

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Product image**



















Similar to illustration

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, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 4, 90°, Solder pin length (I): 4.5 mm, tinned, orange, Box
Order No.	<u>1515160000</u>
Туре	SL 5.08/04/90B 4.5SN OR BX
GTIN (EAN)	4008190181093
Qty.	100 pc(s).
Product data	IEC: 400 V / 18 A
	UL: 300 V / 15 A
Packaging	Box
Delivery status	This article will no longer be available in the future.
Available until	2023-07-30

Creation date February 25, 2025 12:32:56 PM CET



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# **Technical data**

## **Dimensions and weights**

Depth	12 mm	Depth (inches)	0.472 inch
Height	12.9 mm	Height (inches)	0.508 inch
Height of lowest version	8.4 mm	Width	22.32 mm
Width (inches)	0.879 inch	Net weight	1.461 g

## **System specifications**

Product family	OMNIMATE Signal - series	Type of connection	Daniel and a series
-	BL/SL 5.08		Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 "	Outgoing elbow	90°
Number of poles	4	Number of solder pins per pole	1
Solder pin length (I)	4.5 mm	Solder pin length tolerance	+0.1 / -0.3 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	15.24 mm	L1 in inches	0.6 "
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE	finger-safe unplugged/	Touch-safe protection acc. to DIN VDE	IP20 plugged/ IP10 un-
57 106	back-of-hand-safe plugged	0470	plugged
Protection degree	IP20	Volume resistance	4.50 mΩ
Can be coded	Yes		

### **Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact base material	CuSn	Contact material	Cu-alloy
Contact surface		Layer structure of solder connection	13 µm Ni / 24 µm Sı
	tinned		matt
Layer structure of plug contact	13 μm Ni / 24 μm Sn	Storage temperature, min.	
	matt		-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 1s with 120 A



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# **Technical data**

#### Rated data acc. to CSA

nstitute (CSA)	<b>€</b> P:	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 maxi- mum values, details - see approval certificate.		

	mum values, details - see approval certificate.		
Rated data acc. to UL 1059			
1 (117)		0 cc + N (UD)	
Institute (UR)	<i>71.</i>	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	169 mm
1 dokuging	117 mm	VPE height	38 mm

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
ECLASS 14.0	27-46-02-01		

#### **Environmental Product Compliance**

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%



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# **Technical data**

#### 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	Additional variants 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>
	<ul> <li>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</li> </ul>
	<ul> <li>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

# **Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

### **Downloads**

Catalogues	Catalogues in PDF-format	
Brochures	FL DRIVES EN FL DRIVES DE	



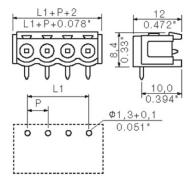
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# **Drawings**

# **Dimensional drawing**





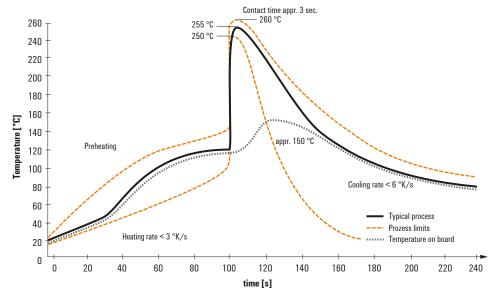
# Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

## 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.