

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image



















Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 5.08 mm, Number of poles: 24, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1149190000</u>
Туре	SL 5.08HC/24/180F 3.2SN BK BX
GTIN (EAN)	4032248932665
Qty.	12 pc(s).
Product data	IEC: 400 V / 24 A
	UL: 300 V / 18.5 A
Packaging	Box

Creation date March 23, 2021 4:29:36 AM CET



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Technical data

Dimensions and weights

Depth	8.5 mm	Depth (inches)	0.335 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Net weight	10.4 g
Width	131.92 mm	Width (inches)	5.194 inch

System specifications

- / - to iii - op - o iii - ou - o ii					
Product family	OMNIMATE Signal - series BL	/SL 5.08			
Type of connection	Board connection				
Mounting onto the PCB	THT solder connection				
Pitch in mm (P)	5.08 mm				
Pitch in inches (P)	0.2 inch				
Outgoing elbow	180°				
Number of poles	24				
Number of solder pins per pole	1				
Solder pin length (I)	3.2 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	116.84 mm				
L1 in inches	4.6 inch				
Number of rows	1				
Pin series quantity	1				
Volume resistance	≤5 mΩ				
Can be coded	Yes				
Plugging force/pole, max.	10 N				
Pulling force/pole, max.	7.5 N				
Tightening torque	Torque type		Mounting screw, PCB		
	Usage information		Tightening torque	min.	0.15 Nm
				max.	0.2 Nm
			Recommended screw	Part	PTSC KA
				number	2.2X4.5
					<u>WN1412</u>

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	UL 94 flammability rating	V-0
Contact material	CuMg	Contact surface	tinned
Layer structure of solder connection	13 μm Ni / 24 μm Sn matt	Layer structure of plug contact	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 ℃	Temperature range, installation, max.	100 °C



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Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	24 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	19 A	(Tu=40°C)	21 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	16.5 A	pollution degree II/2	400 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	320 V	pollution degree III/3	250 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	4 kV	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

Rated data acc. to UL 1059

Institute (cURus)	
	C TABLE US

Certificate No. (cURus)

			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	Box	VPE length	32 mm
VPE width	135 mm	VPE height	193 mm
Classifications			
ETIM 6.0	EC002637	ETIM 7.0	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



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Imp	orta	nt r	note
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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 colours on request
	Gold-plated contact surfaces on request
	Rated current related to rated cross-section & min. No. of poles.
	• 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	c SN us III	
ROHS	Conform	
UL File Number Search	E60693	

Downloads

Approval/Certificate/Document of Conformity	CB Certificate CB Testreport Declaration of the Manufacturer
Engineering Data	<u>STEP</u>



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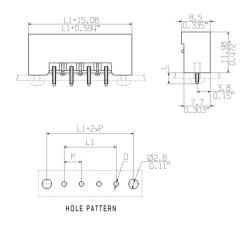
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Drawings

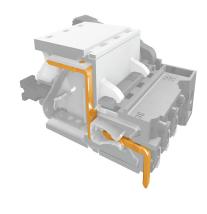
Product image



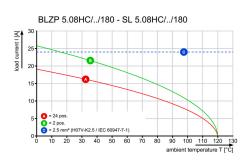
Dimensional drawing



Product benefits

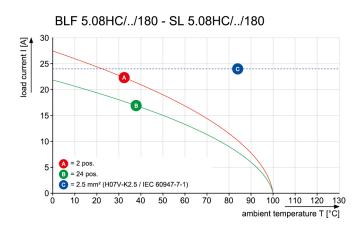


Graph

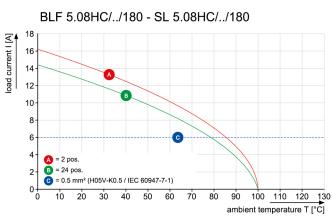


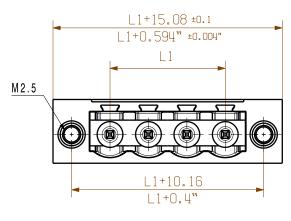
Safe power transmission Proven properties

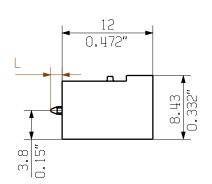
Graph

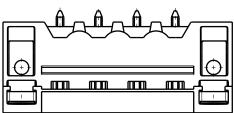


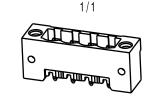
Graph











<u>L1+</u>10.16 L1+0.4" L1 Ρ PCB-Ø 1,4 TILL POLE 8 PCB-Ø 1,5 FROM POLE 9 HOLE PATTERN

116,84 4.600 23 111,76 4,400 22 106,68 4,200 101,60 4,000 20 96.52 3.800 19 91,44 3,600 18 86,36 3,400 17 81,28 3,200 16 76,20 3,000 15 71,12 2,800 14 66,04 2,600 13 60,96 2,400 12 55.88 2,200 50,80 2.000 10 45,72 1,800 9 40.64 1.600 8 35.56 1,400 30,48 1,200 6 25,40 1,000 5 20,32 0,800 15,24 0.600 3 10,16 0.400

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to IEC 60326 part 3 very fine.

Weidmueller 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

P = PITCH

SHOWN: SL 5.08HC/04/180F

General tolerance: DIN ISO 2768-mK

FTLAENGE L	TOLERANZ	0
	1	-5
N LENGTH L	TOLERANCE	٠
LEMOTHE	TOLLIVANCE	4
	0.1	-
3.2	0,1	0
٥,٢	-0.3	0
	-,-	0
A F	0,1	2
4,5	0.2	n
	-0,3	•

3		5	C
Drawing	no.	_	4
Sheet	0	4	J

0953 04

5,08

L1 [mm]

Cat.no.:.

Issue no 05 sheets

0,200

L1 [Inch]

ROMS	22.11.17 HE	cation	We	eidmüller 🕏
		Date	Name	
	Drawn	18.02.2011	HERTEL_S	SL 5.08
	Responsible		HERTEL_S	STI
Scale: 2:1	Checked	30.11.2017	HELIS_MA	MAL
Supersedes: .	Approved		LANG_T	Product file: SL5.08 HC

99587/5 22.11.17 HELIS MA

SL 5.08HC/../180.. STIFTLEISTE MALE HEADER

7377



Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

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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.