

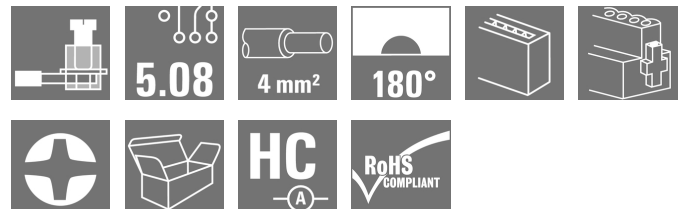
BLZP 5.08HC/12/180F SN BK BX TB**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

Female plug with clamping-yoke screw system for connecting wires with straight (180°) 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: 12, 180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box
Order No.	1990120000
Type	BLZP 5.08HC/12/180F SN BK BX TB
GTIN (EAN)	4050118375053
Qty.	24 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 March 26, 2021 7:37:50 PM CET

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Technical data**Dimensions and weights**

Depth	20 mm	Depth (inches)	0.787 inch
Height	16.1 mm	Height (inches)	0.634 inch
Net weight	18.347 g	Width	70.76 mm
Width (inches)	2.786 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	180°		
Number of poles	12		
L1 in mm	55.88 mm		
L1 in inches	2.2 inch		
Pin series quantity	1		
Rated cross-section	4 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, 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	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.	4 mm ²
Wire connection cross section AWG, min.	AWG 30
Wire connection cross section AWG, max.	AWG 12

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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, 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.	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	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

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)	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

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Technical data**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.

Reference to approval values

Specifications are maximum values, details - see approval certificate.

AWG 12

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	35 mm
VPE width	145 mm	VPE height	340 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
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

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Technical data

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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Technical data

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
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.
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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
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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

Approval/Certificate/Document of Conformity	CB Certificate CB Testreport
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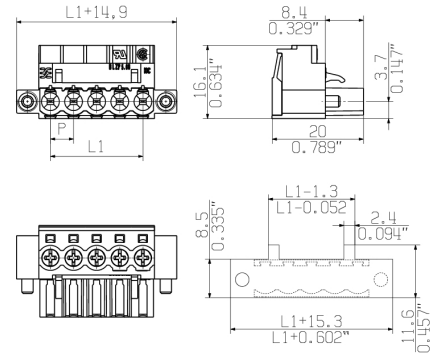
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Drawings

Dimensional drawing



MIN. FRONT PLATE CUT-OUT

Graph

