

SL 5.00/07/90 3.2SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, male header, open side, THT solder connection, 5.00 mm, Number of poles: 7, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1410510000
Type	SL 5.00/07/90 3.2SN BK BX
GTIN (EAN)	4050118211764
Qty.	50 pc(s).
Product data	IEC: 400 V / 18 A UL: 300 V / 15 A
Packaging	Box

Creation date June 13, 2024 10:40:06 PM CEST

Catalogue status 01.06.2024 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	12 mm	Depth (inches)	0.472 inch
Height	11.6 mm	Height (inches)	0.457 inch
Height of lowest version	8.4 mm	Width	35 mm
Width (inches)	1.378 inch	Net weight	2.242 g

System specifications

Product family	OMNIMATE Signal - series BL/SL 5.00	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 "	Outgoing elbow	90°
Number of poles	7	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	+0.1 / -0.2 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder pin dimensions = d tolerance	0 / -0.03 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	30 mm	L1 in inches	1.181 "
Number of rows	1	Pin series quantity	1
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
Protection degree	IP20	Volume resistance	≤5 mΩ
Can be coded	Yes	Plugging force/pole, max.	10 N
Pulling force/pole, max.	8 N		

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	1...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 2...4 µm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °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)	18 A
Rated current, max. number of poles (Tu=20°C)	14.5 A	Rated current, min. number of poles (Tu=40°C)	15 A
Rated current, max. number of poles (Tu=40°C)	12 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1 s with 120 A

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Technical data

Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA) 300 V

Rated voltage (Use group D / CSA) 300 V

Rated current (Use group B / CSA) 15 A

Rated current (Use group D / CSA) 10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

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) 15 A

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

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Box	VPE length	165 mm
VPE width	115 mm	VPE height	30 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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

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

Approvals

Approvals



ROHS Conform

UL File Number Search UL Website

Certificate No. (UR) E60693

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Technical data

Downloads

Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN FL DRIVES DE

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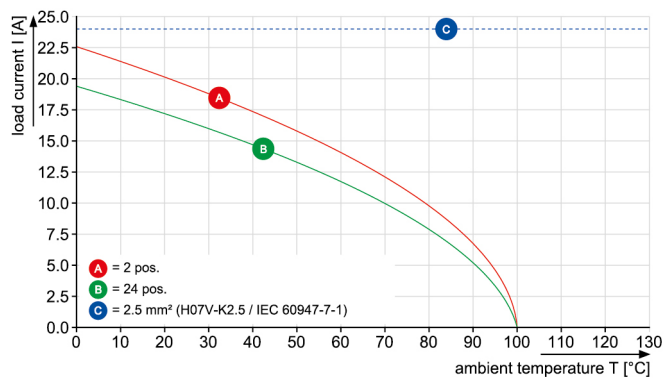
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Drawings
Product image

Dimensional drawing

Graph

BLF 5.00HC/./180 - SL 5.00/./90


Graph

BLF 5.00HC/./180 - SL 5.00/./90



Recommended wave soldering 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.

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