

OMNIMATE Signal - series BL/SL 5.08 BLZ 5.08/16/90 SN BK BX

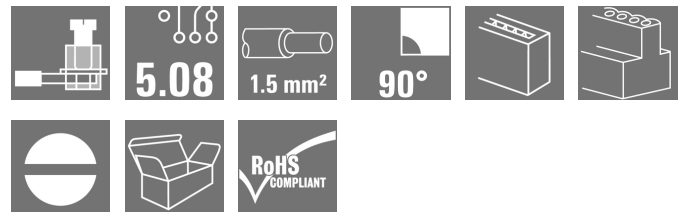
Weidmüller Interface GmbH & Co. KG
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Product image



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

Delivery status	This article will no longer be available in the future.
Available until	2023-12-31
Type	BLZ 5.08/16/90 SN BK BX
Order No.	1554110000
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
GTIN (EAN)	4008190267858
Qty.	18 pc(s).
Product data	IEC: 400 V / 15 A / 0.2 - 2.5 mm²
Creation date	22.07.2020 10:43:58 AM CEST
Packaging	Box
Alternative product	1948380000

Catalogue status 17.07.2020 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

Width	81.28 mm	Width (inches)	3.2 inch
Height	14.1 mm	Height (inches)	0.555 inch
Depth	26.9 mm	Depth (inches)	1.059 inch
Net weight	27.38 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	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	≤ 5mΩ
Can be coded	Yes	Stripping length	7 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.	8.5 N	Pulling force/pole, max.	6.5 N

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	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	Copper alloy	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.	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

Creation date April 22, 2020 4:43:56 AM CEST

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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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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.		
Max. clamping range	3.31 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)	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.		


Data sheet

**OMNIMATE Signal - series BL/SL 5.08
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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	UNSPSC	30-21-18-10

Notes

Notes	<ul style="list-style-type: none"> • 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.
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
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Technical data**Downloads**

Approval/Certificate/Document of
Conformity

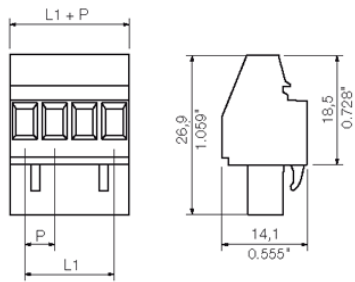
[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[FL BUILDING SAFETY EN](#)
[FL APPL LED LIGHTING EN](#)
[FLIndustr.CONTROLS EN](#)
[FL MACHINE SAFETY EN](#)
[FL HEATING ELECTR EN](#)
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Drawings**Dimensional drawing**

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
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	V-0
	Insulation resistance	> 10 ⁵ MOhm
	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
Pull out force (max.I)	N/pole	8
Through resistance (typical)	mOhm	3.6
Operating temperatur range	°C	-55...+100
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	yes
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)
Rated current @ 40°C ambient (together with)	A	11 (SL5.08)
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



	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



	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

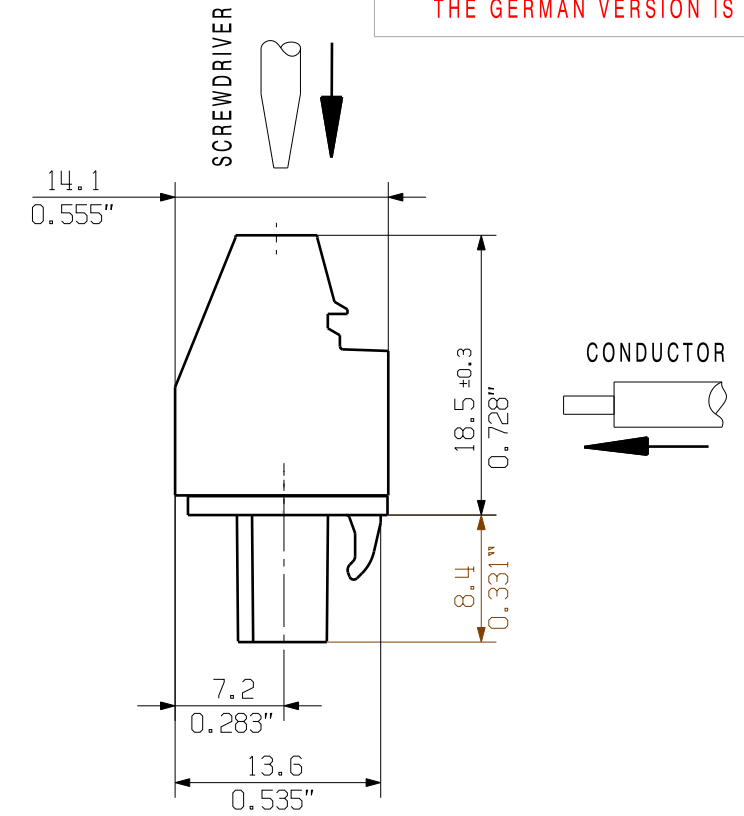
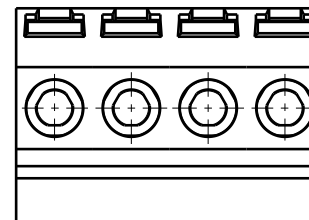
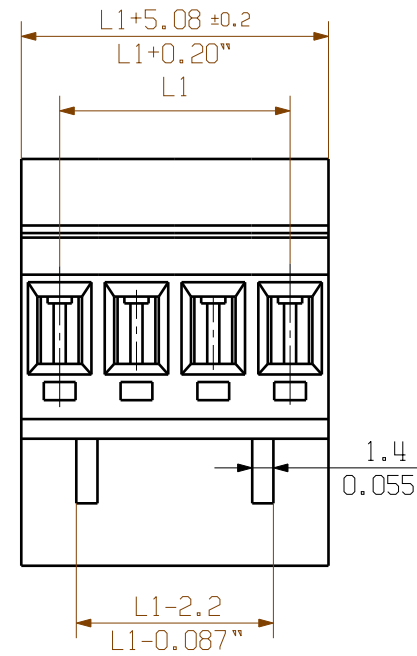
Downloads

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- 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 5.08/4/90

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 with 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.

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05	39998/0 21.04.08 HELIS_MA 00	CAT.NO.:
		MODIFICATION	C 16661 25
	DRAWN	11.04.2008	HELI_S
	RESPONSIBLE		HEKERT_S
	CHECKED	24.04.2008	HEKERT_M
APPROVED		HEKERT_M	
SCALE: 2/1 SUPERSEDES: .			DRAWING NO. SHEET 02 OF 05 SHEETS BLZ 5.08 / 90 (B) BUCHSENLEISTE SOCKET BLOCK PRODUCT FILE: BLZ 5.08 90/270 7161

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