

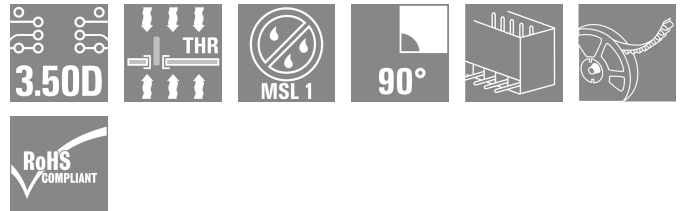
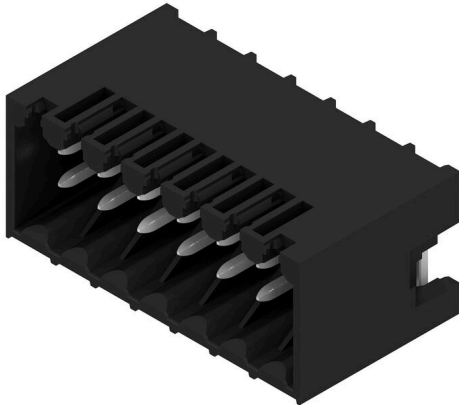
## S2L-SMT 3.50/14/90G 1.5SN BK RL

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

[www.weidmueller.com](http://www.weidmueller.com)

Do not use product for  
new developments

### Product image



High-temperature-resistant, straight, 2-tier male connector for all common soldering methods. Optimised for automatic assembly. Packed in box or tape. 3.2 mm solder pin suitable for reflow and wave soldering. These male connectors can be labelled and coded.

### General ordering data

Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 14, 90°, Solder pin length (l): 1.5 mm, tinned, black, Tape
Order No.	<a href="#">1994990000</a>
Type	S2L-SMT 3.50/14/90G 1.5SN BK RL
GTIN (EAN)	4050118381528
Qty.	235 items
Product data	IEC: 160 V / 10 A UL: 150 V / 10 A
Packaging	Tape
Delivery status	This article will no longer be available in the future.
Available until	2028-12-31T00:00:00+01:00
Alternative part no.	<a href="#">02.202630301523MEZ/14/90G 1.5SN BK RL</a>

## S2L-SMT 3.50/14/90G 1.5SN BK RL

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## Technical data

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### Approvals

ROHS	Conform
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### Dimensions and weights

Depth	14.2 mm	Depth (inches)	0.5591 inch
Height	14.2 mm	Height (inches)	0.5591 inch
Height of lowest version	10.8 mm	Width	25.9 mm
Width (inches)	1.0197 inch	Net weight	4.29 g

### Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

### System specifications

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	3.50 mm
Pitch in inches (P)	0.138 "	Outgoing elbow	90°
Number of poles	14	Number of solder pins per pole	1
Solder pin length (l)	1.5 mm	Solder pin dimensions	d = 1.0 mm, Octagonal
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)+	0, 1 mm
Outside diameter of solder pad	2.1 mm	Template aperture diameter	1.9 mm
L1 in mm	21.00 mm	L1 in inches	0.827 "
Number of rows	1	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
Can be coded	Yes	Plugging force/pole, max.	3 N
Pulling force/pole, max.	6 N		

### Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIb
Comparative Tracking Index (CTI)	≥ 175	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	2...3 µm Ni / 5...7 µm Sn glossy
Layer structure of plug contact	2...5 µm Sn / 1...3 µm Ni	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	10 A
Rated current, max. number of poles (Tu=20°C)	10 A	Rated current, min. number of poles (Tu=40°C)	9 A
Rated current, max. number of poles (Tu=40°C)	8.5 A	Rated voltage for surge voltage class / pollution degree II/2	160 V
Rated voltage for surge voltage class / pollution degree III/2	125 V	Rated voltage for surge voltage class / pollution degree III/3	50 V

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### Technical data

Rated impulse voltage for surge voltage class/ pollution degree II/2 1.5 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3 2.5 kV

Rated impulse voltage for surge voltage class/ pollution degree III/2 1.5 kV

Short-time withstand current resistance 3 x 1s with 77 A

#### Rated data acc. to CSA

Rated voltage (Use group B / CSA) 150 V

Rated voltage (Use group D / CSA) 150 V

Rated current (Use group C / CSA) 9.5 A

Rated voltage (Use group C / CSA) 50 V

Rated current (Use group B / CSA) 5 A

Rated current (Use group D / CSA) 9.5 A

#### Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059) 150 V

Rated current (Use group B / UL 1059) 10 A

#### Packing

ESD Level packaging static dissipative

VPE length 330.00 mm

VPE height 51.00 mm

Tape width (W) 44 mm

Tape pocket height (AO) 14.50 mm

Tape pocket separation (P1) 20.00 mm

Tape pocket separation (F) 20.20 mm

Surface resistance  $R_s = 109 - 1012 \Omega$

Packaging Tape

VPE width 330.00 mm

Tape depth (T2) 15.10 mm

Tape pocket depth (KO) 14.60 mm

Tape pocket width (BO) 32.90 mm

Tape hole separation (E) 1.75 mm

Tape reel diameter  $\varnothing$  (A) 330 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

- 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 8.0 EC002637

ETIM 10.0 EC002637

ECLASS 15.0 27-46-02-01

ETIM 9.0 EC002637

ECLASS 14.0 27-46-02-01

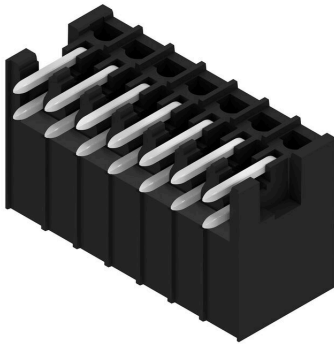
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Drawings

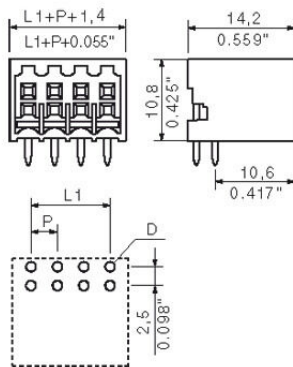
Product image



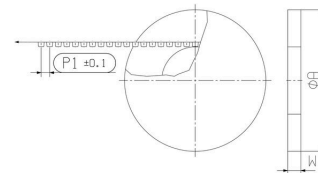
Product image



Dimensional drawing



Dimensional drawing



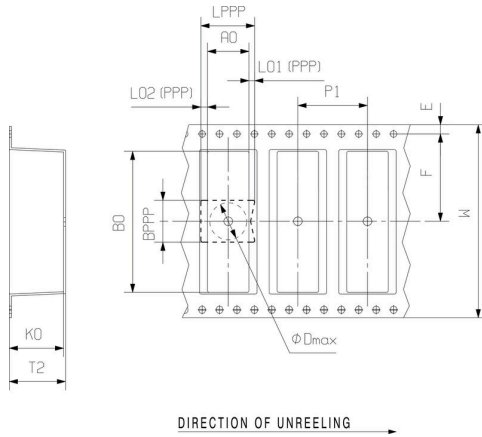
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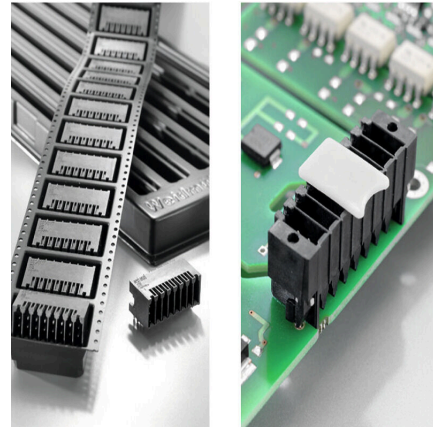
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Dimensional drawing



Optimised for the SMT process  
Safe board-to-board connection

Product benefits



Optimised for the SMT process  
Safe board-to-board connection

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## 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	B2L/S2L 3.50 KO BK BX	Version
Order No.	<a href="#">1849740000</a>	PCB plug-in connector, Accessories, Coding element, black, Number of poles: 1
GTIN (EAN)	4032248378203	
Qty.	100 ST	
Type	B2L/S2L 3.50 KO OR BX	Version
Order No.	<a href="#">1849730000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number of poles: 1
GTIN (EAN)	4032248378197	
Qty.	100 ST	

### LED Light guides



Effective: the link between LED and front panel.  
 Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.  
 The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.  
 The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

### General ordering data

Type	S2L/S2C 3.5 FLA 20/10 S...	Version
Order No.	<a href="#">1814590000</a>	PCB plug-in connector, Accessories, Flood-light display, Transparent, Number of poles: 10
GTIN (EAN)	4032248302826	
Qty.	50 ST	

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## Accessories

Type	S2L/S2C 3.5 FLA 20/10	Version	
Order No.	<a href="#">1699580000</a>	PCB plug-in connector, Accessories, Flood-light display, Transparent,	
GTIN (EAN)	4008190891350	Number of poles: 10	
Qty.	100 ST		