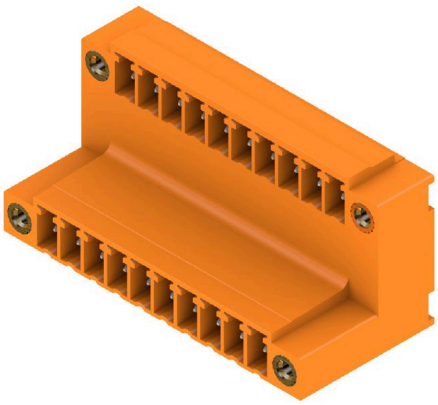
Data sheet

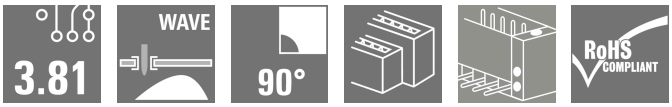
SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image





Two-tier SCDV pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at two offset levels and with open access to each row.
- Space for labelling and coding
- Packed in cardboard box.

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.

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.81 mm, Number of poles: 20, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	1032660000
Type	SCDV 3.81/20/90F 3.2SN OR BX
GTIN (EAN)	4032248771936
Qty.	50 items
Product data	IEC: 320 V / 17.5 A UL: 300 V / 11 A
Packaging	Box

SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Approvals

ROHS	Conform

Dimensions and weights

Depth	21.9 mm	Depth (inches)	0.8622 inch
Height	25.9 mm	Height (inches)	1.0197 inch
Height of lowest version	22.7 mm	Width	48.49 mm
Width (inches)	1.9091 inch	Net weight	11.8 g

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1
SCIP	bf6d7a85-f544-4ef5-9f0d-e42877c7f5e6

System specifications

Product family	OMNIMATE Signal - series 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)	0.150 "
Outgoing elbow	90°
Number of poles	20
Number of solder pins per pole	1
Solder pin length (l)	3.2 mm
Solder pin length tolerance	+0,02 / -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)	+ 0,1 mm
L1 in mm	34.29 mm
L1 in inches	1.350 "
Number of rows	2
Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	finger-safe unplugged/ back-of-hand-safe plugged
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Volume resistance	≤5 mΩ
Can be coded	Yes
Plugging force/pole, max.	7.5 N
Pulling force/pole, max.	5.5 N
Tightening torque	Torque type: Mounting screw, PCB
	Usage information: Tightening torque — min. 0.1 Nm; max. 0.15 Nm
	Usage information: Recommended screw — Part number: PTSC KA 2.2X4.5 WN1412

Material data

Insulating material	PA GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	II

SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Comparative Tracking Index (CTI)	≥ 550	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-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		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, min. number of poles (Tu=40°C)	17 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 voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	11 A	Rated current (Use group D / CSA)	10 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)	11 A	Rated current (Use group D / UL 1059)	10 A

Packing

Packaging	Box	VPE length	260.00 mm
VPE width	255.00 mm	VPE height	28.00 mm

Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • 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. • P on drawing = pitch • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	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	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01

SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

ECLASS 15.0	27-46-02-01		

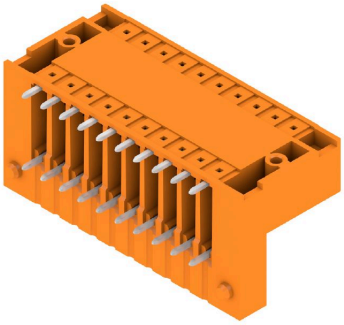
SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

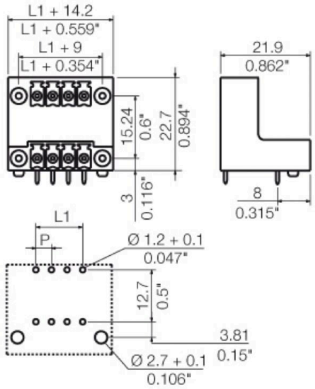
www.weidmueller.com

Drawings

Product image



Dimensional drawing



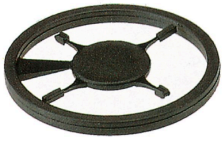
SCDV 3.81/20/90F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.
Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.
The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.
The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	SC-SMT 3.81 KO GY BX	Version
Order No.	1968900000	PCB plug-in connector, Accessories, Coding element, grey, Number of
GTIN (EAN)	4032248772865	poles: 6
Qty.	100 ST	