

### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

### **Product image**





Similar to illustration

Dimensionally stable, straight, codable male connector from the Unimate range of plugs with integral aid to prevent wrong connections. Available with open or closed sides. Fixing blocks can be attached to the closed version. The solder pin length of 3.2 mm has been optimised for wave soldering. Supplied in cardboard box.

#### **General ordering data**

Box
UL: 300 V / 10 A
IEC: 400 V / 17.5 A
50 pc(s).
4008190016913
SLA 06/180B 3.2SN OR BX
<u>1242960000</u>
PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 6, 180°, Solder pin length (I): 3.2 mm, tinned, orange, Box

Creation date May 22, 2021 3:24:36 PM CEST



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## **Technical data**

Dimensions	and weights	
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Depth	9.4 mm	Depth (inches)	0.37 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Net weight	2.5 g
Width	32.48 mm	Width (inches)	1.279 inch

### **System specifications**

Product family	OMNIMATE Signal - series	Type of connection		
	BLA/SLA 5.08		Board connection	
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm	
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°	
Number of poles	6	Number of solder pins per pole	1	
Solder pin length (I)	3.2 mm	Solder pin dimensions	d = 1.2 mm, Octagonal	
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)+ 0,1 mm		
L1 in mm	25.4 mm	L1 in inches	1 inch	
Number of rows	1	Pin series quantity	1	
Touch-safe protection acc. to DIN VDE	Safe from back-of-hand	Volume resistance		
57 106	touch		5.50 mΩ	
Can be coded	Yes	Pulling force/pole, max.	2 N	

### **Material data**

Insulating material	PBT GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	CuSn	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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	12.5 A	Rated current, min. number of poles (Tu=40°C)	16 A
Rated current, max. number of poles (Tu=40°C)	11 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 1s with 100 A

### Rated data acc. to CSA

Institute (CSA)



Rated voltage (Use group B / CSA)	300 V
Rated current (Use group B / CSA)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

12400-158
300 V
10 A

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## **Technical data**



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nstitute (UR)		Certificate No. (UR)			
			E60693		
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)			
Rated current (Use group B / UL 1059)		Rated current (Use group D / UL 1059)			
eference to approval values Specifications are maximum values, details - see approval certificate.		nated current (Use group D / OL 1059) TO A			
Packing					
Packaging	Вох	VPE length	153 mm		
VPE width	61 mm	VPE height	58 mm		
Classifications					
	5000007		50000007		
ETIM 6.0	EC002637	ETIM 7.0	EC002637		
ECLASS 9.0 ECLASS 10.0	27-44-04-02 27-44-04-02	ECLASS 9.1 ECLASS 11.0	27-44-04-02 27-46-02-01		
Important note	27-44-04-02	ECLASS TI.0	27-46-02-01		
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 propertie in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.				
Notes	Additional colours on request	-	·		
	Gold-plated contact surfaces on request				
	Rated current related to rated cross-section & min. No. of poles.				
	• P on drawing = pitch				
	<ul> <li>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.</li> </ul>				
	Long term storage of the proc	duct with average temperature of 50 °C and ave	rage humidity 70%, 36 mon		
Approvals					
Approvals	•	<b>T1</b> > *			
ROHS	Conform				
UL File Number Search	E60693				
Downloads					
Downloads					
Approval/Certificate/Document of Conformity	Declaration of the Manufact	urer			
Approval/Certificate/Document of	Declaration of the Manufact STEP Catalogues in PDF-format	<u>urer</u>			

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Catalogue status 07.05.2021 / We reserve the right to make technical changes.

## Drawings



### Weidmüller Interface GmbH & Co. KG

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### **Dimensional drawing**

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L1+0 L1+5	.03 +0.05 -0.3 0.277 " 5.03 +0.05 -0.2 0,198 "			. 4 ±0.2 37″ ▲	0°47''		
L1 − − − − − − − − − − − − −						24         116,84           23         111,76           22         106,68           21         101,60           20         96,52           19         91,44           18         86,36           17         81,28           16         76,20           15         71,12           14         66,04           13         60,96           12         55,88	4,600 4,400 4,200 3,800 3,600 3,400 3,200 3,200 2,800 2,600 2,400 2,200
rated da alone. The nect observer accorda The curr be deter Weidmü standarc Providec purpose occuring	nounting of PCBs, it shout ta relates only to the PCB d in connection with the r nce to IEC 664 / VDE 011 ent-carrying capacity and mined according to DIN I ller PCB components are d, and are valid for its field that the components are g of electrical, mechanical e stress will be satisfied.	components earance paths n espective applie 0. I pitch tolerance EC 326 part 3 v tested to the D d of application. e used to the int spect to the	nust be icant in e is to very fine. DIN EN 61984	P = 5.08mm/0.2i d = max.1.2mm/ D = 1.3mm/0.51i 3,2 4,5 PINLÄNGE L PIN LENGTH L	0.047inch inch -0,3 0,1 -0,3 TOLERANZ	11         50,80           10         45,72           9         40,64           8         35,56           7         30,48           6         25,40           5         20,32           4         15,24           3         10,16           2         5,08	2,000 1,800 1,600 1,400 1,200 1,000 0,800 0,600 0,400 0,200 L1 [Inch]
General tolerance: DIN ISO 2768-mK	101264/4	0 We Name	eidm	üller 🗄	0	Cat.no.:. 27739	9 <b>13</b> Issue no.
Scale: 2:1 Supersedes: .	Drawn 17.09.200 Responsible Checked 27.02.201 Approved	9 HELIS_MA HERTEL_S 8 HELIS_MA LANG_T	Product fi	S T P I	<b>/180</b> . TIFTLEISTE IN HEADER		7123

### Wave Solder Profile

### **Recommended wave solderding profiles**

# Weidmüller 🟵

#### Weidmüller Interface GmbH & Co. KG

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**Double Wave:** 

Single 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.