

## SVZ 7.62HP/02/180F SN BK BX SO

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

www.weidmueller.com

### Product image



High-performance male 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 connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

### General ordering data

Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2, 180°, Clamping yoke connection, Box
Order No.	<a href="#">2566470000</a>
Type	SVZ 7.62HP/02/180F SN BK BX SO
GTIN (EAN)	4050118576085
Qty.	100 items
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm <sup>2</sup> UL: 600 V / 42 A / AWG 24 - AWG 8
Packaging	Box

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (cURus)	E60693

**Dimensions and weights**

Depth	41.45 mm	Depth (inches)	1.6319 inch
Height	23.1 mm	Height (inches)	0.9094 inch
Width	30.48 mm	Width (inches)	1.2 inch
Net weight	12.64 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 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)	0.300 "	Conductor outlet direction	180°
Number of poles	2	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm <sup>2</sup>
Protection degree	IP20	Screwdriver blade	0.6 x 3.5
Plugging cycles	25		

**Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of plug contact	4...6 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.	125 °C

**Conductors suitable for connection**

Wire connection cross section AWG, max.	AWG 8		
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>		
Solid, max. H05(07) V-U	6 mm <sup>2</sup>		
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>		
Flexible, max. H05(07) V-K	10 mm <sup>2</sup>		
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm <sup>2</sup>		
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm <sup>2</sup>		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>

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wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0,5/18 OR</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	1 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	<a href="#">H1,0/18 GE</a>
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	<a href="#">H1,5/18D SW</a>
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H1,5/12</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	0.75 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H2,5/19D BL</a>
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H2,5/12</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	4 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H4,0/12</a>
	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H4,0/20D GR</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	6 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H6,0/12</a>

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)	57 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated voltage for surge voltage class / pollution degree II/2	1000 V	Rated voltage for surge voltage class / pollution degree III/2	1000 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6000 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Creepage distance, min.	13.8 mm	Clearance, min.	13.56 mm

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## Technical data

### 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)	42 A
Rated current (Use group C / UL 1059)	42 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	334.00 mm
VPE width	150.00 mm	VPE height	89.00 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	
	Evaluation	available	
	Test	durability	
Test: Misengagement (Non-interchangeability)	Evaluation	passed	
	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08	
	Test	180° turned with coding elements	
	Evaluation	passed	
Test: Clampable cross section	Test	180° turned without coding elements	
	Evaluation	passed	
	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 <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>
		Type of conductor and conductor cross-section	solid 6 mm <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 6 mm <sup>2</sup>
		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		
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00	
	Requirement	0.2 kg	

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**Technical data**

Pull-out test	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	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>
	Evaluation	passed	
	Requirement	1.4 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 6 mm <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 6 mm <sup>2</sup>
		Type of conductor and conductor cross-section	AWG 10/1
		Type of conductor and conductor cross-section	AWG 10/19
	Evaluation	passed	
	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 <sup>2</sup>	
	Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>	
Evaluation	passed		
Requirement	≥80 N		
Conductor type	Type of conductor and conductor cross-section	solid 6 mm <sup>2</sup>	
	Type of conductor and conductor cross-section	stranded 6 mm <sup>2</sup>	
	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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**Technical data****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	<ul style="list-style-type: none"><li>• 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</li><li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li></ul>

**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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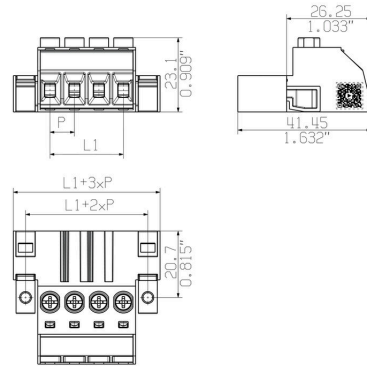
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Drawings

Product image



Dimensional drawing



Graph

BVL 7.62HP/./180 - SVZ 7.62HP/./180



Graph

BVZ 7.62HP/./180 - SVZ 7.62HP/./180



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## Accessories

## Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm<sup>2</sup> connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm<sup>2</sup> connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our service:

Design your individual connectors simply by using the product configurator.

## General ordering data

Type	BV/SV 7.62HP KO	Version	
Order No.	<a href="#">1937590000</a>	PCB plug-in connector, Accessories, Coding element, black, Number	
GTIN (EAN)	4032248608881	of poles: 1	
Qty.	50 ST		

## 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 0.8X4.5X125	Version	
Order No.	<a href="#">9009020000</a>	Screwdriver, Screwdriver	
GTIN (EAN)	4032248266883		
Qty.	1 ST		

## Crimping tools



Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

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## Accessories

### General ordering data

Type	PZ 6/5	Version	
Order No.	<a href="#">9011460000</a>	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm <sup>2</sup> , 6mm <sup>2</sup> ,	
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp	
Qty.	1 ST		