

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **Product image**

























Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) 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: 8, 90°, Clamping yoke connection, Clamping range, max.: 4 mm², Box
Order No.	<u>1087310000</u>
Туре	BLZP 5.08HC/08/90LR SN OR BX
GTIN (EAN)	4032248854448
Qty.	36 pc(s).
Product data	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup> UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

Creation date January 20, 2022 11:55:51 AM CET



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

### **Dimensions and weights**

Depth	29.5 mm	Depth (inches)	1.161 inch
Height	17.7 mm	Height (inches)	0.697 inch
Width	50.46 mm	Width (inches)	1.987 inch
Net weight	14.74 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	8			
L1 in mm	35.56 mm			
L1 in inches	1.4 inch			
Number of rows	1			
Pin series quantity	1			
Rated cross-section	4 mm <sup>2</sup>			
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch			
Protection degree	IP20			
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

#### **Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper 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		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

#### **Conductors suitable for connection**

Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, max.	4 mm <sup>2</sup>
Wire connection cross section A	WG,	Wire connection cross section AV	VG,
min.	AWG 30	max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>	Solid, max. H05(07) V-U	4 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>	Flexible, max. H05(07) V-K	4 mm <sup>2</sup>
w. plastic collar ferrule, DIN 4622	28 pt 4,	w. plastic collar ferrule, DIN 4622	28 pt 4,
min.	0.2 mm <sup>2</sup>	max.	2.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 p	ot 1,	w. wire end ferrule, DIN 46228 p	t 1,
min.	0.2 mm <sup>2</sup>	max.	4 mm <sup>2</sup>
Plug gauge in accordance with E 60999 a x b; ø		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
	2.8 mm x 2.4 mm		voltage.

#### Rated data acc. to IEC

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		

### Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	
	(SP∙		
			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 -
	AWG 12		see approval certificate.

#### 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.		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

## **Packing**

Packaging	Вох	VPE length	351 mm
VPE width	139 mm	VPE height	34 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	Test mark of origin, rated voltage, rated type of material	
	Evaluation	Evaluation available	
	Test	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	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 0.2 mm <sup>2</sup> and conductor cross-section
			Type of conductor stranded 0.2 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
			Type of conductor AWG 26/19 and conductor cross-section
	Evaluation		passed



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

Test for damage to and accidental	Standard	DIN EN 60999-1 section 9.4 / 12.00
loosening of conductors	Requirement	0.2 kg
	Conductor type	Type of conductor AWG 26/1 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	0.9 kg
	Conductor type	Type of conductor AWG 12/1 and conductor cross-section
		Type of conductor AWG 12/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥10 N
	Conductor type	Type of conductor AWG 26/1 and conductor cross-section
		Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section
		Type of conductor H05V-K0.5 and conductor cross- section
	Evaluation	passed
	Requirement	≥60 N
	Conductor type	Type of conductor H07V-U4.0 and conductor cross-section
		Type of conductor H07V-K4.0 and conductor cross-section
		Type of conductor AWG 12/1 and conductor cross-section
		Type of conductor AWG 12/19 and conductor cross-section
	Evaluation	passed



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

#### Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	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.

#### **Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Approval/Certificate/Document of					
Conformity	Declaration of the Manufacturer				
Engineering Data	CAD data – STEP				
Engineering Data	WSCAD				
Catalogues	Catalogues in PDF-format				
Brochures	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				
	FL HEATING ELECTR EN				
	FL APPL INVERTER EN				
	FL BASE STATION EN				
	FL ELEVATOR EN				
	FL POWER SUPPLY EN				
	FL 72H SAMPLE SER EN				
	PO OMNIMATE EN				
	PO OMNIMATE EN				



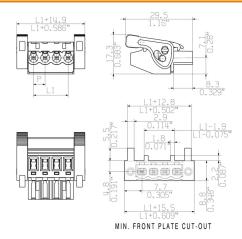
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Drawings**

## **Dimensional drawing**

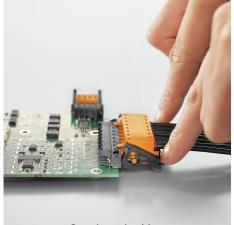


#### **Product benefits**

### **Product benefits**



Self-locking Immediately on plugging in



Gentle unlocking Low mechanical stress



#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Accessories**

#### Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

#### **General ordering data**

Type SDS 0.6X3.5X100
Order No. 2749340000
GTIN (EAN) 4050118895568
Qty. 1 pc(s).

Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade

thickness (A): 0.6 mm

#### **Coding elements**



# Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery. Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

#### **General ordering data**

Туре	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<u>1545710000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
Туре	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<u>1573010000</u>	PCB plug-in connector, Accessories, Coding element, orange, Number	r	Вох
Order No. GTIN (EAN)	1573010000 4008190048396	PCB plug-in connector, Accessories, Coding element, orange, Number of poles: 1	r	Box
			r	Вох



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Accessories**

#### Strain reliefs



# For frequent load changes: the "trailer coupling" for plug-in connectors.

The strain relief can do more than just relieve the strain on conductors:

Simply clip onto the plug and

- bundle conductors
- · guide cables
- · use as a connection and disconnection aid

No damage to the connecting points, clear, tidy wiring and easy to handle.

User advantages: permanent heavy-duty connections for harsh industrial environments and convenient operation ensure improved system availability.

#### **General ordering data**

Туре	BLZ 5.08 ZE08 OR BX	Version	Product data	Packaging
Order No.	<u>1652050000</u>	PCB plug-in connector, Accessories, Strain relief, orange, Number of		Box
GTIN (EAN)	4008190401726	poles: 8		
Qty.	50 pc(s).			
Туре	BLZ 5.08 ZE04 OR BX	Version	Product data	Packaging Box
Order No.	1652110000	PCB plug-in connector, Accessories, Strain relief, orange, Number of		
GTIN (EAN)	4008190401788	poles: 4		
Qty.	50 pc(s).			
Туре	BLZ 5.08 ZE04 BK BX	Version	Product data	Packaging
Order No.	<u>1652130000</u>	PCB plug-in connector, Accessories, Strain relief, black, Number of		Box
GTIN (EAN)	4008190401801	poles: 4		
Qty.	50 pc(s).			
Qty. Type	50 pc(s). BLZ 5.08 ZE08 BK BX	Version	Product data	Packaging
•		Version PCB plug-in connector, Accessories, Strain relief, black, Number of	Product data	Packaging Box
Туре	BLZ 5.08 ZE08 BK BX		Product data	
Type Order No.	BLZ 5.08 ZE08 BK BX 1652070000	PCB plug-in connector, Accessories, Strain relief, black, Number of	Product data	

### **Crosshead screwdriver Phillips**



Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

#### **General ordering data**

 Type
 SDK PH1 X 80
 Version

 Order No.
 2749410000
 Screwdriver, Blade length: 80 mm

 GTIN (EAN)
 4050118895636

 Qty.
 1 pc(s).



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Accessories**

### Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

#### **General ordering data**

Туре SDIS 0.6X3.5X100 Order No. <u>2749810000</u> GTIN (EAN)

4050118897012

Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm

Qty. 1 pc(s).

#### **Crosshead screwdriver Pozidriv**



Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip

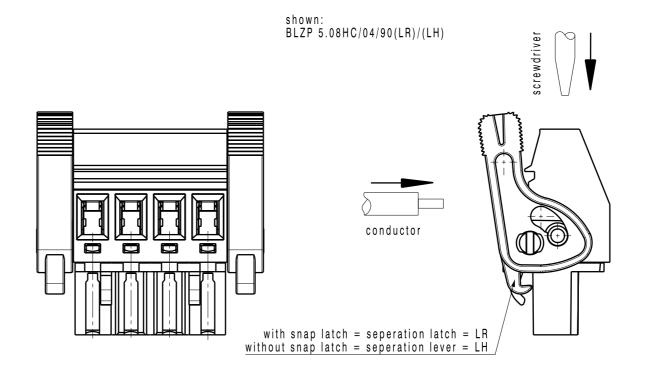
#### **General ordering data**

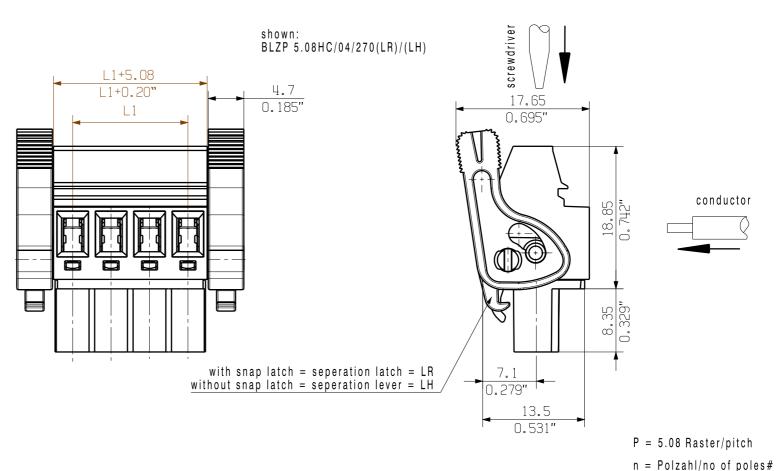
SDK PZ1 X 80 Type Order No. 2749440000 GTIN (EAN) 4050118895667 Qty.

1 pc(s).

Version

Screwdriver, Blade length: 80 mm





BLZP 5.08HC/04/270(LR) (LR) (LH)

Checked

Approved

Scale: 2:1

Supersedes:

116,84 4,60 111,76 4,40 106,68 4,20 101,60 4,00 96,52 3,80 91,44 3,60 86,36 3,40 3,20 81,28 76,20 3,00 71,12 2,80 66,04 2,60 60,96 2,40 55,88 2,20 50,80 2,00 45,72 1,80 40,64 1,60 35,56 1,40 30,48 1,20 25,40 1,00 20,32 0,80 15,24 0,60 10,16 0,40 5.08 0,20 n L1 [mm] L1 [inch]

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary 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.

Weidmueller 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.

						' '			,	Li [iiicii]
I	General tolerance:						С	at.no.:.		
ı	DIN ISO 2768-mK	89239/5 01.08.16 HEI	LIS_MA 02	We	eidmüller	<b>%</b>	3 Drawing n	397	786	12
CUMPLIANT	Modifi	cation				Sheet	03 of	03	sheets	
I			Date	N a m e						
	Drawn	10.06.2013	HERTEL_S	BLZP 5.08HC///						
ı	SHOWN:	Docnoncible		HEDTEL C	7 5 5 5	. 0 0 11 0	<b>/</b>   • • /	••/••		

HERTEL\_S

LANG T

08.08.2016 HELIS MA

5.08 H C/../../... ...
BUCHSENLEISTE SOCKET BLOCK

Product file: BLZP 5.08HC

7159

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>Weidmuller</u>: 1087310000