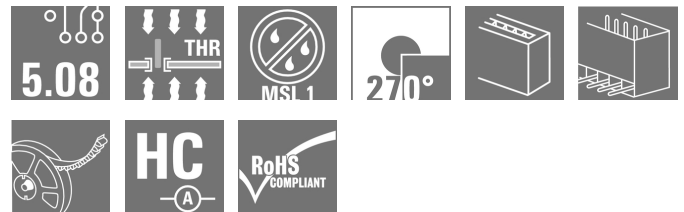


**OMNIMATE Signal - series BL/SL 5.08  
SL-SMT 5.08HC/08/270GH 1.5SN BK RL CO**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com



High-temperature-resistant, straight, open pin header.  
Packed in box or tape. On tape and with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

Type	SL-SMT 5.08HC/08/270GH 1.5SN BK RL CO
Order No.	<a href="#">1911300000</a>
Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, No. of poles: 8, 270°, Solder pin length (l): 1.5 mm, tinned, black, Tape
GTIN (EAN)	4032248539390
Qty.	285 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Tape

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### Technical data

#### Dimensions and weights

Width	43.84 mm	Width (inches)	1.726 inch
Height	12.5 mm	Height (inches)	0.492 inch
Height of lowest version	11 mm	Depth	12 mm
Depth (inches)	0.472 inch	Net weight	6.189 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	270°
No. of poles	8	Number of solder pins per pole	1
Solder pin length (l)	1.5 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
L1 in mm	35.56 mm	L1 in inches	1.4 inch
Number of rows	1	Pin series quantity	1
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	9 N	Pulling force/pole, max.	7 N

#### Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
CTI	≥ 175	Insulation strength	≥ 10 <sup>8</sup> Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
GWIT	930 °C	GWFI	960 °C
Contact material	CuMg	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, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

#### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	27.5 A
Rated current, max. no. of poles (Tu=20°C)	19 A	Rated current, min. no. of poles (Tu=40°C)	24 A
Rated current, max. no. of poles (Tu=40°C)	16.5 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		

#### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	18.5 A	Rated current (Use group D / CSA)	18.5 A

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**Technical data****Rated data acc. to UL 1059**

Institute (UR)



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) 18.5 A

Rated current (Use group D / UL 1059) 10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

**Packing**

Packaging	Tape	VPE length	55 mm
VPE width	60 mm	VPE height	150 mm
Tape depth (T2)	13.7 mm	Tape width (W)	72 mm
Tape pocket depth (K0)	13.2 mm	Tape pocket height (A0)	12.3 mm
Tape pocket width (B0)	44.2 mm	Tape pocket separation (P1)	16 mm
Tape hole separation (E)	1.75 mm	Tape pocket separation (F)	34.2 mm
Tape reel diameter $\varnothing$ (A)	330 mm	Surface resistance	$R_s = 10^9 - 10^{12} \Omega$

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02

**Notes**

Notes

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.

**Approvals**

Approvals



ROHS

Conform

**Downloads**

Brochure/Catalogue

[FL DRIVES EN](#)  
[FL DRIVES DE](#)

SMT white paper

[Download Whitepaper](#)

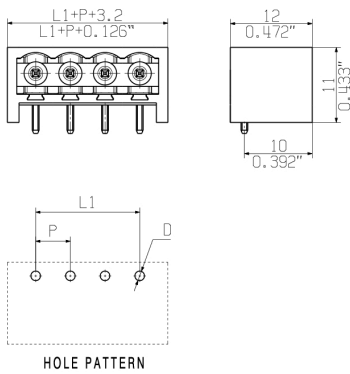
**Data sheet**

**OMNIMATE Signal - series BL/SL 5.08  
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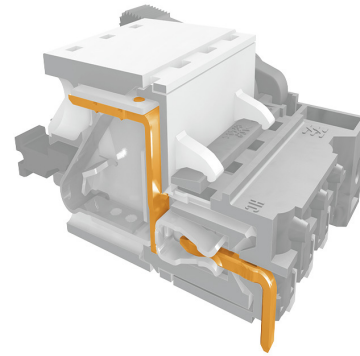
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**Drawings**

**Dimensional drawing**



**Product benefits**



Safe power transmission

**Product benefits** Proven properties

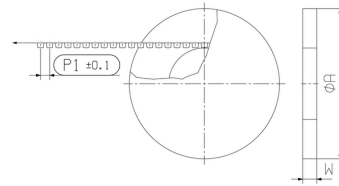


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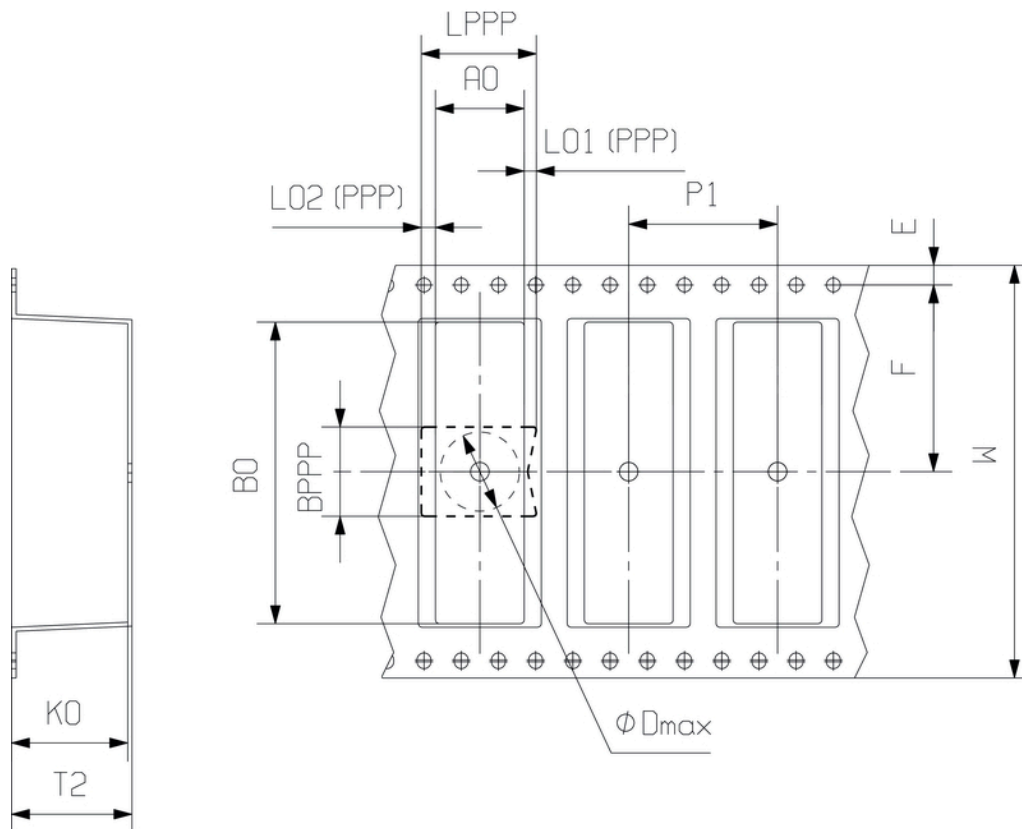
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**Drawings**

**Dimensional drawing**



**Dimensional drawing**



## Recommended wave soldering profiles

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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.

## 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  $\leq +3\text{K/s}$ . 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  $\geq -6\text{K/s}$  solder is cured. Board and components cool down while avoiding cold cracks.