

BVZ 7.62HP/06/180RSH180 SN BK BX
Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

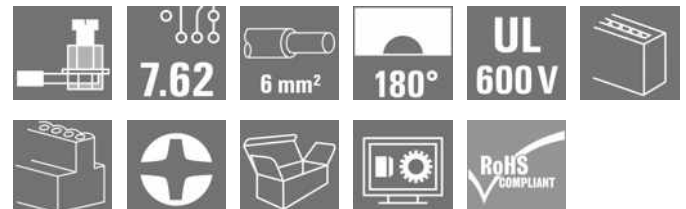
32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Product image


High-performance female header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, protection against faulty wiring, 4-point contact. Suitable for labelling.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 6, 180°, Clamping yoke connection, Clamping range, max. : 10 mm², Box
Order No.	1933370000
Type	BVZ 7.62HP/06/180RSH180 SN BK BX
GTIN (EAN)	4032248585403
Qty.	25 pc(s).
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm² UL: 600 V / 40.5 A / AWG 24 - AWG 8
Packaging	Box

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Technical data**Dimensions and weights**

Depth	84.6 mm	Depth (inches)	3.331 inch
Height	25 mm	Height (inches)	0.984 inch
Width	60.96 mm	Width (inches)	2.4 inch
Net weight	56.92 g		

Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
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System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Conductor outlet direction	180°
Number of poles	6	L1 in mm	38.1 mm
L1 in inches	1.5 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	6 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	Volume resistance	4.50 mΩ
Can be coded	Yes	Stripping length	12 mm
Tightening torque for screw flange, min.	0.2 Nm	Tightening torque for screw flange, max.	0.3 Nm
Tightening torque, min.	0.5 Nm	Tightening torque, max.	0.6 Nm
Clamping screw	M 3	Screwdriver blade	0.6 x 3.5
Plugging cycles	25	Plugging force/pole, max.	16.5 N
Pulling force/pole, max.	11 N		

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	UL 94 flammability rating	V-0
Contact base material	Copper alloy	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	6...8 μm Sn glossy
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Conductors suitable for connection

Clamping range, min.	0.2 mm ²
Clamping range, max.	10 mm ²
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	

Creation date May 5, 2023 1:05:55 PM CEST

Catalogue status 28.04.2023 / We reserve the right to make technical changes.

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Technical data

w. wire end ferrule, DIN 46228 pt 1, min. 0.5 mm²

w. wire end ferrule, DIN 46228 pt 1, max. 6 mm²

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.0 mm; 2.4 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
wire end ferrule	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	H0.5/18 OR	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm ²
wire end ferrule	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	H1.0/18 GE	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	H1.5/18D SW	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal	15 mm
	Recommended wire-end ferrule	H1.5/12	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
wire end ferrule	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	H0,75/18 W	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	H2.5/19D BL	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	H2.5/12	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	4 mm ²
wire end ferrule	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	H4.0/12	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	4 mm ²
wire end ferrule	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	H4.0/20D GR	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	6 mm ²
wire end ferrule	Stripping length	nominal	14 mm
	Recommended wire-end ferrule	H6.0/20 SW	
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	6 mm ²
wire end ferrule	Stripping length	nominal	12 mm
	Recommended wire-end ferrule	H6.0/12	

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.

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Technical data


Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	57 A
Rated current, max. number of poles (Tu=20°C)	54 A	Rated current, min. number of poles (Tu=40°C)	51 A
Rated current, max. number of poles (Tu=40°C)	41 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6,000 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Short-time withstand current resistance	3 x 1s with 420 A
Clearance, min.	10.2 mm	Creepage distance, min.	13 mm

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1534443
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)	40.5 A
Rated current (Use group C / CSA)	40.5 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (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)	40.5 A
Rated current (Use group C / UL 1059)	40.5 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	299 mm
VPE width	105 mm	VPE height	108 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
	Evaluation	available
	Test	durability
	Evaluation	passed

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DIN EN 61984 section 6.3 and 6.9.1 / 09.02,
DIN IEC 61213 part 7 section 5 / 05.94

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Technical data

Test: Misengagement (Non-interchangeability)

Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 61213 part 7 section 5 / 05.94
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 6 mm ²
	Type of conductor and conductor cross-section	stranded 6 mm ²
	Type of conductor and conductor cross-section	AWG 24/1
	Type of conductor and conductor cross-section	AWG 24/19
	Type of conductor and conductor cross-section	AWG 10/1
	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

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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 24/1 and conductor cross-section
	Type of conductor and conductor cross-section	AWG 24/19
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	1.4 kg	
Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²
	Type of conductor and conductor cross-section	stranded 6 mm ²
	Type of conductor and conductor cross-section	AWG 10/1
	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

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 24/1
	Type of conductor and conductor cross-section	AWG 24/19
Evaluation	passed	
Requirement	≥20 N	
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	≥80 N	
Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²
	Type of conductor and conductor cross-section	stranded 6 mm ²
	Type of conductor and conductor cross-section	AWG 10/1
	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

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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	ECLASS 12.0	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 variants on request
 - Rated current related to rated cross-section & min. No. of poles.
 - Wire end ferrule with plastic collar to DIN 46228/4
 - Wire end ferrule without plastic collar to DIN 46228/1
 - 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

Approvals

Approvals



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

Data sheet

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Technical data

Downloads

Approval/Certificate/Document of Conformity

[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

Engineering Data

[WSCAD](#)

Product Change Notification

[PCN_2016_138_PL33_Redesign_BVZ_762HP_Abstandshalter_DE](#)
[PCN_2016_138_PL33_Redesign_BVZ_762HP_outside_pole_spacer_EN](#)
[PCN_2016_275_PL33_plugable_SIBL_EN](#)
[PCN_2016_275_PL33_Steckbare_SIBL_DE](#)

User Documentation

[QR-Code product handling video](#)

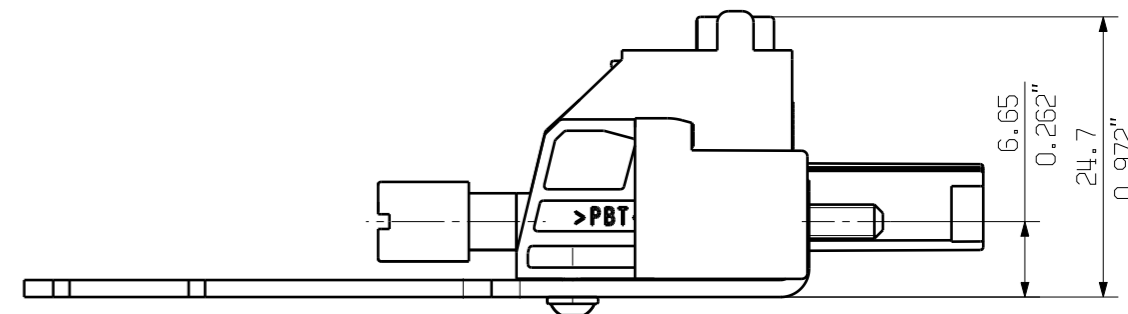
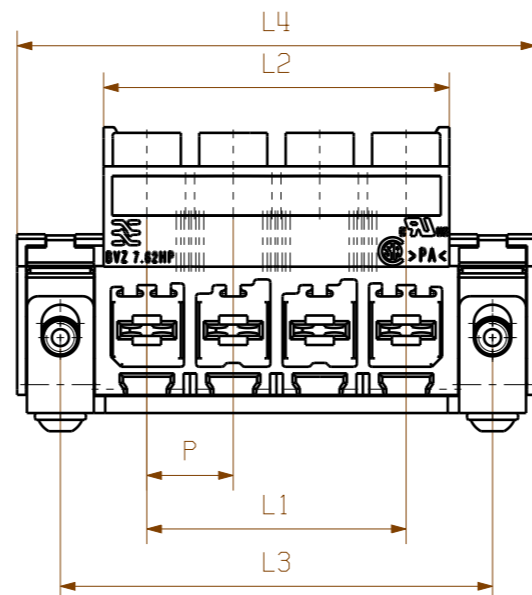
Catalogues

[Catalogues in PDF-format](#)

Brochures

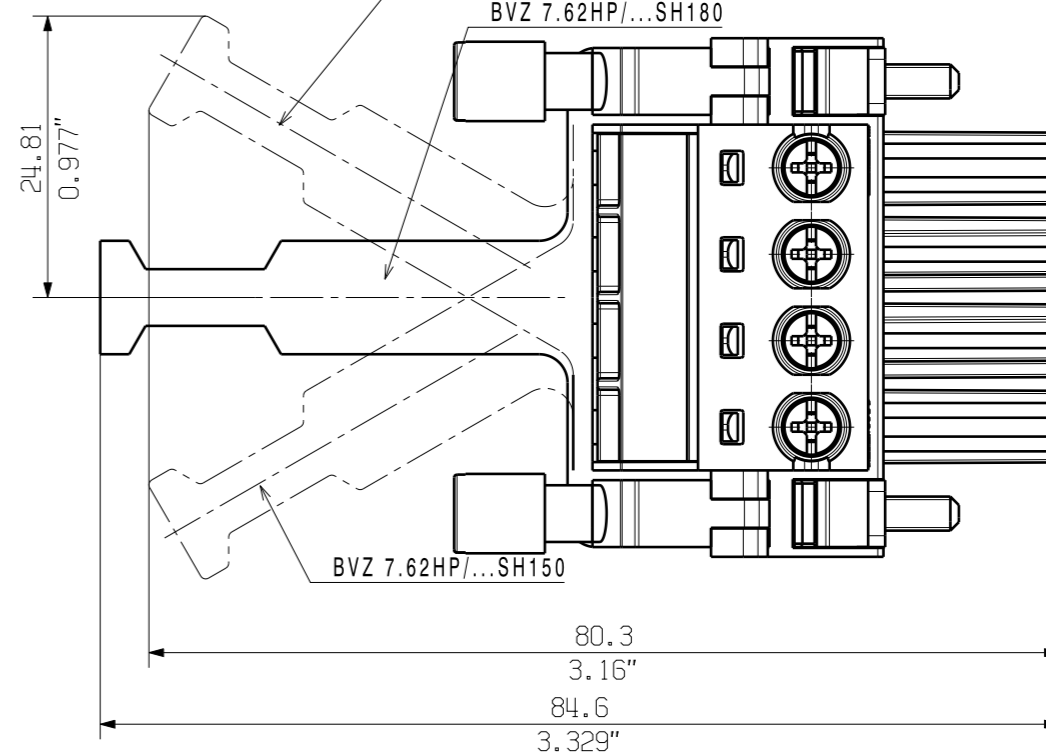
[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[FL HEATING ELECTR EN](#)
[FL APPL INVERTER EN](#)
[FL_BASE_STATION_EN](#)
[FL ELEVATOR EN](#)
[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)
[PO OMNIMATE EN](#)

BVZ 7.62HP/...SH180

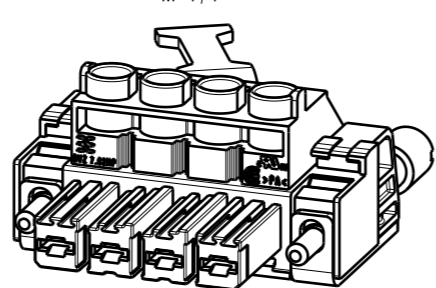


BVZ 7.62HP/...SH210

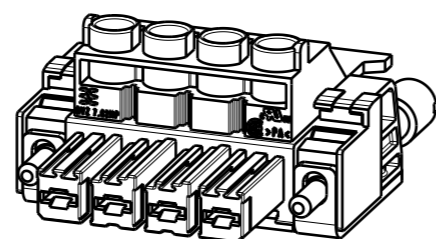
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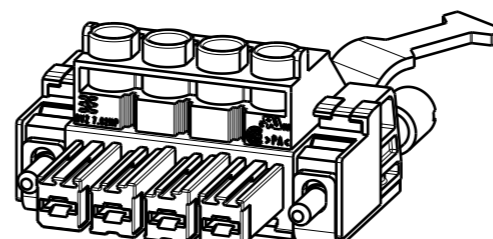
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BVZ 7.62HP/...SH150



BVZ 7.62HP/...SH180



BVZ 7.62HP/...SH210

n=POLZAHL/ NO OF POLES
P=RASTER/PITCH

6	38,10	1,50	45,72	1,80	53,34	2,10	60,96	2,40
5	30,48	1,20	38,10	1,50	45,72	1,80	53,34	2,10
4	22,86	0,90	30,48	1,20	38,10	1,50	45,72	1,80
3	15,24	0,60	22,86	0,90	30,48	1,20	38,10	1,50
n	L1 (mm)	L1 (Inch)	L2 (mm)	L2 (Inch)	L3 (mm)	L3 (Inch)	L4 (mm)	L4 (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 necessary 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.

Weidmüller PCB components are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

	DIN ISO 2768-m		90775/5 18.11.16 KRUG_M 01		Cat.no.: .	
			3 42184 05		Drawing no. Issue no. Sheet 01 of 02 sheets	
Scale: 1.5:1 Supersedes: .		Date Name Drawn 16.01.2007 NEUMANN_G Responsible KRUG_M Checked 21.11.2016 HERTEL_S Approved LANG_T		BVZ 7.62HP/...SH BUCHSENSTECKER FEMALE PLUG		Product file: SV/BVZ 7.62 7340

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