

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image





Similar to illustration

- Male header for wave soldering in 2.50 mm pitch.
- Plugging direction is parallel (90°) to the PCB
- Housing variant: Closed (G)
- Packaged in a cardboard box (BX)

General ordering data

connector, male header, THT solder Pitch in mm (P): 2.50 mm, Number of ^{9°} , Box 0
0
<u>v</u>
90G 3.2SN BK BX
5007
6 A
5 A



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Technical data

Dimensions and weights

Depth	10.1 mm	Depth (inches)	0.398 inch
Height	11.3 mm	Height (inches)	0.445 inch
Height of lowest version	8.1 mm	Width	26.9 mm
Width (inches)	1.059 inch	Net weight	2.78 g

System specifications

Product family OMNIMATE Signal - series BL/SL 2.50		es Type of connection Board connectio					
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	2.5 mm				
Pitch in inches (P)	0.098 inch	Outgoing elbow	90°				
Number of poles	10	Number of solder pins per pole	1				
Solder pin length (I)	3.2 mm	Solder pin length tolerance	+0.1 / -0.1 mm				
Solder pin dimensions	0.8 x 0.8 mm	Solder pin dimensions = d tolerance	+0,02 / -0,02 mm				
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance ([D)+ 0,1 mm				
L1 in mm	22.5 mm	L1 in inches	8.856 inch				
Number of rows	1	Pin series quantity	1				
Touch-safe protection acc. to DIN VDE 57 106	finger-safe plugged/ back- of-hand-safe unplugged	Touch-safe protection acc. to DIN VDE 0470	IP 00				

Material data

Insulating material	PA 66	Colour	black
Colour chart (similar)	RAL 9011	Comparative Tracking Index (CTI)	≥ 600
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Tinning type	matt
Layer structure of solder connection	13 µm Ni / 46 µm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-40 °C
Operating temperature, max.	105 °C		

Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles				
	IEC 61984	(Tu=20°C)	6 A			
Rated current, min. number of poles (Tu=40°C)	6 A	Rated voltage for surge voltage class / pollution degree II/2	320 V			
Rated voltage for surge voltage class / pollution degree III/2	320 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					

Rated data acc. to CSA

Rated voltage (Use group B / CSA)

150 V

Rated current (Use group B / CSA)

5 A

Packing

Packaging	Box	VPE length	260 mm
VPE width	166 mm	VPE height	53 mm



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Technical data

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	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

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	Rated current related to rated cross-section & min. No. of poles.
	• P on drawing = pitch

• 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.

• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals

	C US
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

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Downloads

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN
	MB DEVICE MANUF. EN
	FL DRIVES DE
	FL BUILDING SAFETY EN
	FL APPL LED LIGHTING EN
	FL INDUSTR.CONTROLS EN
	FL MACHINE SAFETY EN
	FL HEATING ELECTR EN
	FL APPL INVERTER EN
	FL BASE STATION EN
	FL ELEVATOR EN
	FL POWER SUPPLY EN
	FL 72H SAMPLE SER EN
	PO OMNIMATE EN



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Dimensional drawing



Drawings



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Drawings

Product benefits



Operating safety Through PUSH IN connection system

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH THE GERMAN VERSION IS BINDING











SHOWN: SL 2 50/04/90 3 2SN

n = POLZAHL/NO OF POLS

2.50mm RASTER

1.0, OKTAGONAL 0.039"

0,098" PITCH

Ø1.3 +0.1 0.051"

L1 = (n-1)xP

P =

D =

d =



1,256

1,157

1.059

0,961

0.862

0.764

0.665

0,567

0,469

0.370

0,272

12

11

10

9

8

7

6

5

4

3

2



1:1

31,90

29,40

26,90

24,40

21,90

19,40

16,90

14,40

11,90

9.40

6,90

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and С

occuring of electrical, mechanical, thermic a corrosive stress will be satisfied.				$l = \frac{3.2}{0.126}$)")			2 n	6,90 L [mm]	0,272 L [inch]
GENERAL TOLERANCE:								CAT.	NO.: .	
DIN ISO 2768-mH	86511/0	NN A 00			_		4	ſ	6332	8 00
ROHS MAX. NRN./NOS.	02.03.16 AMAI	<u> </u>	We	idmül	er		DRAWING		5552	ISSUE NO.
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Recommended wave solderding profiles



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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.