

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **Product image**

























Female plugs with TOP screw connection system for connecting wires with straight outlet direction and screw flange. The female connectors provide space for labelling and can be coded. HC = High Current.

#### **General ordering data**

Version	PCB plug-in connector, female plug, 5.08 mm,
	Number of poles: 12, 180°, TOP connection,
	Clamping range, max. : 2.5 mm², Box
Order No.	1844090000
Туре	BLT 5.08HC/12/180F SN OR BX
GTIN (EAN)	4032248356010
Qty.	24 items
Product data	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>
	UL: 300 V / 17 A / AWG 26 - AWG 14
Packaging	Box

Creation date 27.09.2025 03:00:20 MEZ



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# **Technical data**

Approvals	Α	p	p	r	o	ν	a	ı	s
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Approvals	c <b>F11</b> *us
ROHS	Conform
UL File Number Search	<u>UL Website</u>
Certificate No. (cURus)	E60693

## **Dimensions and weights**

Depth	31.8 mm	Depth (inches)	1.252 inch
Height	12.2 mm	Height (inches)	0.4803 inch
Width	70.76 mm	Width (inches)	2.7858 inch
Net weight	37 g		

## **Environmental Product Compliance**

RoHS Compliance Status	Compliant without exemption	
REACH SVHC	No SVHC above 0.1 wt%	

#### **System Parameters**

Product family	OMNIMATE Signal - series BL/SL 5.08			
Type of connection	Field connection			
Wire connection method	TOP connection			
Pitch in mm (P)	5.08 mm			
Pitch in inches (P)	0.200 "			
Conductor outlet direction	180°			
Number of poles	12			
L1 in mm	55.88 mm			
L1 in inches	2.200 "			
Number of rows	1			
Pin series quantity	1			
Rated cross-section	2.5 mm <sup>2</sup>			
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	13 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 N			
Pulling force/pole, max.	7 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



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#### **Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of plug contact	48 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**

Conductors suitable for conn	lection		
Clamping range, min.	0.13 mm <sup>2</sup>		
Clamping range, max.	2.5 mm <sup>2</sup>		
Wire connection cross section AWG,	AWG 28		
min.			
Wire connection cross section AWG,	AWG 14		
max.			
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>		
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>		
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>		
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>		
w. plastic collar ferrule, DIN 46228 pt min.	4, 0.2 mm <sup>2</sup>		
w. plastic collar ferrule, DIN 46228 pt max.	4, 1.5 mm²		
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>		
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>		
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm ; 2.4 mm		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire- end ferrule	H0,5/18 OR
	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm²
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire- end ferrule	H1,0/18 GE
	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire- end ferrule	H1.5/18D SW
		Stripping length	nominal 12 mm
		Recommended wire- end ferrule	H1,5/12
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# 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)	27 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	24 A

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# **Technical data**

Rated current, max. number of poles 16 A (Tu=40°C)	Rated voltage for surge voltage class / 400 V pollution degree II/2
Rated voltage for surge voltage class / 320 V pollution degree III/2	Rated voltage for surge voltage class / 250 V pollution degree III/3
Rated impulse voltage for surge voltage 4 kV class/ pollution degree II/2	Rated impulse voltage for surge voltage 4 kV class/ pollution degree III/2
Rated impulse voltage for surge voltage 4 kV class/ contamination degree III/3	Short-time withstand current resistance 3 x 1s with 100 A

#### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	15 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14

## Rated data acc. to UL 1059

Institute (cURus)	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)	17 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

#### **Packing**

Packaging	Box	VPE length	353.00 mm
VPE width	137.00 mm	VPE height	38.00 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, type of material, date clock	
	Evaluation	available	
	Test	durability	
	Evaluation	passed	
Test: Misengagement (Non- interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.06	
	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 solid 0.08 mm <sup>2</sup> and conductor cross-section	
		Type of conductor stranded 0.08 mm <sup>2</sup> and conductor cross-section	
		Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section	
		Type of conductor stranded 2.5 mm <sup>2</sup> and conductor cross-section	
		Type of conductor AWG 26/1 and conductor cross-section	

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# **Technical data**

		Type of conductor AWG 26/19 and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
Test for damage to and accidental	Standard	DIN EN 60999-1 section 9.4 / 12.00
posening of conductors	Requirement	0.2 kg
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
		Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 2.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥5 N
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
	Evaluation	passed
	Requirement	≥10 N
	Conductor type	Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
	Evaluation	passed
	Requirement	≥40 N

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# **Technical data**

Conductor type	Type of conductor AWG 14/1 and conductor cross-section		
	Type of conductor AWG 14/19 and conductor cross-section		
Evaluation	passed		
Requirement	≥50 N		
Conductor type	Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section		
	Type of conductor stranded 2.5 mm <sup>2</sup> and conductor cross-section		
Evaluation	passed		

#### 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 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
- Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.
- 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.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50  $^{\circ}$ C and maximum humidity 70%, 36 months

#### Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	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	27-46-02-02	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		



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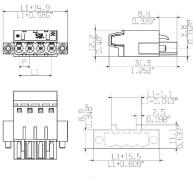
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# **Drawings**

## **Product image**



## **Dimensional drawing**



MIN. FRONT PLATE CUT-OUT

#### Graph

