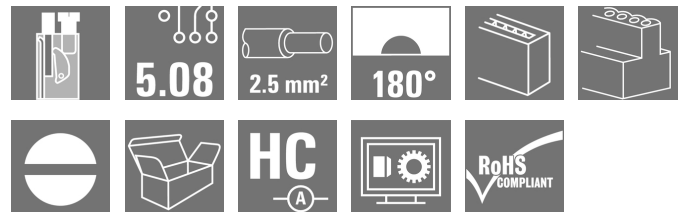


OMNIMATE Signal - series BL/SL 5.08 BLT 5.08HC/20/180 SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

Female plugs with TOP screw connection system for connecting wires with straight 180° outlet direction. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	BLT 5.08HC/20/180 SN OR BX
Order No.	1501360000
Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 20, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box
GTIN (EAN)	4008190113117
Qty.	18 pc(s).
Product data	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14
Packaging	Box

Creation date April 12, 2020 9:50:29 PM CEST

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Technical data**Dimensions and weights**

Width	101.6 mm	Width (inches)	4 inch
Height	12.2 mm	Height (inches)	0.48 inch
Depth	31.8 mm	Depth (inches)	1.252 inch
Net weight	60.889 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	TOP 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	Rated cross-section	2.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Volume resistance	≤ 5mΩ
Can be coded	Yes	Stripping length	13 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping screw	M 2.5	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	8 N	Pulling force/pole, max.	7 N

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	GWFI	960 °C
Contact material	CuSn	Contact surface	tinned
Layer structure of plug contact	4-8 μm Sn hot-dip tinned	Storage temperature, min.	-25 °C
Storage temperature, max.	50 °C	Max. relative humidity during storage	70 %
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.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14
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	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm ; 2.4 mm

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	0.5 mm ²
		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H0.5/18 OR
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	1 mm ²
		Stripping length	nominal 15 mm
		Recommended wire-end ferrule	H1.0/18 GE
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	1.5 mm ²
		Stripping length	nominal 15 mm
		Recommended wire-end ferrule	H1.5/18D SW
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H1.5/12
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.		
Max. clamping range	2.5 mm ²		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	27 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	24 A
Rated current, max. number of poles (Tu=40°C)	16 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 100 A

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)	15 A	Rated current (Use group D / CSA)	15 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Data sheet

**OMNIMATE Signal - series BL/SL 5.08
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Technical data

Rated data acc. to UL 1059

Institute (cURus)



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)	17 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	35 mm
VPE width	135 mm	VPE height	350 mm

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	UNSPSC	30-21-18-10

Notes

Notes

- Additional colours on request
- Gold-plated contact surfaces 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
- Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.
- 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.

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

Data sheet

OMNIMATE Signal - series BL/SL 5.08 BLT 5.08HC/20/180 SN OR BX

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Technical data

Downloads

Approval/Certificate/Document of Conformity	CB Certificate CB Testreport Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.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 FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	WSCAD
Engineering Data	STEP

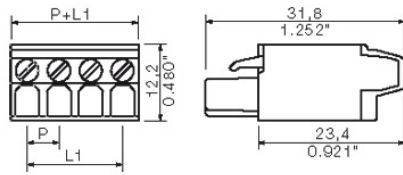
Data sheet

**OMNIMATE Signal - series BL/SL 5.08
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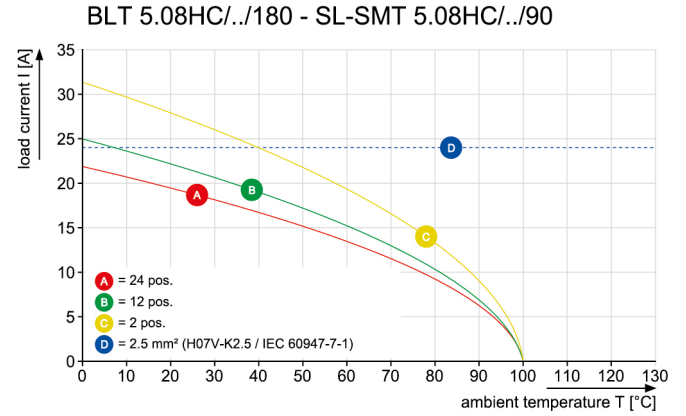
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Drawings

Dimensional drawing



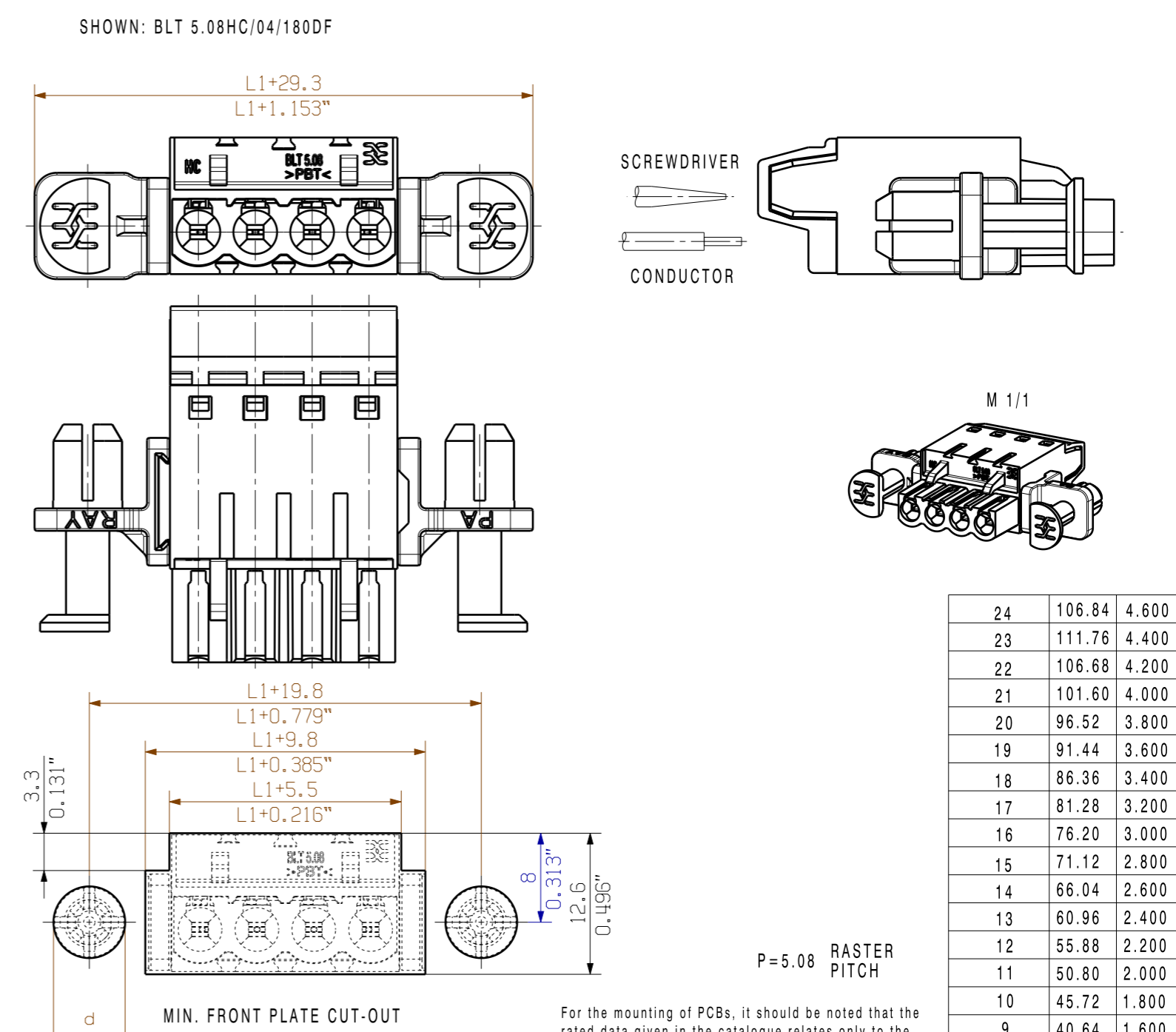
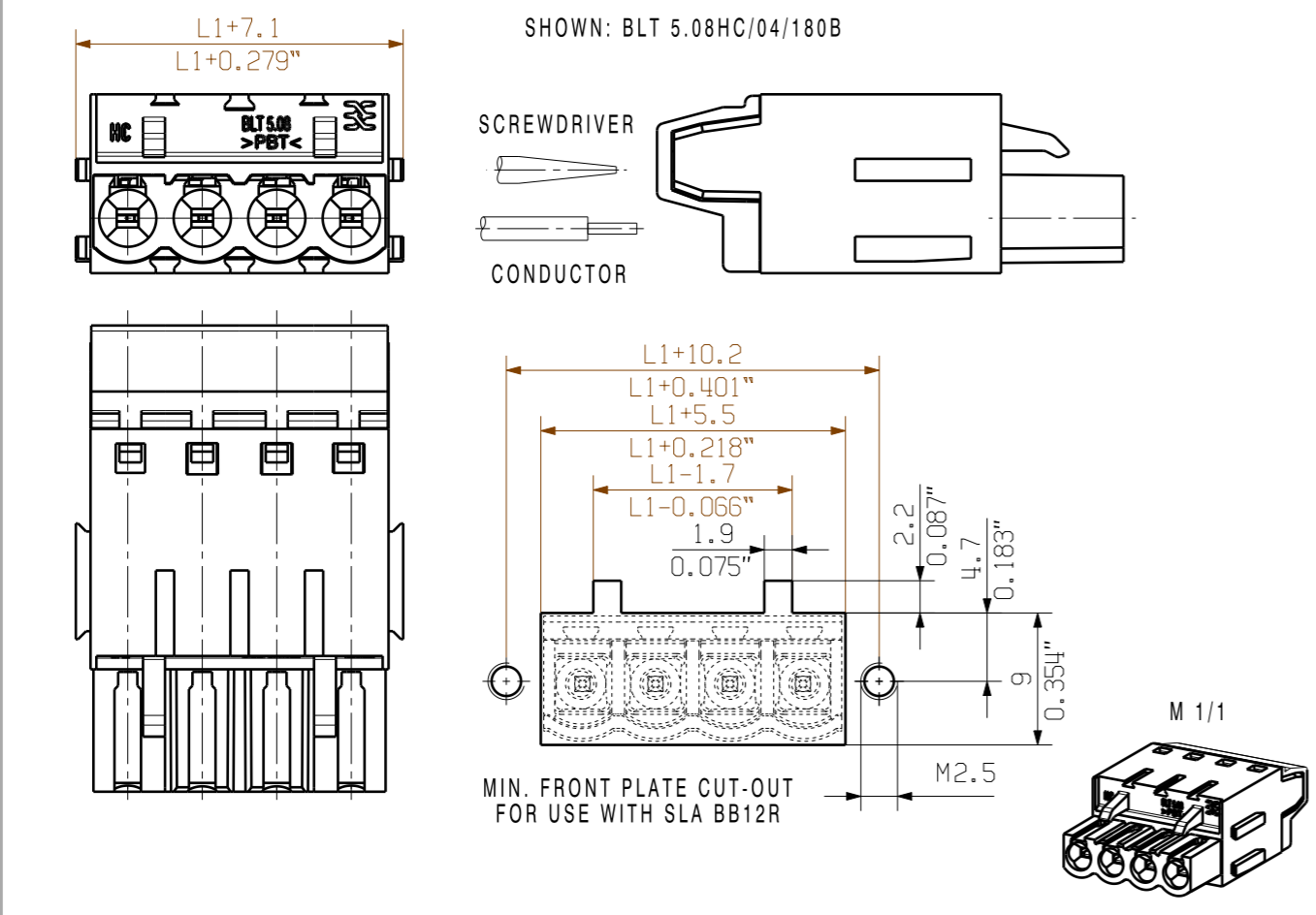
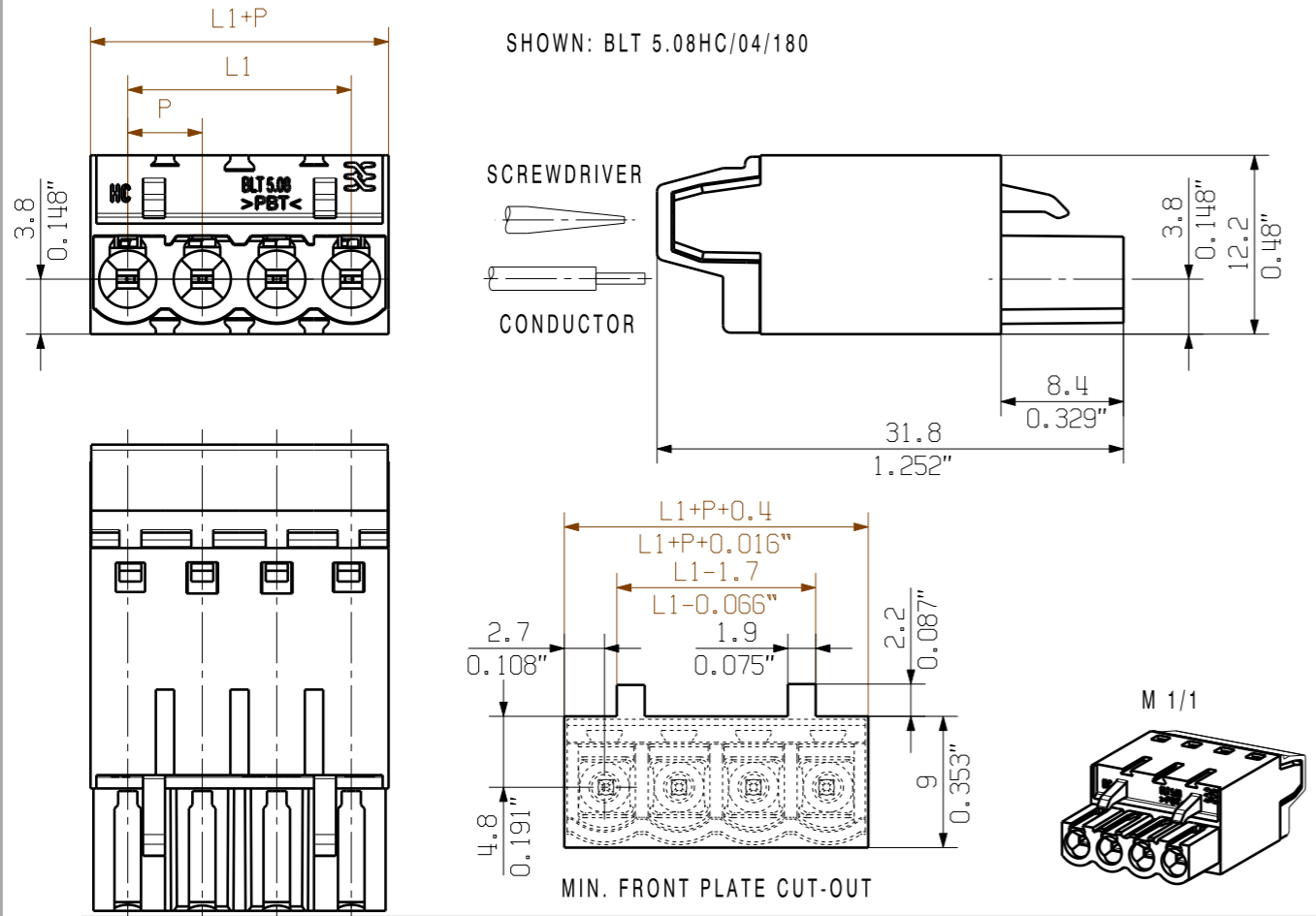
Graph



MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

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 GEBRAUCHSMUSTER-, ODER GESCHMACKSMUSTERENTRAGUNG VORBEHALTEN.
 VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET.
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 VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET.



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]

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 to 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 VDE 0627 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.

	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 POLES	POLZAHL L1 [mm]	L1 [inch]	

GENERAL TOLERANCE: DIN ISO 2768-m

70664/4
24.09.13 HERTEL_S 01

ROHS COMPLIANT

MODIFICATION

DATE NAME

DRAWN 11.06.2003 KNOTH_G

RESPONSIBLE HERTEL_S

CHECKED 24.09.2013 HERTEL_S

APPROVED HECKERT_M

CAT.NO.: . . .

C 16018 41

DRAWING NO. SHEET 01 OF 01 SHEETS

ISSUE NO.

BLT5.08HC/.../180 ...
 BUCHSENSTECKER
 FEMALE PLUG

SCALE: 2/1
 SUPERSEDES: .

PRODUCT FILE: BLT 5.08 7143

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