

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Product image**

















Similar to illustration

The SC pin header has a parallel (recumbent) plugging direction in relation to the PCB. It is available in closed (G) and screw flange (F) versions.

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

### **General ordering data**

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.81 mm, Number of poles: 3, 90°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>2563690000</u>
Туре	SC 3.81/03/90F 3.2SN BK BX CO
GTIN (EAN)	4050118581430
Qty.	78 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Вох

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# **Technical data**

## **Dimensions and weights**

Depth	9.2 mm	Depth (inches)	0.362 inch
Height of lowest version	7.1 mm	Net weight	2.04 g

## **Environmental Product Compliance**

REACH SVHC Lead 7439-92-1

### **System specifications**

Product family	OMNIMATE Signal - series	s BC/SC 3.81			
Type of connection	Board connection				
Mounting onto the PCB	THT solder connection				
Pitch in mm (P)	3.81 mm				
Pitch in inches (P)	0.15 inch				
Outgoing elbow	90°				
Number of poles	3				
Number of solder pins per pole	1				
Solder pin length (I)	3.2 mm				
Solder pin length tolerance	0 / -0.2 mm				
Solder pin dimensions	d = 1.0 mm, Octagonal				
Solder pin dimensions = d tolerance	0 / -0,03 mm				
Solder eyelet hole diameter (D)	1.2 mm				
Solder eyelet hole diameter tolerance (D	0)+ 0,1 mm				
L1 in mm	7.62 mm				
L1 in inches	0.3 inch				
Number of rows	1				
Pin series quantity	1				
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	≤5 mΩ				
Can be coded	Yes				
Plugging force/pole, max.	7 N				
Pulling force/pole, max.	5 N				
Tightening torque	Torque type		Mounting screw, PCB		
	Usage information		Tightening torque	min.	0.1 Nm
				max.	0.15 Nm
			Recommended screw	Part	PTSC KA
				number	2.2X4.5
					<u>WN1412</u>

## **Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C



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# **Technical data**

#### Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	17.5 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	16.3 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
Rated data acc. to CSA			
Rated voltage (Use group B / CSA)	300 V	Rated current (Use group B / CSA)	8 A
Rated data acc. to UL 1059			
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Packing			
Packaging	Box	VPE length	338 mm
VPE width	130 mm	VPE height	27 mm
Classifications			
ETIM 6.0	EC002637	ETIM 7.0	EC002637
ECLASS 9.0	27-44-04-02	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01
Important note			
Inc. ( )			
IPC conformity	standards and norms and comp	eveloped, manufactured and delivered according bly with the assured properties in the data sheet Class 2". Further claims on the products can be e	esp. fulfill decorative properties
Notes	Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months		
Approvals			
ROHS	Conform		
Downloads			
Product Change Notification	Change of packaging - DE Change of packaging - EN		
	Citatige of parentaging Err		



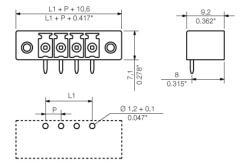
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# **Drawings**

# **Dimensional drawing**





# Recommended wave solderding profiles

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## Single Wave:



#### **Double Wave:**



## Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.