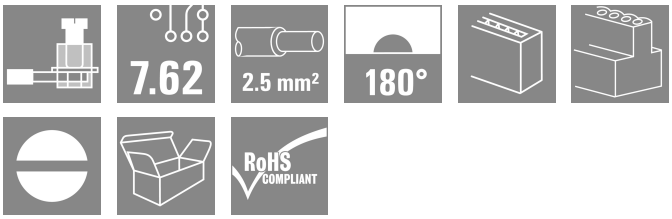
Data sheet

BLZ 7.62/04/180 SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Germany

www.weidmueller.com

Product image



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

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box
Order No.	1623180000
Type	BLZ 7.62/04/180 SN BK BX
GTIN (EAN)	4008190194239
Qty.	100 items
Product data	IEC: 800 V / 18.5 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 12
Packaging	Box

Data sheet

BLZ 7.62/04/180 SN BK BX

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

Dimensions and weights

Net weight	7.64 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 7.62	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	4	L1 in mm	22.86 mm
L1 in inches	0.900 "	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	4.50 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
Pulling force/pole, max.	2 N		

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation resistance	≥ 108 Ω
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	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 mm²	Clamping range, max.	3.31 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm²	Solid, max. H05(07) V-U	2.5 mm²
Flexible, min. H05(07) V-K	0.2 mm²	Flexible, max. H05(07) V-K	2.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm²

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Technical data

Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm	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)	18.5 A
Rated current, max. number of poles (Tu=20°C)	17 A	Rated current, min. number of poles (Tu=40°C)	16 A
Rated current, max. number of poles (Tu=40°C)	14.5 A	Rated voltage for surge voltage class / pollution degree II/2	800 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	500 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 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 120 A

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1121690
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)	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)	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)	15 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	162.00 mm
VPE width	139.00 mm	VPE height	84.00 mm

Type tests

Test: Durability of markings	Standard	draft DIN VDE 0627 section 6.2.2 / 09.91
	Test	mark of origin, type identification, rated cross-section, rated voltage, pitch, approval marking SEV, type of material
	Evaluation	passed
	Test	approval marking UL, approval marking CSA
	Evaluation	on packaging label
Test: Misengagement (Non-interchangeability)	Standard	draft DIN VDE 0627 section 5.9.1 / 09.91, DIN IEC 60512 part 7 section 5 / 05.94
	Test	180° turned with coding elements
	Evaluation	passed

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Technical data

Test: Clampable cross section	Standard	DIN EN 60999 section 6 and 8.1 / 04.94, DIN EN 60947-1 section 8.2.4.5.1 / 07.98	
	Conductor type	Type of conductor and conductor cross-section	solid 0.08 mm²
		Type of conductor and conductor cross-section	stranded 0.08 mm²
		Type of conductor and conductor cross-section	solid 2.5 mm²
		Type of conductor and conductor cross-section	stranded 2.5 mm²
		Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
		Type of conductor and conductor cross-section	AWG 12/1
		Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999 section 8.4 / 04.94	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/7
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm²
		Type of conductor and conductor cross-section	stranded 0.5 mm²
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 2.5 mm²
		Type of conductor and conductor cross-section	stranded 2.5 mm²
	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	
Pull-out test	Standard	DIN EN 60999 section 8.5 / 04.94	
	Requirement	≥5 N	

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Technical data

Conductor type	Type of conductor and conductor cross-section	AWG 28/1
	Type of conductor and conductor cross-section	AWG 28/7
Evaluation	passed	
Requirement	≥50 N	
Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
	Type of conductor and conductor cross-section	H07V-K2.5
Evaluation	passed	
Requirement	≥60 N	
Conductor type	Type of conductor and conductor cross-section	AWG 12/1
	Type of conductor and conductor cross-section	AWG 12/19
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		

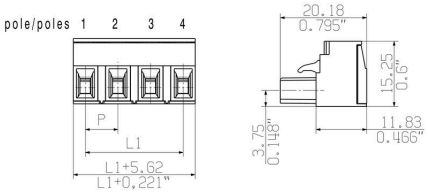
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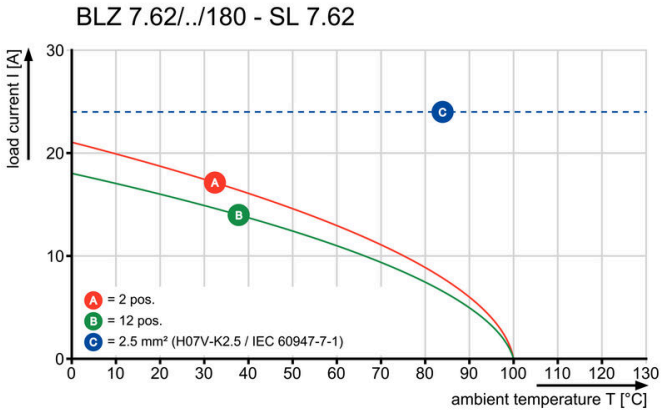
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Drawings

Dimensional drawing



Derating curve



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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

Type	BLZ 7.62 ZE03 OR BX	Version
Order No.	1652150000	PCB plug-in connector, Accessories, Strain relief, orange, Number of
GTIN (EAN)	4008190401825	poles: 3
Qty.	50 ST	
Type	BLZ 7.62 ZE03 BK BX	Version
Order No.	1652210000	PCB plug-in connector, Accessories, Strain relief, black, Number of
GTIN (EAN)	4008190401887	poles: 3
Qty.	50 ST	

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

Type	BLZ/SL KO BK BX	Version
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4008190087142	of poles: 1
Qty.	50 ST	
Type	BLZ/SL KO OR BX	Version
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number
GTIN (EAN)	4008190048396	of poles: 1
Qty.	100 ST	

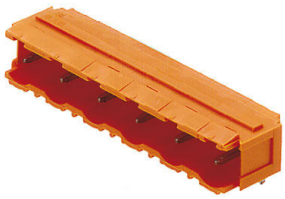
BLZ 7.62/04/180 SN BK BX

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Counterpart

SL 7.62/90B

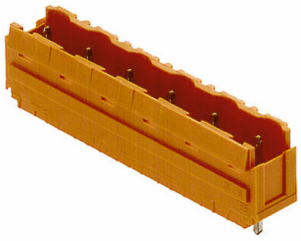


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.62/04/90B 4.5SN BK...	Version
Order No.	1624060000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT
GTIN (EAN)	4008190195113	solder connection, 7.62 mm, Number of poles: 4, 90°, Solder pin
Qty.	100 ST	length (l): 4.5 mm, tinned, black, Box
Type	SL 7.62/04/90B 3.2SN OR...	Version
Order No.	1624390000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT
GTIN (EAN)	4008190195441	solder connection, 7.62 mm, Number of poles: 4, 90°, Solder pin
Qty.	100 ST	length (l): 3.2 mm, tinned, orange, Box

SL 7.62/180B



Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.62/04/180B 4.5SN B...	Version
Order No.	1624940000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT
GTIN (EAN)	4008190195991	solder connection, 7.62 mm, Number of poles: 4, 180°, Solder pin
Qty.	60 ST	length (l): 4.5 mm, tinned, black, Box
Type	SL 7.62/04/180B 3.2SN O...	Version
Order No.	1625270000	PCB plug-in connector, male header, Dovetails for fixing blocks, THT
GTIN (EAN)	4008190196325	solder connection, 7.62 mm, Number of poles: 4, 180°, Solder pin
Qty.	100 ST	length (l): 3.2 mm, tinned, orange, Box

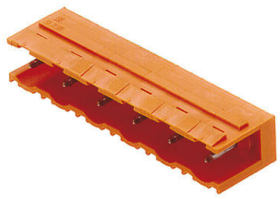
BLZ 7.62/04/180 SN BK BX

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Counterpart

SL 7.62/90

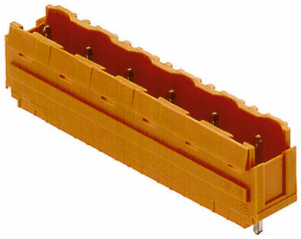


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.62/04/90 3.2SN OR ...	Version
Order No.	1624170000	PCB plug-in connector, male header, open side, THT solder
GTIN (EAN)	4008190195229	connection, 7.62 mm, Number of poles: 4, 90°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, orange, Box

SL 7.62/180



Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

General ordering data

Type	SL 7.62/04/180 3.2SN OR...	Version
Order No.	1625050000	PCB plug-in connector, male header, open side, THT solder
GTIN (EAN)	4008190196103	connection, 7.62 mm, Number of poles: 4, 180°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, orange, Box