

BLZP 5.08HC/10/90F SN BK BX

Weidmüller Interface GmbH & Co. KG

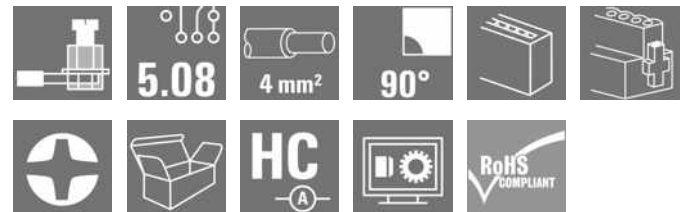
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 10, 90°, Clamping yoke connection, Clamping range, max.: 4 mm², Box
Order No.	1950120000
Type	BLZP 5.08HC/10/90F SN BK BX
GTIN (EAN)	4032248628056
Qty.	30 pc(s).
Product data	IEC: 400 V / 23 A / 0.2 - 4 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

Creation date September 6, 2023 2:27:26 PM CEST

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Technical data**Dimensions and weights**

Depth	27.1 mm	Depth (inches)	1.067 inch
Height	14.1 mm	Height (inches)	0.555 inch
Width	60.6 mm	Width (inches)	2.386 inch
Net weight	19.64 g		

Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
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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	90°		
Number of poles	10		
L1 in mm	45.72 mm		
L1 in inches	1.8 inch		
Number of rows	1		
Pin series quantity	1		
Rated cross-section	4 mm ²		
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged		
Protection degree	IP20		
Volume resistance	≤5 mΩ		
Can be coded	Yes		
Stripping length	7 mm		
Clamping screw	M 2.5		
Screwdriver blade	0.6 x 3.5, PH 1, PZ 1		
Screwdriver blade standard	DIN 5264, ISO 8764/2-PH, ISO 8764/2-PZ		
Plugging cycles	25		
Plugging force/pole, max.	10 N		
Pulling force/pole, max.	9 N		
Tightening torque	Torque type	Wire connection	
	Usage information	Tightening torque	min. 0.4 Nm
			max. 0.5 Nm
	Torque type	Screw flange	
Usage information	Tightening torque	min. 0.2 Nm	
		max. 0.25 Nm	

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	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		

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Technical data

Conductors suitable for connection

Clamping range, min.	0.13 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 30
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	4 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	4 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	4 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm

Clampable conductor	Cross-section for conductor connection	nominal	
		nominal	0.5 mm ²
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0,5/6
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0,5/12 OR
Cross-section for conductor connection	wire end ferrule	nominal	1 mm ²
		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H1,0/6
		nominal	1.5 mm ²
wire end ferrule		Stripping length	nominal 7 mm
		Recommended wire-end ferrule	H1,5/7
		nominal	2.5 mm ²
		Stripping length	nominal 7 mm
wire end ferrule		Recommended wire-end ferrule	H2,5/7
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H2,5/15D BL

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.


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Technical data
Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	23 A
Rated current, max. number of poles (Tu=20°C)	18 A	Rated current, min. number of poles (Tu=40°C)	21 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 120 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 C / CSA)	50 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group D / CSA)	20 A	Wire cross-section, AWG, min.	AWG 30
Wire cross-section, AWG, max.	AWG 12	Reference to approval values	Specifications are maximum values, details - see approval certificate.

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)	20 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	349 mm
VPE width	135 mm	VPE height	32 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96
	Test	mark of origin, rated voltage, rated cross-section, type of material
	Evaluation	available
	Test	durability
	Evaluation	passed

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Test: Misengagement (Non-interchangeability)	Standard	DIN EN 60512-13-5 / 11.06, IEC 60512-13-5 / 02.06	
	Test	180° turned with coding elements	
	Evaluation	passed	
	Test	visual examination	
	Evaluation	passed	
Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
	Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm ²
		Type of conductor and conductor cross-section	stranded 0.2 mm ²
		Type of conductor and conductor cross-section	solid 2.5 mm ²
		Type of conductor and conductor cross-section	stranded 2.5 mm ²
		Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG 26/19
	Evaluation	passed	
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG 26/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 12/1
		Type of conductor and conductor cross-section	AWG 12/19
Evaluation	passed		

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Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥10 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 26/1	
		Type of conductor and conductor cross-section	AWG 26/19	
	Evaluation	passed		
	Requirement	≥20 N		
	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	≥60 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-U4.0	
		Type of conductor and conductor cross-section	H07V-K4.0	
		Type of conductor and conductor cross-section	AWG 12/1	
		Type of conductor and conductor cross-section	AWG 12/19	
	Evaluation	passed		

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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
ECLASS 12.0	27-46-02-02	ECLASS 13.0	27460202

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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	<ul style="list-style-type: none"> • Additional variants 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 • 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. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	Zuken E3.S
Product Change Notification	20220106 BLT and BLZP in pitch 5.0x – Addition of a screw locking 20220106 BLT und BLZP im Raster 5.0x – Ergänzung einer Schraubensicherung
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 FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

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Data sheet

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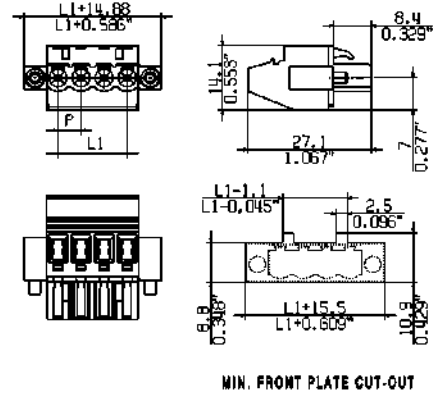
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Drawings

Product image



Dimensional drawing



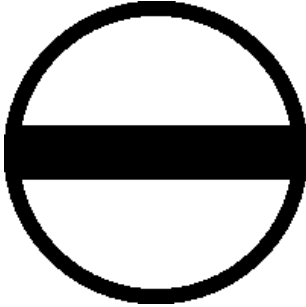
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Accessories

Slotted screwdriver

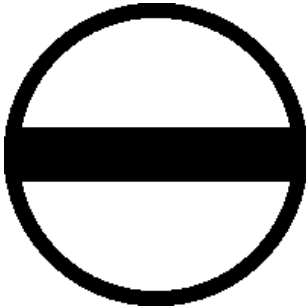


Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.6X3.5X100	Version
Order No.	9008330000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	9008390000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

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Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

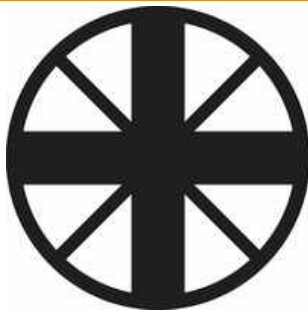
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

Crosshead screwdriver Pozidriv



Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PZ1	Version
Order No.	9008530000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056521	
Qty.	1 pc(s).	

Data sheet**BLZP 5.08HC/10/90F SN BK BX****Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
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Germanywww.weidmueller.com**Accessories****Crosshead screwdriver Phillips**

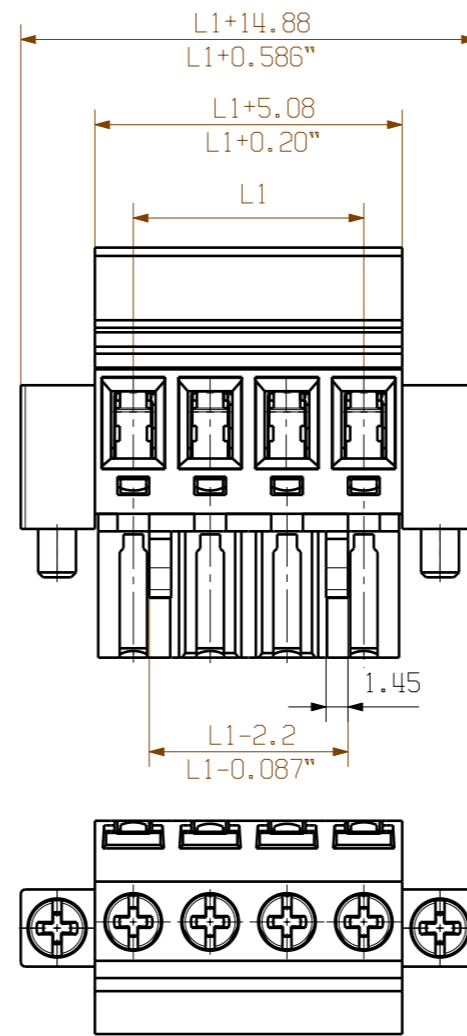
Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

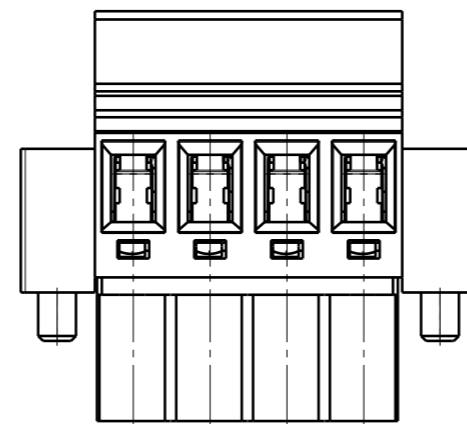
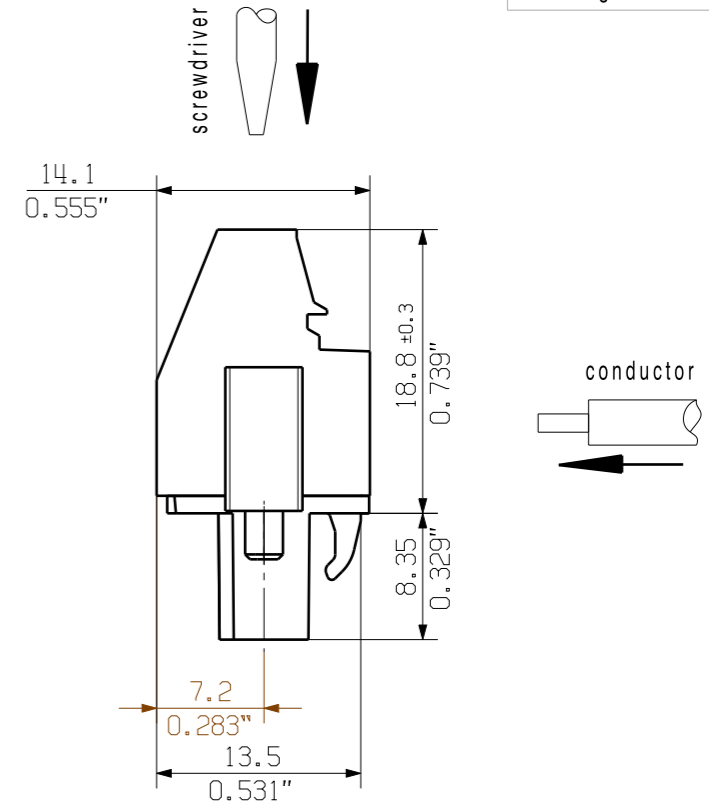
Type	SDK PH1	Version
Order No.	9008480000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056477	
Qty.	1 pc(s).	

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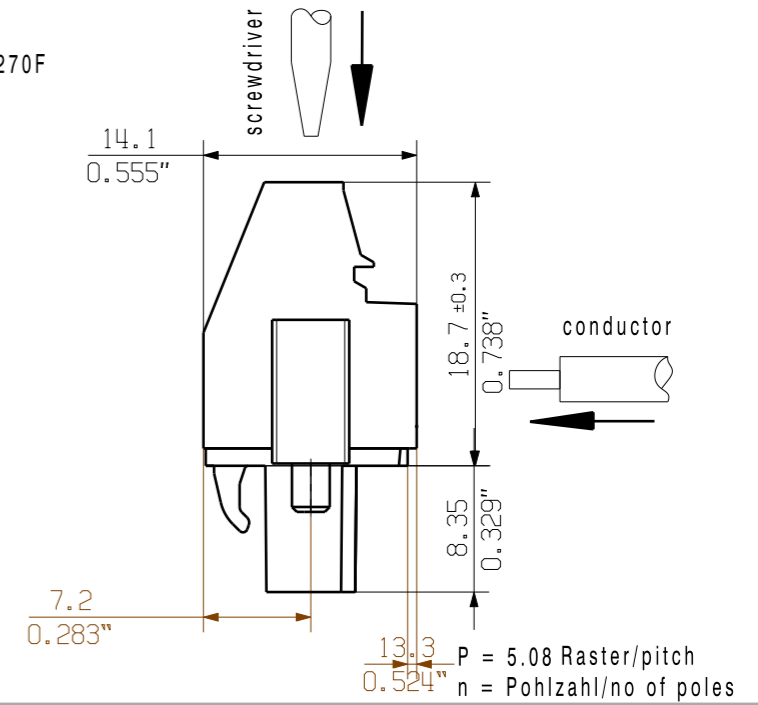
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shown:
BLZP 5.08HC/04/90F



shown:
BLZP 5.08HC/04/270F



24	116.84	4,60
23	111,76	4,40
22	106,68	4,20
21	101,60	4,00
20	96,52	3,80
19	91,44	3,60
18	86,36	3,40
17	81,28	3,20
16	76,20	3,00
15	71,12	2,80
14	66,04	2,60
13	60,96	2,40
12	55,88	2,20
11	50,80	2,00
10	45,72	1,80
9	40,64	1,60
8	35,56	1,40
7	30,48	1,20
6	25,40	1,00
5	20,32	0,80
4	15,24	0,60
3	10,16	0,40
2	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 to 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	89239/5	02	Weidmüller	Cat.no.: .	
	01.08.16 HELIS_MA			3 39786 12	
	Modification		Drawing no. Issue no.		
	Drawn	Date	Name	Sheet 02	of 03 sheets
	Responsible	10.06.2013	HERTEL_S		
	Checked	08.08.2016	HELIS_MA		
Scale: 2:1	Approved	LANG_T	BLZP 5.08HC/.../.../... .. BUCHSENLEISTE SOCKET BLOCK		
Supersedes: .	Product file: BLZP 5.08HC				