

OMNIMATE Signal - series BL/SL 5.08
BLZ 5.08/12/90 SN OR BX

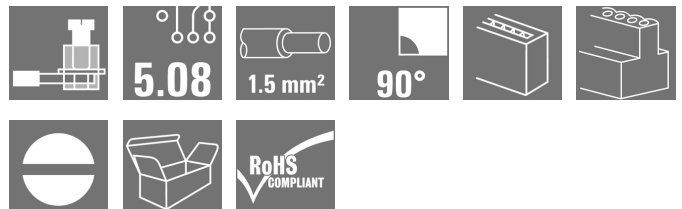
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration

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

Do not use product for new developments

**General ordering data**

Delivery status	This article will no longer be available in the future.
Available until	2023-12-31
Type	BLZ 5.08/12/90 SN OR BX
Order No.	1553760000
Version	PCB plug-in connector, female plug, 5.08 mm, No. of poles: 12, 90°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box
GTIN (EAN)	4008190157357
Qty.	30 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
Alternative product	1948110000

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Technical data

Dimensions and weights

Width	60.96 mm	Width (inches)	2.4 inch
Height	14.1 mm	Height (inches)	0.555 inch
Depth	26.9 mm	Depth (inches)	1.059 inch
Net weight	21.15 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°
No. of poles	12	L1 in mm	55.88 mm
L1 in inches	2.2 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	5.00 mΩ
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	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
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.	55 °C	Max. relative humidity during storage	80 %
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, 2.5 mm ² max.	
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	
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
	AEH	Stripping length	nominal	7 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²	
	AEH	Stripping length	nominal	7 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	AEH	Stripping length	nominal	6 mm
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P).			
Max. clamping range	3.31 mm ²			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984			
Rated current, max. no. of poles (Tu=20°C)	12 A	Rated current, min. no. of poles (Tu=20°C)	15 A	
Rated current, max. no. of poles (Tu=40°C)	10 A	Rated current, min. no. of poles (Tu=40°C)	12 A	
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree II/2	400 V	
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated voltage for surge voltage class / pollution degree III/3	250 V	
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	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.				

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.		

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Technical data

Packing

Packaging	Box	VPE length	30 mm
VPE width	135 mm	VPE height	350 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002638
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-03-09
eClass 9.1	27-44-03-09		

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 • 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

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Technical data

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Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

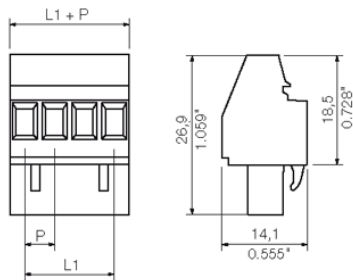
[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[FL BUILDING SAFETY EN](#)
[FL APPL LED LIGHTING EN](#)
[FL INDUSTR.CONTROLS EN](#)
[FL MACHINE SAFETY EN](#)
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[FL APPL INVERTER EN](#)
[FL BASE STATION EN](#)
[FL ELEVATOR EN](#)
[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

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Drawings

Dimensional drawing



Technical Data

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	yes
Manual assembly of modules	yes/no	no
Max. number of poles	n	24

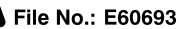
Conductor

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

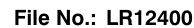
Rated cross section acc. to EN 60999	mm ²	2.5		
Rated current @ 20°C ambient (together with)	A	13 (SL5.08)		3
Rated current @ 40°C ambient (together with)	A	11 (SL5.08)		3
Overvoltage category / Pollution degree		III/3	III/2	II/2
Rated voltage	V	250	320	400
Rated impulse voltage	kV	4.0	4.0	4.0

UL 1059 rated data



Rated voltage	V	300	-	300
Rated current	A	15	-	10
AWG wire range (field wiring / factory wiring)		22...12		

CSA C22.2 rated data



Rated voltage	V	300	-	300
Rated current	A	15	-	10
AWG wire range (field wiring / factory wiring)		26....12		

Packaging

card box

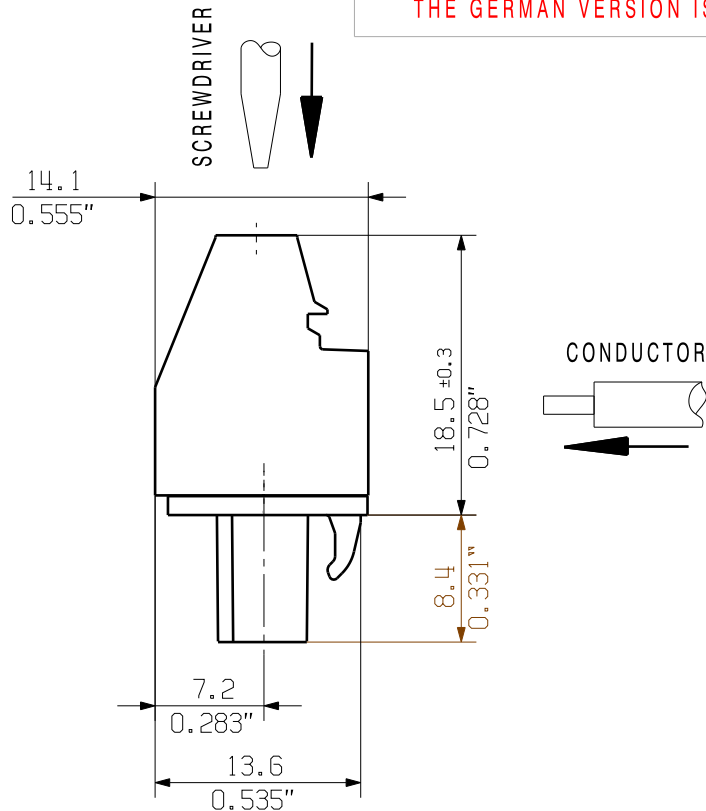
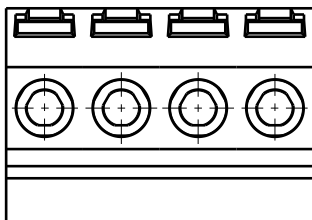
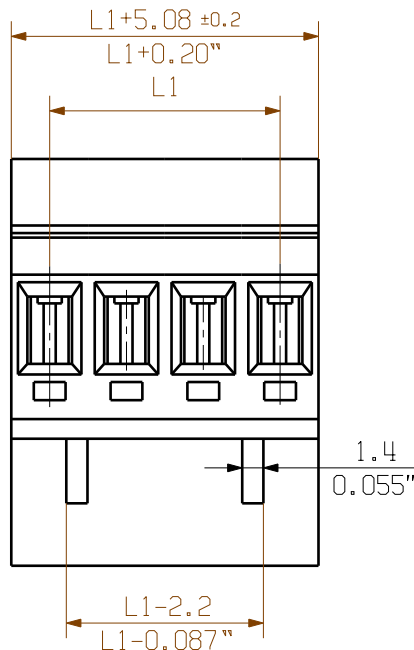
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- 1) Without locking latches
- 2) Sum of ambient temperature and temperature rise
- 3) Referred to rated cross section and minimum pole number

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

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