

SLDV-THR 5.08/42/180FLF 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Product image



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

Version	PCB plug-in connector, male header, Flange / Solder flange, THT/THR solder connection, 5.08 mm, Number of poles: 42, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1889300000
Type	SLDV-THR 5.08/42/180FLF 3.2SN BK BX
GTIN (EAN)	4032248495641
Qty.	10 pc(s).
Product data	IEC: 400 V / 15 A UL: 300 V / 10 A
Packaging	Box

Creation date September 16, 2022 9:11:54 PM CEST

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Technical data

Dimensions and weights

Depth	23.67 mm	Depth (inches)	0.932 inch
Height	29.36 mm	Height (inches)	1.156 inch
Height of lowest version	26.16 mm	Width	116.84 mm
Width (inches)	4.6 inch	Net weight	29.055 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°
Number of poles	42	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	0 / -0.3 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	101.6 mm
L1 in inches	4 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	Protection degree	IP20
Volume resistance	≤5 mΩ	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	7.5 N

Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 175	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.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, max.	100 °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)	15 A
Rated current, max. number of poles (Tu=20°C)	10.5 A	Rated current, min. number of poles (Tu=40°C)	13 A
Rated current, max. number 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

Institute (CSA)



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	227 mm
VPE width	143 mm	VPE height	34 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	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

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

- Rated current related to rated cross-section & min. No. of poles.
- 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

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	WSCAD
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN
	MB DEVICE MANUF. EN
	FL DRIVES DE
	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
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White paper surface mount technology	PO OMNIMATE EN
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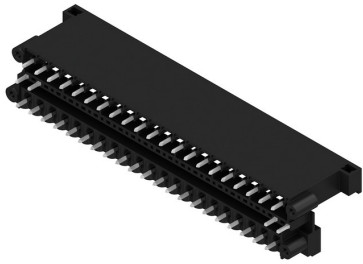
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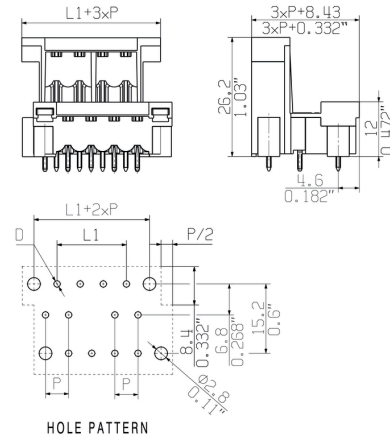
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Drawings

Product image



Dimensional drawing



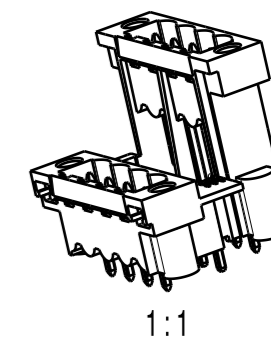
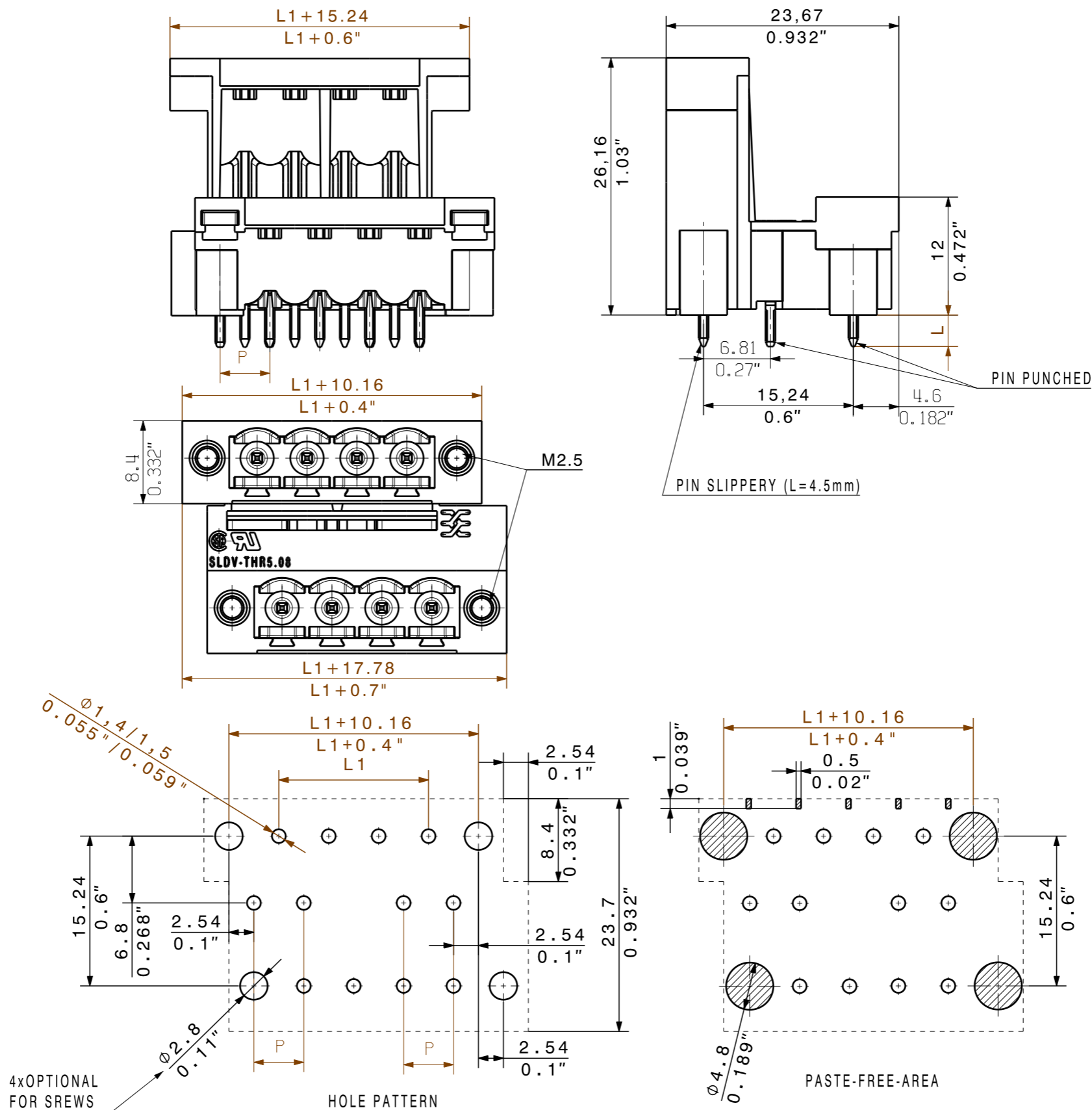
Product benefits



Safe power transmission
 Proven properties

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4xOPTIONAL FOR SCREWS

P=PITCH
SHOWN : SLDV-THR 5.08/08/180LF

STIFTLAENGE L	TOLERANZ	Pin Count	Pin Length [mm]	Pin Length [inch]
1,5	0,0	48	116,84	4,60
	-0,3	46	111,76	4,40
3,2	0,0	44	106,68	4,20
	-0,3	42	101,60	4,00
4,5	0,0	40	96,52	3,80
	-0,3	38	91,44	3,60
n	-0,3	36	86,36	3,40
		34	81,28	3,20
		32	76,20	3,00
		30	71,12	2,80
		28	66,04	2,60
		26	60,96	2,40
		24	55,88	2,20
		22	50,80	2,00
		20	45,72	1,80
		18	40,64	1,60
		16	35,56	1,40
		14	30,48	1,20
		12	25,40	1,00
		10	20,32	0,80
		8	15,24	0,60
		6	10,16	0,40
		4	5,08	0,20
		n	L1 [mm]	L1 [inch]

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance with VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

General tolerance:
DIN ISO 2768-mK



91693/5
04.01.17 HELIS_MA 01

Modification



Cat.no.:
3 34069 09
Drawing no. Issue no.
Sheet 03 of 03 sheets

	Date	Name
Drawn	22.11.2007	HELIS_MA
Responsible		HERTEL_S
Checked	10.01.2017	HELIS_MA
Approved		LANG_T

SLDV-THR 5.08/./180F
STIFTLAENGE
PIN HEADER

Scale: 2:1

Supersedes: .

Product file: SLDV THR 5.08

7307

Recommended wave soldering profiles

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 Germany
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 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.

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.