

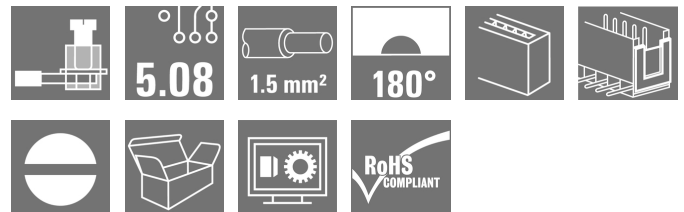
SLS 5.08/20/180B SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, male plug, 5.08 mm, Number of poles: 20, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box
Order No.	1645180000
Type	SLS 5.08/20/180B SN OR BX
GTIN (EAN)	4008190284398
Qty.	18 pc(s).
Product data	IEC: 400 V / 21.5 A / 0.2 - 2.5 mm² UL: 300 V / 14 A / AWG 26 - AWG 12
Packaging	Box

Creation date March 24, 2021 5:50:22 PM CET

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Technical data

Dimensions and weights

Depth	22.3 mm	Depth (inches)	0.878 inch
Height	15.2 mm	Height (inches)	0.598 inch
Net weight	31.9 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08		
Type of connection	Field connection		
Wire connection method	Clamping yoke connection		
Pitch in mm (P)	5.08 mm		
Pitch in inches (P)	0.2 inch		
Conductor outlet direction	180°		
Number of poles	20		
L1 in mm	96.52 mm		
L1 in inches	3.8 inch		
Number of rows	1		
Pin series quantity	1		
Touch-safe protection acc. to DIN VDE 57 106	finger-safe plugged/ back-of-hand-safe unplugged		
Volume resistance	≤5 mΩ		
Can be coded	Yes		
Stripping length	7 mm		
Clamping screw	M 2.5		
Screwdriver blade	0.6 x 3.5		
Screwdriver blade standard	DIN 5264-A		
Plugging cycles	25		
Plugging force/pole, max.	4 N		
Pulling force/pole, max.	3 N		
Tightening torque	Torque type	Wire connection	
	Usage information	Tightening torque	min. 0.4 Nm max. 0.5 Nm

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	CuSn
Contact surface	tinned	Layer structure of plug contact	4...8 μm Sn hot-dip tinned
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

Conductors suitable for connection

Clamping range, min.	0.13 mm ²
Clamping range, max.	3.31 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	2.5 mm ²

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Technical data

w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm²
min.

w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm²
max.

w. wire end ferrule, DIN 46228 pt 1, 0.2 mm²
min.

w. wire end ferrule, DIN 46228 pt 1, 2.5 mm²
max.

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.0 mm; 2.4 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
	wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.5/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H1.0/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
	wire end ferrule	Stripping length	nominal	7 mm
		Recommended wire-end ferrule	H1.5/7	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²	
	wire end ferrule	Stripping length	nominal	7 mm
		Recommended wire-end ferrule	H2.5/7	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.75/6	

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	21.5 A
Rated current, max. number of poles (Tu=20°C)	16 A	Rated current, min. number of poles (Tu=40°C)	18 A
Rated current, max. number of poles (Tu=40°C)	14 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

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	300 V
Rated current (Use group B / CSA)	15 A
Wire cross-section, AWG, min.	AWG 26
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / CSA)	300 V
Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, max.	AWG 12

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (Use group B / UL 1059)	300 V
Rated current (Use group B / UL 1059)	14 A
Wire cross-section, AWG, min.	AWG 26
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, max.	AWG 12

Packing

Packaging	Box	VPE length	25 mm
VPE width	135 mm	VPE height	350 mm

Type tests

Test: Durability of markings	Standard	VDE 0627 Tab. 7 item 3/6.86	
	Test	durability	
	Evaluation	passed	
Test: Clampable cross section	Standard	VDE 0609 part 1 06.83, EN 60947-1 03.91	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
		Type of conductor and conductor cross-section	H05V-U2.5
		Type of conductor and conductor cross-section	H05V-K2.5
		Type of conductor and conductor cross-section	AWG 28
		Type of conductor and conductor cross-section	AWG 14
	Evaluation	passed	

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Technical data

Test for damage to and accidental loosening of conductors	Standard	EN 60947-1/1991 section 8.2.4.3	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
		Type of conductor and conductor cross-section	H07V-K2.5
	Evaluation	passed	
Pull-out test	Standard	EN 60947-1/1991 section 8.2.4.4	
	Requirement	≥5 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/7
	Evaluation	passed	
	Requirement	≥50 N	
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
		Type of conductor and conductor cross-section	H07V-K2.5
		Type of conductor and conductor cross-section	AWG 14/19
	Evaluation	passed	

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ECLASS 9.0	27-44-03-09	ECLASS 9.1	27-44-03-09
ECLASS 10.0	27-44-03-09	ECLASS 11.0	27-46-02-02

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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 colours on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • 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	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	WSCAD

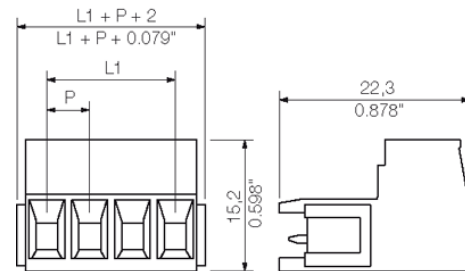
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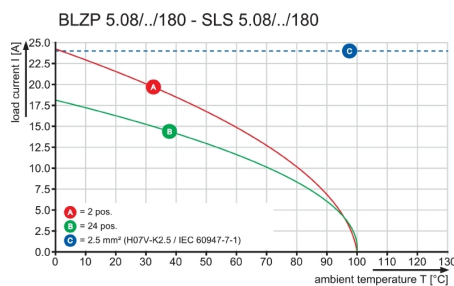
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Drawings

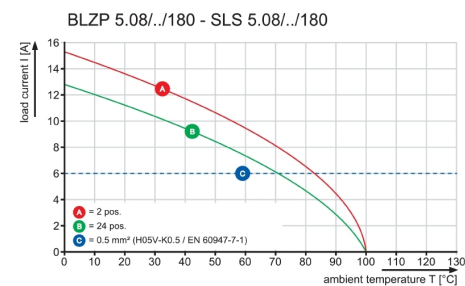
Dimensional drawing



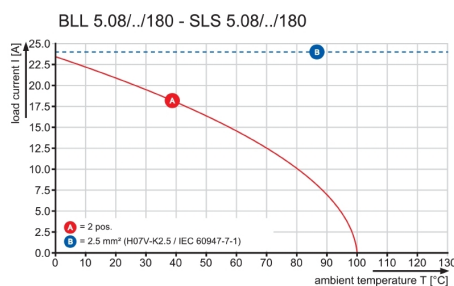
Graph



Graph



Graph



Product benefits



Lower assembly costs
Secure in a matter of seconds

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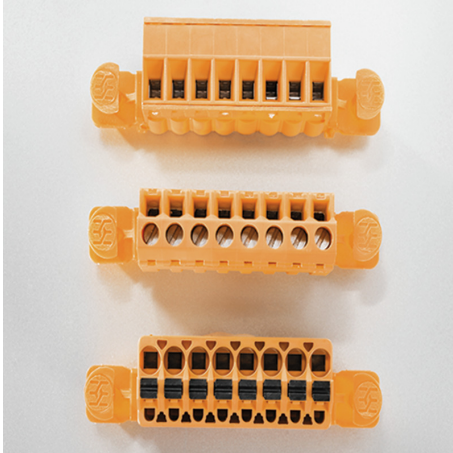
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Drawings

Product benefits



Flexible application options
For 3 connection systems

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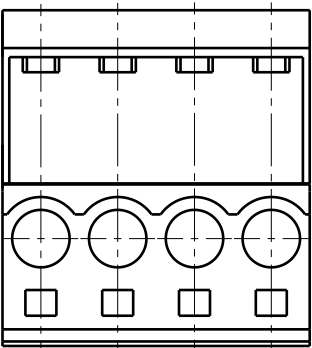
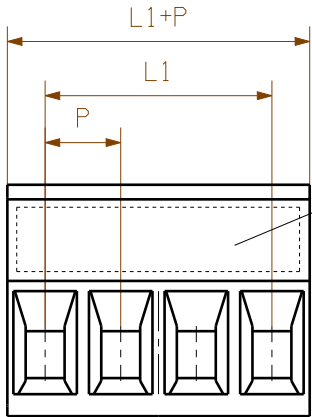
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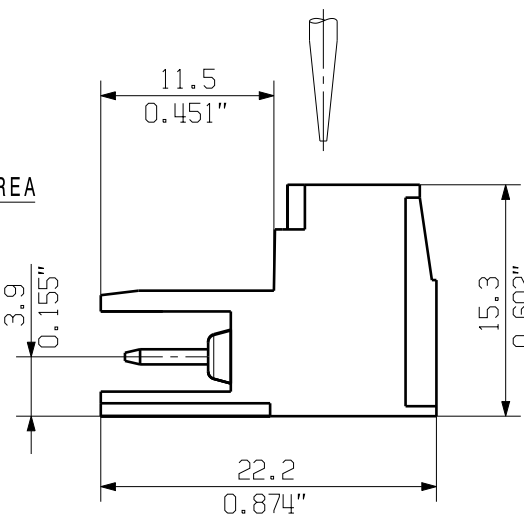
ALLGEMEINGUELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

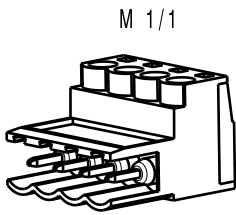
SHOWN: SLS 5.08/04/180



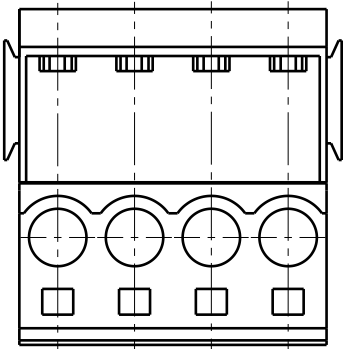
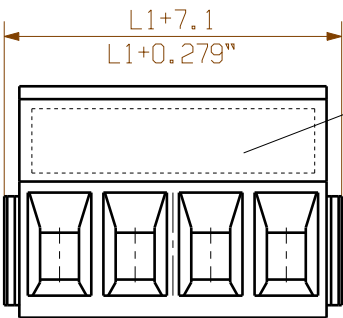
SCREWDRIVER



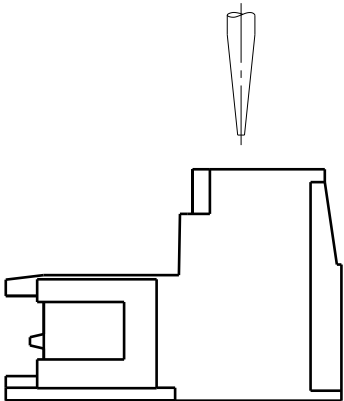
CONDUCTOR



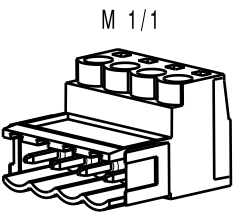
SHOWN: SLS 5.08/04/180B



SCREWDRIVER



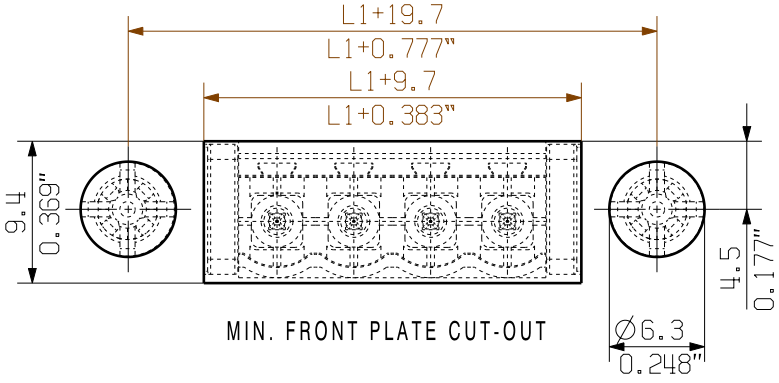
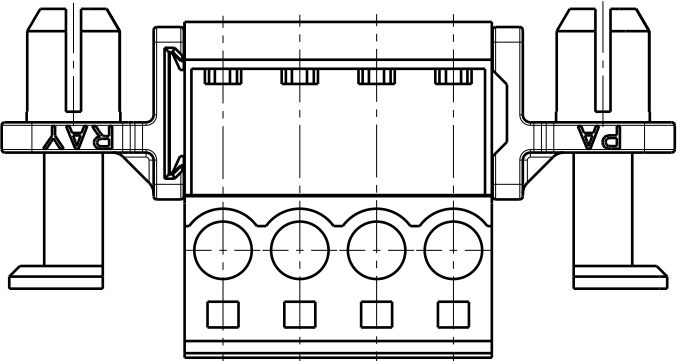
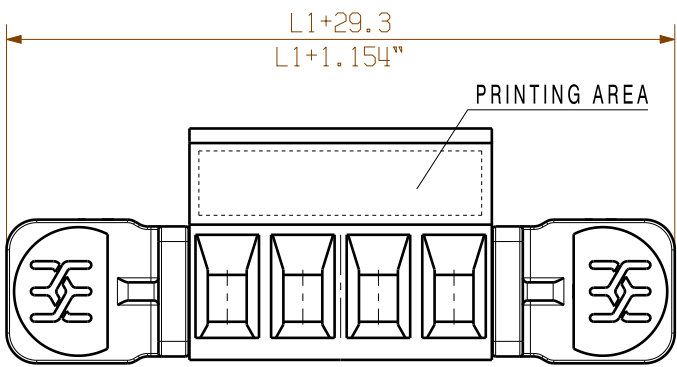
CONDUCTOR



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

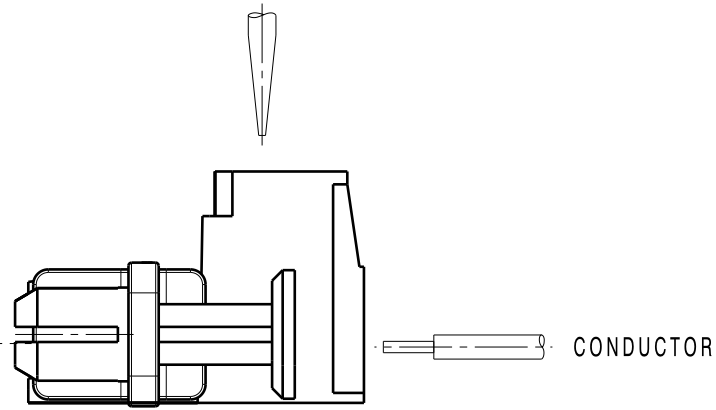
Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: SLS 5.08/04/180DF



0.5-0.8	0.019-0.031	6.3	0.248
1.00	0.039	6.4	0.252
1.5	0.059	6.5	0.256
2.00	0.079	6.7	0.264
WANDDICKE WALL THICKNESS [mm]	WANDDICKE WALL THICKNESS [inch]	d [mm]	d [inch]

SCREWDRIVER



P=5.08 RASTER PITCH

24	106.84	4.600
23	111.76	4.400
22	106.68	4.200
21	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
11	50.80	2.000
10	45.72	1.800
9	40.64	1.600
8	35.56	1.400
7	30.48	1.200
6	25.40	1.000
5	20.32	0.800
4	15.24	0.600
3	10.16	0.400
2	5.08	0.200
n POLZAHL POLES	L1 [mm]	L1 [inch]

METRIC TOLERANCES
X. = ±0.3
X.X = ±0.1
X.XX = ±0.05

70327/5
22.05.13 HELIS_MA

01

MODIFICATION

DRAWN

27.08.2003

RESPONSIBLE

CHECKED

27.05.2013

APPROVED

DATE

NAME

HECKERT_M

HECKERT_M

SCALE: 2/1

SUPERSEDES: .

CAT.NO.: .

Weidmüller

C 21277

DRAWING NO. SHEET 01 OF 01 SHEETS

ISSUE NO. 18

SLS 5.08/./180...

STIFTSTECKER
MALE PLUG

PRODUCT FILE: SLS 5.08

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