 mm, No. of poles: 1	0,		
		90°, Clamping yoke connectio	n,		
		Clamping range, max.: 1.5			
		mm², Box			
1798750000	BCZ 3.81/10/90 SN GN BX	PCB plug-in connector, female	4032248243433	50 pc(s).	Box
		plug, 3.81 mm, No. of poles: 1	0,		
		90°, Clamping yoke connectio	n,		
		Clamping range, max.: 1.5			
		mm², 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:

- 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)

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Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<u>1799140000</u>	BCZ 3.81/10/270F SN BK BX	PCB plug-in connector, female	4032248244034	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1799230000	BCZ 3.81/10/270F SN GN BX	PCB plug-in connector, female	4032248244126	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1940540000	BCZ 3.81/10/270F SN OR BX	PCB plug-in connector, female	4032248656295	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², 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 mm2 (IEC) / 28 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
1941860000	BCZ 3.81/10/180LR SN BK BX	PCB plug-in connector, female	4032248698899	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1941670000	BCZ 3.81/10/180LR SN GN BX	PCB plug-in connector, female	4032248698592	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1941480000	BCZ 3.81/10/180LR SN OR BX	PCB plug-in connector, female	4032248698400	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², 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:

- 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)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging		
<u>1940060000</u>	BCZ 3.81/10/90F SN OR BX	PCB plug-in connector, female	4032248656769	50 pc(s).	Box		
		plug, 3.81 mm, No. of poles: 10, 90°, Clamping yoke connection, Clamping range, max.: 1.5					
1798820000	BCZ 3.81/10/90F SN BK BX	PCB plug-in connector, female	4032248243501	50 pc(s).	Box		
		plug, 3.81 mm, No. of poles: 1	0,				
		90°, Clamping yoke connectio	n,				
		Clamping range, max.: 1.5					
		mm², Box					
1798910000	BCZ 3.81/10/90F SN GN BX	PCB plug-in connector, female	4032248243594	50 pc(s).	Box		
		plug, 3.81 mm, No. of poles: 1	0,				
		90°, Clamping yoke connection	n,				
		Clamping range, max.: 1.5					
		mm², Box					



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# Counterpart

#### BCZ 3.81/180F



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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)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
1941090000	BCZ 3.81/10/180F SN OR BX	PCB plug-in connector, female	4032248655755	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1793100000	BCZ 3.81/10/180F SN GN BX	PCB plug-in connector, female	4032248227181	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1793010000	BCZ 3.81/10/180F SN BK BX	PCB plug-in connector, female	4032248227099	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		10, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			