

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **Product image**

















Similar to illustration

2-tier male header with parallel pin arrangement. 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, closed side, THT solder connection, 5.00 mm, Number of poles: 24, 90°, Solder pin length (I): 4.5 mm, tinned, black, Box
Order No.	<u>1653800000</u>
Туре	SLD 5.00/24/90G 4.5 SN BK BX
GTIN (EAN)	4008190405632
Qty.	10 pc(s).
Product data	IEC: 400 V / 11 A UL: 300 V / 10 A
Packaging	Box

Creation date October 11, 2022 7:30:08 PM CEST



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# **Technical data**

### **Dimensions and weights**

Depth	22 mm	Depth (inches)	0.866 inch
Height	32.55 mm	Height (inches)	1.281 inch
Height of lowest version	28.05 mm	Width	61.96 mm
Width (inches)	2.439 inch	Net weight	23.7 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 inch	Outgoing elbow	90°
Number of poles	24	Number of solder pins per pole	1
Solder pin length (I)	4.5 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	55 mm	L1 in inches	2.165 inch
Number of rows	2	Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch	Protection degree	IP20
Volume resistance	≤5 mΩ	Can be coded	Yes
Plugging force/pole, max.	3 N	Pulling force/pole, max.	3 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	CuSn	Contact surface	tinned
Layer structure of solder connection	13 μm Ni / 24 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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	11 A
Rated current, max. number of poles (Tu=20°C)	8.5 A	Rated current, min. number of poles (Tu=40°C)	9.5 A
Rated current, max. number of poles (Tu=40°C)	7 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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Institute (CSA)	(SP·	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)	10 A	Rated current (Use group D / CSA)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
Packaging	Box	VPE length	168 mm
/PE width	117 mm	VPE height	38 mm
Classifications			
TIM 6.0	EC002637	ETIM 7.0	EC002637
TIM 8.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1 ECLASS 11.0	27-44-04-02 27-46-02-01	ECLASS 10.0 ECLASS 12.0	27-44-04-02 27-46-02-01
mportant note	27-40-02-01	LCLA33 12.0	27-40-02-01
PC 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 propertin accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.		
Notes	Additional variants on reques	st	
	Rated current related to rated	cross-section & min. No. of poles.	
	Spacing between rows: see h	nole lavout	

- Spacing between rows: see hole layout
- 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



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	<u>FL DRIVES EN</u> FL DRIVES DE	



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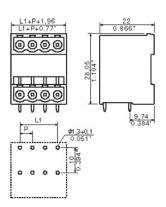
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# **Drawings**

### **Product image**



### **Dimensional drawing**





### 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.