

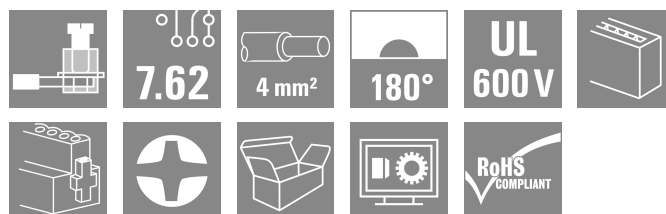
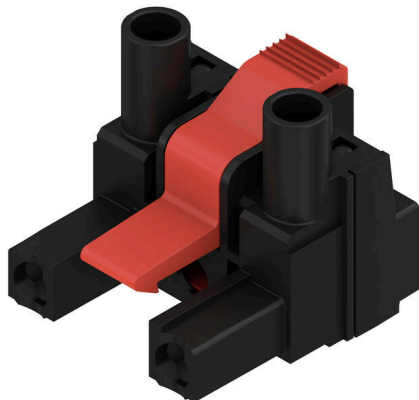
BLZ 7.62IT/02/180MF2 SN BK BX PRT
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image


180° female plug with a 7.62 pitch for IT power networks. Meets the requirements of UL1059 600 V class C. In combination with male header SL 7.62 IT.... With leading contact. Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth. The self-locking middle flange which can optionally be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.

On request also available without middle flange interlock.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 2, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box
Order No.	1317320000
Type	BLZ 7.62IT/02/180MF2 SN BK BX PRT
GTIN (EAN)	4050118121278
Qty.	70 items
Product data	IEC: 630 V / 29 A / 0.08 - 4 mm² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Box

BLZ 7.62IT/02/180MF2 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS Conform
UL File Number Search [UL Website](#)
Certificate No. (cURus) E60693

Dimensions and weights

Depth	23.4 mm	Depth (inches)	0.9213 inch
Height	21.2 mm	Height (inches)	0.8346 inch
Width	22.86 mm	Width (inches)	0.9 inch
Net weight	5.27 g		

Environmental Product Compliance

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

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62IT	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	2	L1 in mm	15.24 mm
L1 in inches	0.600 "	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	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20, when fully mounted	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.	9.5 N	Pulling force/pole, max.	8.5 N

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation resistance	≥ 10 ⁸ Ω
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-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.	0.08 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 28

BLZ 7.62IT/02/180MF2 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Wire connection cross section AWG, max.	AWG 12		
Solid, min. H05(07) V-U	0.08 mm ²		
Solid, max. H05(07) V-U	4 mm ²		
Flexible, min. H05(07) V-K	0.08 mm ²		
Flexible, max. H05(07) V-K	4 mm ²		
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm ²		
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²		
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 2.4 mm		
Clampable conductor	Cross-section for conductor connection	nominal	0.25 mm ²
		wire end ferrule	Stripping length nominal 10 mm Recommended wire-end ferrule H0.25/12 HBL
	Cross-section for conductor connection	nominal	0.34 mm ²
		wire end ferrule	Stripping length nominal 10 mm Recommended wire-end ferrule H0.34/12 TK
	Cross-section for conductor connection	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	nominal	0.75 mm ²
		wire end ferrule	Stripping length nominal 6 mm Recommended wire-end ferrule H0.75/6
	Cross-section for conductor connection	nominal	1 mm ²
		wire end ferrule	Stripping length nominal 6 mm Recommended wire-end ferrule H1.0/6
	Cross-section for conductor connection	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	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)	29 A
Rated current, max. number of poles (Tu=20°C)	26.5 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number of poles (Tu=40°C)	23 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	500 V	Rated voltage for surge voltage class / pollution degree III/3	400 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	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 180 A

BLZ 7.62IT/02/180MF2 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Creepage distance, min.	11.3 mm	Clearance, min.	9.8 mm
-------------------------	---------	-----------------	--------

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	20 A
Rated current (Use group C / UL 1059)	20 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12

Reference to approval values
 Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Box	VPE length	347.00 mm
VPE width	136.00 mm	VPE height	31.00 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 identification, pitch, 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	180° turned without coding elements	
	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 and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 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 20/1
		Type of conductor and conductor cross-section	AWG 20/19

BLZ 7.62IT/02/180MF2 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

		Type of conductor and conductor cross-section	AWG 12/1
		Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
	Evaluation	passed	
	Requirement	0.3 kg	
	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	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1
		Type of conductor and conductor cross-section	AWG 14/19
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U4.0
		Type of conductor and conductor cross-section	H07V-K4.0
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.5 / 12.00	
	Requirement	≥5 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
	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	≥50 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1
Pull-out test			

Technical data

www.weidmueller.com

	Type of conductor and conductor cross-section	AWG 14/19
	Type of conductor and conductor cross-section	H07V-K4.0
Evaluation	passed	
Requirement	≥60 N	
Conductor type	Type of conductor and conductor cross-section	H07V-U4.0
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
 - 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 °C and maximum humidity 70%, 36 months

Classifications

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

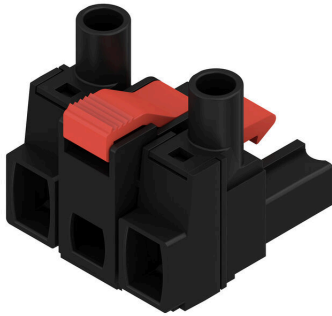
BLZ 7.62IT/02/180MF2 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

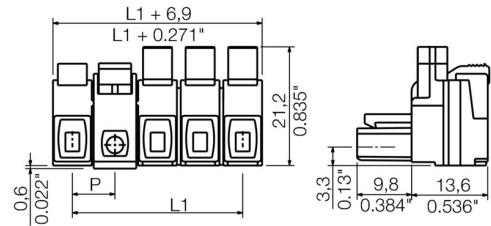
www.weidmueller.com

Drawings

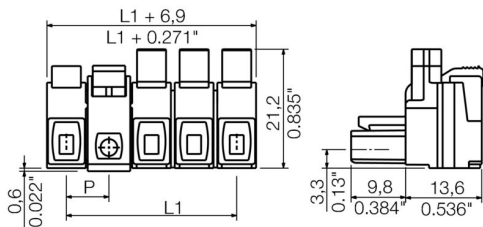
Product image



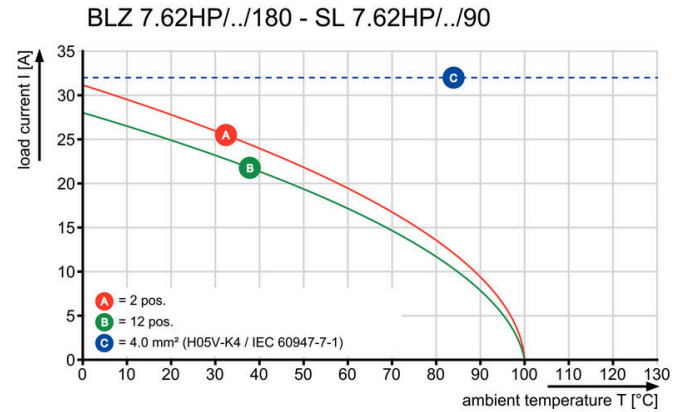
Dimensional drawing



Dimensional drawing



Graph



Graph

