

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 3.81mm 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>1862480000</u>
Part designation	SC-SMT 3.81/03/90G 3.2SN BK BX
Version	PCB plug-in connector, male header, 3.81 mm, No. of poles: 3, 90°, Solder pin length: 3.2 mm, tinned, black, Reflow solder connection, Box
GTIN (EAN)	4032248427659
Qty.	50 pc(s).
Packaging	Box

Technical data

System parameters



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Fitted to PCB	Reflow solder connection	Outgoing elbow	90°	
Pitch in mm	3.81 mm	Pitch in inch	0.15 inch	
No. of poles	3	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		7.62 mm	
L1 in inch	0.3 inch	Insulation resistance	10 ³ Ω	
		Electric shock protection to DIN VDE 57 106 Safe from finger touch		
	IP 20	Electric shock protection to DIN VD	E 57 106 Safe from finger touch	
Electric shock protection to DIN VDE 0470 Material data Insulating material		·		
Material data	IP 20 LCP GF Illa	Electric shock protection to DIN VD Colour Flammability class UL 94	E 57 106 Safe from finger touch black V-0	
Material data Insulating material Insulating material group	LCP GF	Colour	black	
	LCP GF Illa	Colour Flammability class UL 94	black V-0 Copper alloy	
Material data Insulating material Insulating material group CTI	LCP GF Illa	Colour Flammability class UL 94 Contact material	black V-0 Copper alloy	
Material data Insulating material Insulating material group CTI	LCP GF Illa ≥ 175	Colour Flammability class UL 94 Contact material Highest continous operating temper	black V-0 Copper alloy rature, -25 °C	

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/pollutic 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/pollutic 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			
Classifications				

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

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





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Counterpart

BCZ 3.81/180





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Klingenbergstraße 16 D-32758 Detmold Germany Fon: +49 5231 14-0 Fax: +49 5231 14-2083 www.weidmueller.com

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
1792870000	BCZ 3.81/03/180 SN GN BX	PCB plug-in connector, female	4032248226955	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1792780000	BCZ 3.81/03/180 SN BK BX	PCB plug-in connector, female	4032248226764	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1940740000	BCZ 3.81/03/180 SN OR BX	PCB plug-in connector, female	4032248656097	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			

Counterpart

BCZ 3.81/270





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• 270° wire perpendicular and below plugging direction There are three housing shapes, covering many different requirements, to choose from:

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- 17.5 A (IEC) / 10 A (UL)

Order No.	Part designation	Version GTIN (EAN)	Qty.	Packaging	
1940200000	BCZ 3.81/03/270 SN OR BX	PCB plug-in connector, female 4032248656639	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1799020000	BCZ 3.81/03/270 SN GN BX	PCB plug-in connector, female 4032248243914	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			
1798160000	BCZ 3.81/03/270 SN BK BX	PCB plug-in connector, female 4032248241354	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			

Counterpart

BCZ 3.81/90





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- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

Order No.	Part designation	Version GTIN (EAN)	Qty.	Packaging	
<u>1798120000</u>	BCZ 3.81/03/90 SN BK BX	PCB plug-in connector, female 4032248241316	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			
1939830000	BCZ 3.81/03/90 SN OR BX	PCB plug-in connector, female 4032248653959	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			
1798690000	BCZ 3.81/03/90 SN GN BX	PCB plug-in connector, female 4032248243280	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			

Counterpart

BCZ 3.81/90F





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Order No.	Part designation	Version GTIN (EAN)	Qty.	Packaging	
<u>1798140000</u>	BCZ 3.81/03/90F SN BK BX	PCB plug-in connector, female 4032248241330	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			
1798860000	BCZ 3.81/03/90F SN GN BX	PCB plug-in connector, female 4032248243549	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			
1939990000	BCZ 3.81/03/90F SN OR BX	PCB plug-in connector, female 4032248656837	50 pc(s).	Box	
		plug, 3.81 mm, No. of poles: 3,			
		90°, Clamping yoke connection,			
		Clamping range, max.: 1.5			
		mm², Box			

Counterpart

BCZ 3.81/180LR





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- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<u>1941410000</u>	BCZ 3.81/03/180LR SN OR BX	PCB plug-in connector, female	4032248698332	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
<u>1941600000</u>	BCZ 3.81/03/180LR SN GN BX	PCB plug-in connector, female	4032248698523	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
1941790000	BCZ 3.81/03/180LR SN BK BX	PCB plug-in connector, female	4032248698714	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			

Counterpart

BCZ 3.81/180F





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Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<u>1792960000</u>	BCZ 3.81/03/180F SN BK BX	PCB plug-in connector, female	4032248227044	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
<u>1793050000</u>	BCZ 3.81/03/180F SN GN BX	PCB plug-in connector, female	4032248227136	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
<u>1941020000</u>	BCZ 3.81/03/180F SN OR BX	PCB plug-in connector, female	4032248655823	50 pc(s).	Box
		plug, 3.81 mm, No. of poles:			
		3, 180°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			

Counterpart

BCZ 3.81/270F





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Order No.	Part designation	Version GTIN (EAN)	Qty.	Packaging	
<u>1799180000</u>	BCZ 3.81/03/270F SN GN BX	PCB plug-in connector, female 4032248244072	2 50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
<u>1798180000</u>	BCZ 3.81/03/270F SN BK BX	PCB plug-in connector, female 4032248241378	3 50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm ² , Box			
<u>1940470000</u>	BCZ 3.81/03/270F SN OR BX	PCB plug-in connector, female 4032248656363	3 50 pc(s).	Box	
		plug, 3.81 mm, No. of poles:			
		3, 270°, Clamping yoke			
		connection, Clamping range,			
		max.: 1.5 mm², Box			