

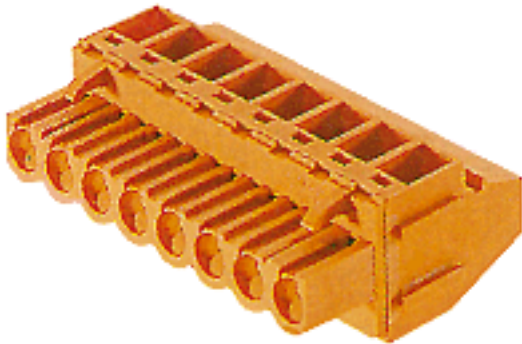
BLZ 5.08/16/90B SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

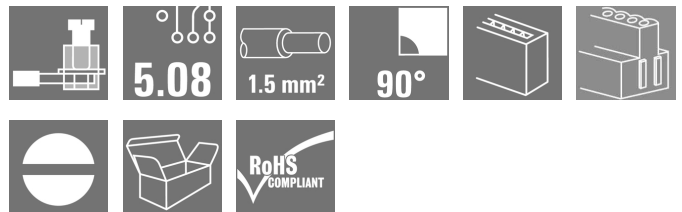
D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

Do not use product for new developments

Female plugs with clamping-yoke screw connection.
The female plugs provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 16, 90°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box
Order No.	1556460000
Type	BLZ 5.08/16/90B SN OR BX
GTIN (EAN)	4008190098971
Qty.	18 pc(s).
Product data	IEC: 400 V / 15 A / 0.2 - 2.5 mm² UL: 300 V / 10 A / AWG 26 - AWG 12
Packaging	Box

Delivery status **This article will no longer be available in the future.**

Creation date March 24, 2021 5:52:26 AM CET

Available until 2023-12-31

Alternative product [1949940000](#)

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

Depth	26.9 mm	Depth (inches)	1.059 inch
Height	14.1 mm	Height (inches)	0.555 inch
Net weight	31.94 g	Width	83.28 mm
Width (inches)	3.279 inch		

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	16	L1 in mm	76.2 mm
L1 in inches	3 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	≤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	Plugging cycles	25
Plugging force/pole, max.	8.5 N	Pulling force/pole, max.	6.5 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	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

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
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 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.	2.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

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Technical data

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)	15 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	12 A
Rated current, max. number of poles (Tu=40°C)	10 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)	200039-1301847
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
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.		

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Technical data

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

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) 10 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

30 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

ECLASS 11.0

27-46-02-02

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
- 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

E60693

BLZ 5.08/16/90B SN OR BX

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Technical data

Downloads

Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

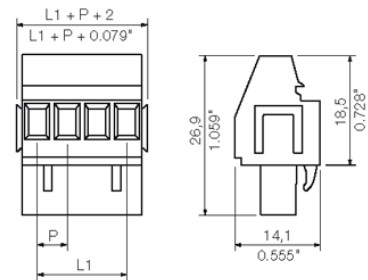
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Drawings

Dimensional drawing



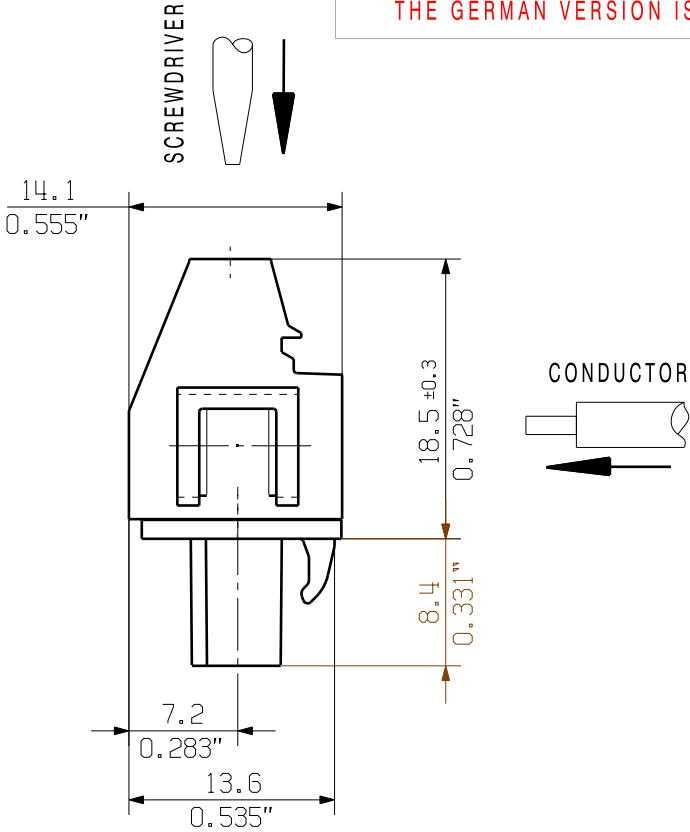
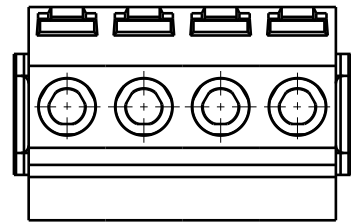
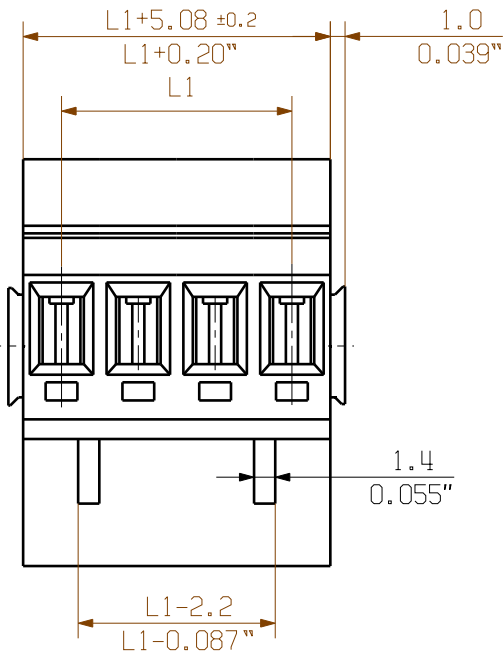
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DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

Technical Data

Rev.	Material data	
	Insulation material type	PBT
	Insulation material colors	orange
	Insulation material flammability class	UL94 V-0
	Insulation resistance	MOhm > 10 ⁵
	Contact base material	Cu-alloy
	Contact plating	tin-plated
System characteristic values		
	Pitch P	mm/inch 5.08/0.2
	Number of rows	1
	Dielectric strength (r.m.s withstand voltage)	kV > 2.21
	Mechanical operating cycles	acc. to IEC 512 > 25
	Plug in force (max.)	N/pole 10 1)
	Pull out force (max.I)	N/pole 8 1)
	Through resistance (typical)	mOhm 3.6
	Operating temperatur range	°C -55...+ 100 2)
	Degree of protection acc. to VDE 0106 (plugged/unplugged)	finger safe/finger safe
	Degree of protection acc. to DIN EN 60529 (plugged/unplugged)	IP20/IP20
	Conductor connection method	clamping yoke
	Screw size	M2.5
	Screw torque	Nm 0.4
	Screw driver type	0.6 x 3.5
Application notes		
	Coding possibility	yes/no yes (accessory)
	Joinable with loss of pitch	yes/no no
	Manual assembly of modules	yes/no no
	Max. number of poles	n 24
Conductor		
	Clamping range	mm ² 0.08...2.5
	"e" solid H05(07) V-U	mm ² 0.5...2.5
	"f" flexible H05(07) V-K	mm ² 0.5...2.5
	"f" with ferrule acc. to DIN 46228/1	mm ² 0.5...2.5
	... with plastic collar acc. to DIN 46228/4	mm ² 0.5...2.5
	Conductor insulation stripping length	mm 7/0.276
	Conductor insulation diameter max.	mm ---
	Two wire clamping range	mm ² 0.5...1.5
	Gauges to EN 60999 (a x b ; Ø)	mm 2.8x2.4 ; 2.4
VDE0110 (4.97) rated data		
	Rated cross section acc. to EN 60999	mm ² 2.5
	Rated current @ 20°C ambient (together with)	A 13 (SL5.08) 3)
	Rated current @ 40°C ambient (together with)	A 11 (SL5.08) 3)
	Overvoltage category / Pollution degree	III/3 III/2 II/2
	Rated voltage	V 250 320 400
	Rated impulse voltage	kV 4.0 4.0 4.0
UL 1059 rated data		
	File No.: E60693	B C D
	Rated voltage	V 300 - 300
	Rated current	A 15 - 10
	AWG wire range (field wiring / factory wiring)	22...12
CSA C22.2 rated data		
	File No.: LR12400	B C D
	Rated voltage	V 300 - 300
	Rated current	A 15 - 10
	AWG wire range (field wiring / factory wiring)	26....12
Packaging		card box
Downloads		www.weidmueller.de
1) Without locking latches		
2) Sum of ambient temperature and temperature rise		
3) Referred to rated cross section and minimum pole number		
n.a. = not applicable		
Subject to technical changes		



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]

SHOWN: BLZ 5.08/4/90B

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05		39998/0 21.04.08 HELIS_MA 00		CAT.NO.: . . .	
	MODIFICATION					
	DRAWN	11.04.2008	HELIS_MA	BLZ 5.08 / 90 (B) BUCHSENLEISTE SOCKET BLOCK		
	RESPONSIBLE		HERTEL_S			
SCALE: 2/1	CHECKED	24.04.2008	HECKERT_M			
SUPERSEDES: .	APPROVED		HECKERT_M	7161		

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