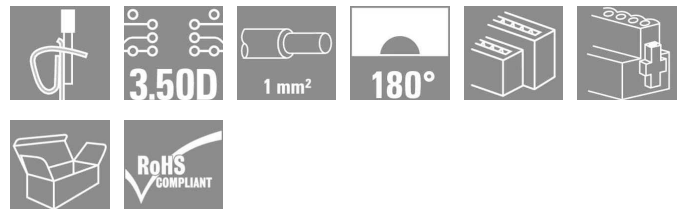


OMNIMATE Signal - series B2L/S2L 3.50 - 2-row B2L 3.50/06/180F SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
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Fax: +49 5231 14-292083
www.weidmueller.com



Component density redefined: the future standard for signal connection

Maximum connection density in the smallest of spaces - the 2-row B2L raises the bar higher for standard sensor cables up to 1 mm² and bridges the gap between insufficient space and more functions.

The result is a connecting solution for standard industrial cables with 1.75 pitch - 30% smaller than an equivalent solution with 2.5 pitch and with 140% the robustness of 3.5 pitch

Dimensions: double the connection density with 3.5mm pitch size

Connection system: tried and tested maintenance-free Weidmüller tension clamp connection

Connection data / Performance:

- 0.20 - 1.0mm² (IEC) / 28 - 18 AWG (UL)
- 80 V / 10 A (IEC) / 150 V / 10 A (UL)
- No. of poles: 4 to 36

The basic application advantages:

Efficient - maximum component density on the PCB

Suitable for industrial use - minimum dimensions, maximum robustness

Process-optimised - automatic configuration and reflow solders, rapid connection

User-friendly - patented release lever for the easy release of larger numbers of poles

Application-oriented: easy labelling and reliable coding despite compact dimensions

Miniaturisation is more than just a larger number of functions within a small space:

Every reduction in size decreases space requirements and the overall system costs less for the end customer.

Weidmüller fulfils a growing demand in the engineering and industrial automation sectors.

General ordering data

Type	B2L 3.50/06/180F SN OR BX
Order No.	1748010000
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box
GTIN (EAN)	4032248037933
Qty.	50 pc(s).
Product data	IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box

Creation date October 22, 2013 6:31:36 PM CEST

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Technical data
Dimensions and weights

Net weight 3.47 g

System parameters

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row	Wire connection method	Tension clamp connection
Conductor outlet direction	180°	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	No. of poles	6
Stripping length	7 mm	L1 in mm	7 mm
L1 in inches	0.276 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		

Material data

Insulating material	PBT	Colour	Orange
Colour chart (similar)	RAL 2000	UL 94 flammability rating	V-0
Contact material	Cu-Leg	Contact surface	tinned


Connectable conductors

Clamping range, rated connection, min.	0.08 mm ²	Clamping range, rated connection, max.	1 mm ²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 18
Solid, min. H05(07) V-U	0.2 mm ²	Solid, max. H05(07) V-U	1 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²	Flexible, max. H05(07) V-K	1 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.13 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	0.34 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.13 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	0.34 mm ²

DIN IEC rating data

Rated current, min. no. of poles (Tu=20°C)	10.3 A	Rated current, max. no. of poles (Tu=20°C)	8.7 A
Rated current, number of poles (Tu=40°C), min	8.9 A	Rated current, number of poles (Tu=40°C), max.	7.4 A
Rated voltage for surge voltage class pollution degree II/2	250 V	Rated voltage for surge voltage class pollution degree III/2	160 V
Rated voltage for surge voltage class pollution degree III/3	80 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 77 A		

CSA rating data

Institute (CSA)		Rated voltage (Use group B)	300 V
Rated current (use group B)	5 A	Wire cross-section, AWG, min.	AWG 28
Wire cross-section, AWG, max.	AWG 18		


Data sheet

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Technical data

UL 1059 rating data

Institute (UR)		Rated voltage (use group B)	300 V
Rated current (use group B)	10 A	Rated voltage (use group C)	50 V
Rated current (use group C)	10 A	Wire cross-section, AWG, min.	AWG 28
Wire cross-section, AWG, max.	AWG 16		

Classifications

UNSPSC	30-21-18-10	eClass 5.1	27-26-07-01
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02

Notes

- Notes
- Additional colours on request
 - Gold-plated contact surfaces on request
 - Rated current related to rated cross-section & min. No. of poles.
 - Wire end ferrule with plastic collar to DIN 46228/4
 - Wire end ferrule without plastic collar to DIN 46228/1
 - P on drawing = pitch
 - Crimp shape A for wire-end ferrules with crimping tools PZ 1,5 (order no. 9005990000) or PZ 6/5 (order no. 9011460000) for larger wire cross-sections recommended.
 - 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.

Approvals

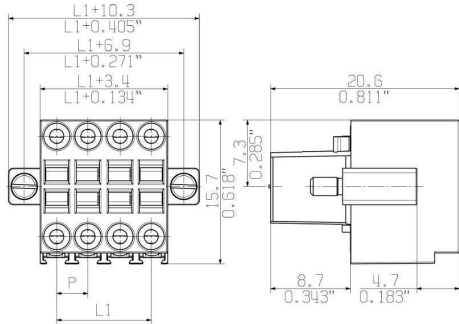
Approvals	
ROHS	Conform

Data sheet

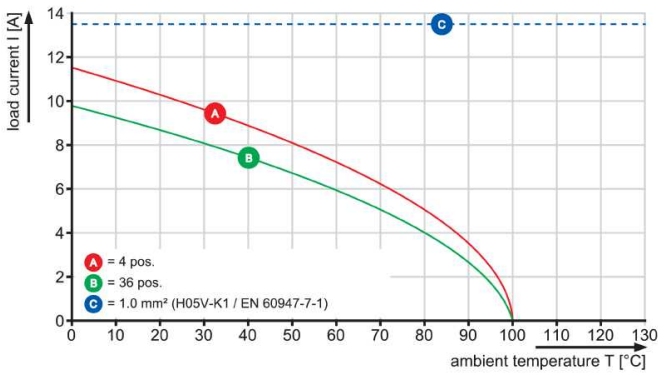
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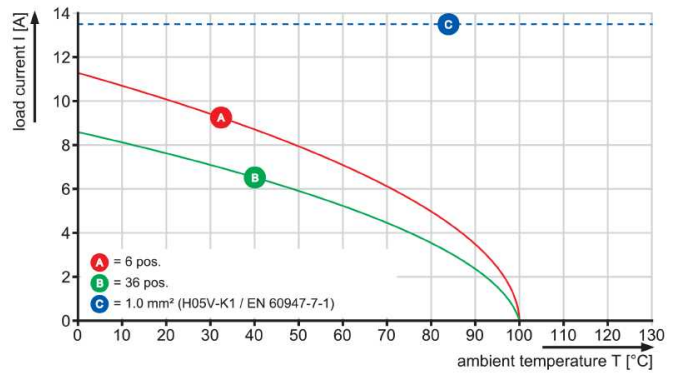
Drawings



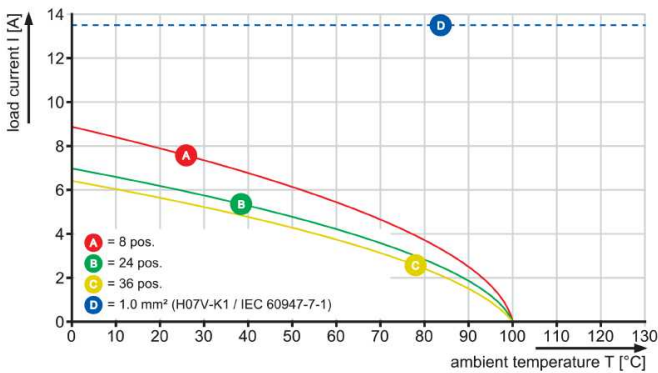
B2L 3.50/./180 - S2L-SMT 3.50/./90



B2L 3.50/./180 - S2L 3.50/./90



B2L 3.50/./180 - S2LD-THR 3.50/./90



**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
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Mating connector (conditionally pluggable)
S2L-SMT 3.50/90 BOX


High-temperature-resistant, straight, 2-tier pin header for all common soldering methods. Optimized for automatic assembly. Packed in box or tape. 3.2 mm solder pin suitable for reflow and wave soldering. These pin headers can be labelled and coded. (Packaging in tape on request)

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90 3.2SN BK BX	1794370000	PCB plug-in connector, male header, open side, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248231553	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

S2L-SMT 3.50/180G Tape


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.

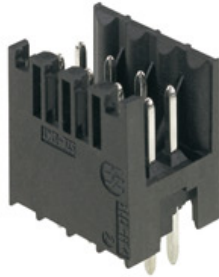
- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180G 3.5SN BK RL	1807780000	PCB plug-in connector, male header, closed side, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Tape	4032248279487	175 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Mating connector (conditionally pluggable)
S2L-SMT 3.50/180 Tape


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180 3.5SN BK RL	1802210000	PCB plug-in connector, male header, open side, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Tape	4032248255535	175 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

S2L 3.50/180G


Straight two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

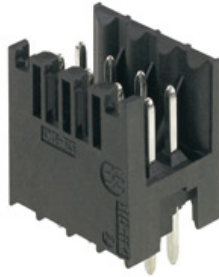
- 80 V (IEC) / 150 V (UL)
- 9 A (IEC) / 8 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L 3.50/06/180G 3.5SN BK BX	1728950000	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248040384	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box
S2L 3.50/06/180G 3.5SN OR BX	1728790000	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Orange, Box	4032248040254	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Mating connector (conditionally pluggable)
S2L-SMT 3.50/180 Box


High-temperature-resistant, straight, 2-tier male connector for all common soldering methods. Optimized for automatic assembly. Packed in box or tape. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers can be labelled and coded. (Packaging in tape on request)

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180 3.5SN BK BX	1794690000	PCB plug-in connector, male header, open side, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248231874	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

S2L 3.50/90G


Angled, two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

- 80 V (IEC) / 150 V (UL)
- 9 A (IEC / 8 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L 3.50/06/90G 3.5SN BK BX	1727990000	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248039487	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box
S2L 3.50/06/90G 3.5SN OR BX	1727830000	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Orange, Box	4032248045242	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Mating connector (conditionally pluggable)
S2L-SMT 3.50/90G Tape


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90G 3.2SN BK RL	1807470000	PCB plug-in connector, male header, closed side, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Tape	4032248278763	235 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

S2L-SMT 3.50/180G Box


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180G 3.5SN BK BX	1794530000	PCB plug-in connector, male header, closed side, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248231713	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/06/180F SN OR BX**

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Mating connector (conditionally pluggable)
S2L-SMT 3.50/90 Tape


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90 3.2SN BK RL	1802170000	PCB plug-in connector, male header, open side, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Tape	4032248255511	235 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

S2L-SMT 3.50/90G Box


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90G 3.2SN BK BX	1794210000	PCB plug-in connector, male header, closed side, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248231256	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
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Mating connector (fully pluggable)
S2L-SMT 3.50/180LF Tape


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180LF 3.5SN BK RL	1807870000	PCB plug-in connector, male header, Solder flange, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Tape	4032248279579	175 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

S2L-SMT 3.50/180LF Box


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/180LF 3.5SN BK BX	1795200000	PCB plug-in connector, male header, Solder flange, Reflow solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248232710	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
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Mating connector (fully pluggable)
S2L-SMT 3.50/90LF Tape


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90LF 3.2SN BK RL	1807560000	PCB plug-in connector, male header, Solder flange, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Tape	4032248278855	235 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Tape

S2L 3.50/90F


Angled, two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

- 80 V (IEC) / 150 V (UL)
- 9 A (IEC / 8 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L 3.50/06/90F 3.5SN OR BX	1728470000	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Orange, Box	4032248039968	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box
S2L 3.50/06/90F 3.5SN BK BX	1728630000	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248040094	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box

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Mating connector (fully pluggable)
S2L-SMT 3.50/90LF Box


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.

- 50 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L-SMT 3.50/06/90LF 3.2SN BK BX	1794860000	PCB plug-in connector, male header, Solder flange, Reflow solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248232314	50 pc(s).	IEC: 160 V / 10 A UL: 150 V / 10 A	Box

S2L 3.50/180F


Straight two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

- 80 V (IEC) / 150 V (UL)
- 9 A (IEC) / 8 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
S2L 3.50/06/180F 3.5SN OR BX	1729430000	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Orange, Box	4032248040865	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box
S2L 3.50/06/180F 3.5SN BK BX	1729590000	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 6, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box	4032248040995	50 pc(s).	IEC: 250 V / 10 A UL: 150 V / 10 A	Box

