

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

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High-temperature resistant, double level, laterally offset, male connector with flange or solder flange. 1.5 mm solder pin is suitable for reflow soldering. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded.

### General ordering data

Туре	SLDV-THR 5.08/32/180FLF 3.2SN BK BX
Order No.	<u>1866320000</u>
Version	PCB plug-in connector, male header, Flange / Solder flange, THT/THR solder connection, 5.08 mm, No. of poles: 32, 180°, Solder pin length (I): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4032248470440
Qty.	10 pc(s).
Product data	IEC: 400 V / 15 A UL: 300 V / 10 A
Packaging	Box



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# **Technical data**

## **Dimensions and weights**

Width	91.44 mm	Width (inches)	3.6 inch
Height	29.36 mm	Height (inches)	1.156 inch
Height of lowest version	26.16 mm	Depth	23.67 mm
Depth (inches)	0.932 inch	Net weight	26.067 g

## **System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
No. of poles	32	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.20 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.5 mm	Solder eyelet hole diameter tolerance (D)+ 0,1 mm	
L1 in mm	76.2 mm	L1 in inches	3 inch
Number of rows	2	Pin series quantity	2
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	IP20 plugged/ IP10 unplugged
Volume resistance	4.50 mΩ	Can be coded	Yes
Plugging cycles	25		

#### **Material data**

Insulating material	LCP GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
СТІ	≥ 175	Insulation resistance	≥ 10 <sup>8</sup> Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	CuSn	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.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, max.	100 °C
Temperature range, installation, max.	100 °C		

#### Rated data acc. to IEC

tested acc. to standard		Rated current, min. no. of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	15 A
Rated current, max. no. of poles (Tu=20°C)	10.5 A	Rated current, min. no. of poles (Tu=40°C)	13 A
Rated current, max. no. of poles (Tu=40°C)	9 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	1 x 1s with 120 A



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# **Technical data**

#### Rated data acc. to CSA

		omponent itself. Clearance and creepage rith the relevant application standards.	distances to other components are t
	• P on drawing = pitch		
	Spacing between rows: see h	nole layout	
Notes	Rated current related to rated	cross-section & min. No. of poles.	
Notes			
ECIASS 9. I	Z /-44-U4-UZ		
eClass 8.1 eClass 9.1	<u>27-44-04-02</u> 27-44-04-02	eClass 9.0	27-44-04-02
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
ETIM 5.0	EC002637	ETIM 6.0	EC002637
ETIM 3.0	EC001284	ETIM 4.0	EC002637
Classifications			
VPE width	95 mm	VPE height	175 mm
Packaging	Box	VPE length	50 mm
Packaging			
notoronce to approval values	maximum values, details - see approval certificate.		
Rated current (use group B) Reference to approval values	10 A Specifications are	Rated current (use group D)	10 A
Rated voltage (use group B)	300 V	Rated voltage (use group D)	300 V
	<i>8</i> 7		E60693
Institute (UR)	<b>—</b> 1.7	Certificate No. (UR)	
Rated data acc. to UL 1059			
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Rated voltage (Use group B)	300 V	Rated voltage (use group D)	300 V
	<b>⊕</b> .		200039-1121690
Institute (CSA)		Certificate No. (CSA)	

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.

IPC conformity



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# **Technical data**

Approv	als
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Approvals



ROHS Conform

#### **Downloads**

Declaration of the Manufacturer
FL DRIVES EN
MB DEVICE MANUF. EN
FL DRIVES DE
CAT 2 PORTFOLIOGUIDE EN
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
<u>PO OMNIMATE EN</u>
WSCAD
SLDV-THR.zip
STEP
Download Whitepaper



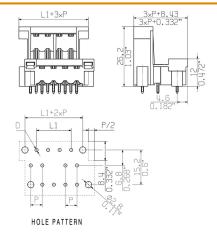
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# **Drawings**





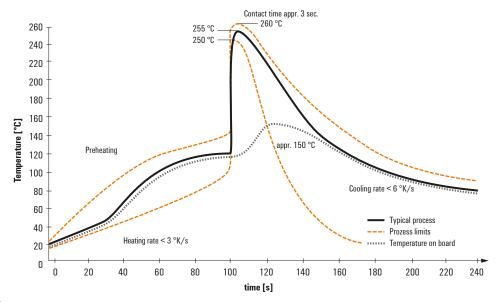
## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

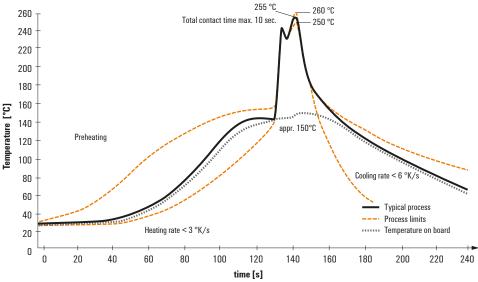
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### **Single Wave:**



#### **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.

We reserve the right to make technical changes.

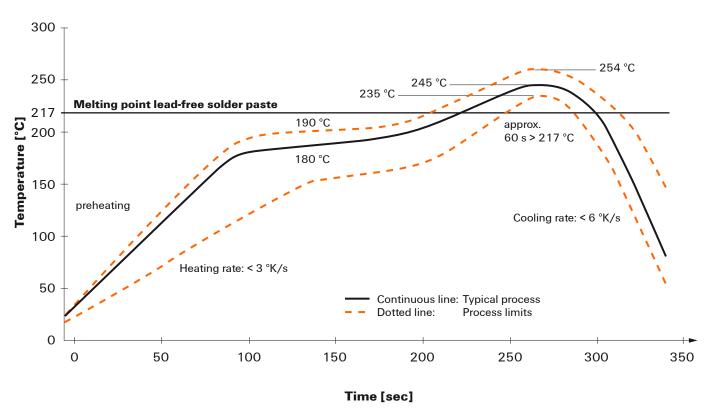


## Recommended reflow soldering profile

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## Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- · Time for pre heating
- Maximum temperature
- Time above melting point
- · Time for cooling
- · Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically  $\leq +3$ K/s. In parallel the solder paste is ,activated′. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at  $\geq$  -6K/s solder is cured. Board and components cool down while avoiding cold cracks.

We reserve the right to make technical changes.