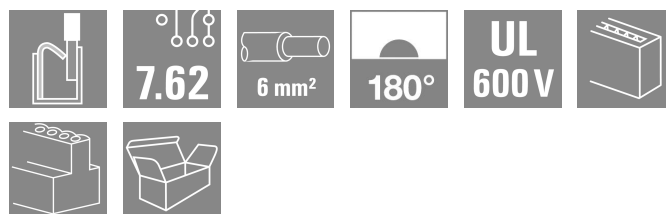
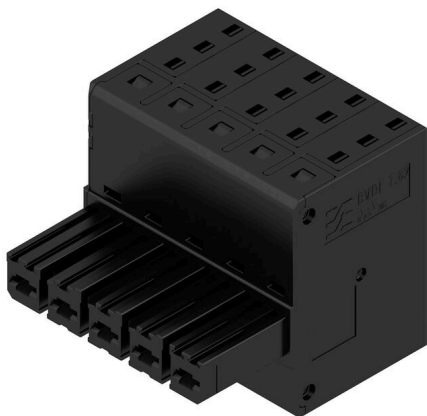


**BVDF 7.62HP/05/180 SN BK BX**
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)
**Product image**


Bus connector with two connections per pole with the time-saving 6mm<sup>2</sup> PUSH IN connection system.

- The extremely short cross-connection allows you to safely loop through bus currents.
- PUSH IN connection: Solid wires and stranded wires with ferrules need only to be inserted and they are ready.
- The self-locking middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

**General ordering data**

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm <sup>2</sup> , Box
Order No.	<a href="#">2720450000</a>
Type	BVDF 7.62HP/05/180 SN BK BX
GTIN (EAN)	4050118780963
Qty.	24 items
Product data	IEC: 600 V / 46 A / 0.5 - 10 mm <sup>2</sup> UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

## BVDF 7.62HP/05/180 SN BK BX

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## Technical data

## Approvals

Approvals



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

## Dimensions and weights

Depth	42.55 mm	Depth (inches)	1.6752 inch
Height	35.05 mm	Height (inches)	1.3799 inch
Width	49.26 mm	Width (inches)	1.9394 inch
Net weight	42.64 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	PUSH IN with actuator, Tension-clamp connection		
Pitch in mm (P)	7.62 mm		
Pitch in inches (P)	0.300 "		
Conductor outlet direction	180°		
Number of poles	5		
L1 in mm	30.48 mm		
L1 in inches	1.200 "		
Number of rows	2		
Pin series quantity	1		
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		
Stripping length tolerance	min.	-1 mm	
	max.	1 mm	
Screwdriver blade	0.6 x 3.5		
Plugging cycles	25		
Plugging force/pole, max.	12 N		
Pulling force/pole, max.	12 N		

## Material data

Insulating material	PA GF	Colour	black
Colour of operational elements	white	Colour chart (similar)	RAL 9011
Insulating material group	I	Comparative Tracking Index (CTI)	≥ 600
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	1...3 µm Ni / 4...10 µm Sn	Storage temperature, min.	-40 °C

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## Technical data

Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C		

### Conductors suitable for connection

Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	10 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	10 mm <sup>2</sup>
Stranded, min. H07V-R	1.5 mm <sup>2</sup>
Stranded, max. H07V-R	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. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 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	
	nominal	0.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0,5/12 OR</a>
Cross-section for conductor connection	nominal	0.75 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 14 mm
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
Cross-section for conductor connection	nominal	1 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 15 mm
wire end ferrule	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	<a href="#">H1,0/18 GE</a>
Cross-section for conductor connection	nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 12 mm
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H1,5/12</a>
Cross-section for conductor connection	nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 15 mm
wire end ferrule	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	<a href="#">H1,5/18D SW</a>
Cross-section for conductor connection	nominal	2.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 12 mm
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H2,5/12</a>
Cross-section for conductor connection	nominal	2.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 14 mm
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H2,5/19D BL</a>
Cross-section for conductor connection	nominal	4 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 12 mm
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H4,0/12</a>
Cross-section for conductor connection	nominal	4 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 14 mm
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H4,0/20D GR</a>
Cross-section for conductor connection	nominal	6 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 12 mm
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H6,0/12</a>

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**Technical data**

		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>
	Cross-section for conductor connection	nominal	10 mm <sup>2</sup>
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)	46 A
Rated current, max. number of poles (Tu=20°C)	42 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	37.5 A	Rated voltage for surge voltage class / pollution degree II/2	600 V
Rated voltage for surge voltage class / pollution degree III/2	600 V	Rated voltage for surge voltage class / pollution degree III/3	600 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 400 A
Creepage distance, min.	11.03 mm	Clearance, min.	10.36 mm

**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)	35 A
Rated current (Use group C / UL 1059)	35 A	Rated current (Use group D / UL 1059)	35 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	355.00 mm
VPE width	143.00 mm	VPE height	60.00 mm

**Type tests**

Test: Durability of markings	Standard	IEC 61984 section 7.3.2 / 10.08 Taking pattern from IEC 60068-2-70 / 12.95	
	Test	mark of origin, type identification, pitch, durability	
	Evaluation	available	
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 / 04.08	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
		Type of conductor and conductor cross-section	H07V-K6
		Type of conductor and conductor cross-section	H07V-K10

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**Technical data**

Test for damage to and accidental loosening of conductors		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 8/19
	Evaluation	passed	
	Standard	IEC 60999-1 section 9.4 / 11.99	
	Requirement	0.2 kg	
	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	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
Evaluation	passed		
Requirement	1.4 kg		
Conductor type	Type of conductor and conductor cross-section	H07V-K6	
Evaluation	passed		
Requirement	2.0 kg		
Conductor type	Type of conductor and conductor cross-section	H07V-U10	
	Type of conductor and conductor cross-section	AWG 8/19	
Evaluation	passed		
Standard	IEC 60999-1 section 9.5 / 11.99		
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	H05V-U0.5	
	Type of conductor and conductor cross-section	H05V-K0.5	
Evaluation	passed		
Requirement	≥80 N		
Conductor type	Type of conductor and conductor cross-section	H07V-K6	
Evaluation	passed		
Requirement	≥ 90N		
Pull-out test			
	Evaluation	passed	
	Standard	IEC 60999-1 section 9.5 / 11.99	
	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	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
Evaluation	passed		
Requirement	≥80 N		
Conductor type	Type of conductor and conductor cross-section	H07V-K6	
Evaluation	passed		
Requirement	≥ 90N		

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## Technical data

Conductor type	Type of conductor and conductor cross-section	H07V-K10
	Type of conductor and conductor cross-section	AWG 8/19
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	<ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <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		



## BVDF 7.62HP/05/180 SN BK BX

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 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

## Counterpart

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## SV 7.62HP 180G SN



Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for lead-free wave soldering.

## General ordering data

Type	SV 7.62HP/05/180G 3.5SN...	Version
Order No.	<a href="#">1930630000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580606	connection, 7.62 mm, Number of poles: 5, 180°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

## SV 7.62HP 270G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

Type	SV 7.62HP/05/270G 3.5SN...	Version
Order No.	<a href="#">1931290000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248581320	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

## SV 7.62HP 90G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

Type	SV 7.62HP/05/90G 3.5SN ...	Version
Order No.	<a href="#">1930300000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580170	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

## BVDF 7.62HP/05/180 SN BK BX

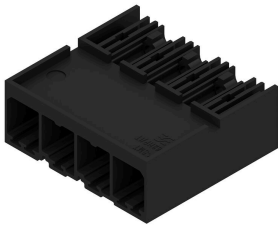
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## Counterpart

Type	SV 7.62HP/05/90G 3.5SN ...	Version
Order No.	<a href="#">2465330000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118479775	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

## SV-SMT 7.62HP 270G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

Tailor-made solutions for high performers

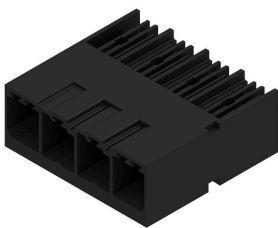
More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

### General ordering data

Type	SV-SMT 7.62HP/05/270G 2...	Version
Order No.	<a href="#">2499360000</a>	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118512601	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	48 ST	2.6 mm, tinned, black, Box

Type	SV-SMT 7.62HP/05/270G 3...	Version
Order No.	<a href="#">2498420000</a>	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118511642	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	50 ST	3.5 mm, tinned, black, Box

## SV-SMT 7.62HP 90G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

Tailor-made solutions for high performers

More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

### General ordering data

Type	SV-SMT 7.62HP/05/90G 2...	Version
Order No.	<a href="#">2499560000</a>	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118512861	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	2.6 mm, tinned, black, Box

## BVDF 7.62HP/05/180 SN BK BX

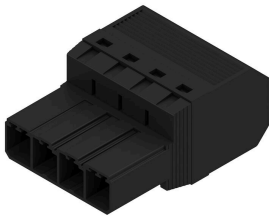
**Weidmüller Interface GmbH & Co. KG**  
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## Counterpart

Type	SV-SMT 7.62HP/05/90G 3...	Version
Order No.	<a href="#">2498370000</a>	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118511604	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	50 ST	3.5 mm, tinned, black, Box

## SVF 7.62HP/180G



180° inverted pin header with PUSH IN connection technology for field wiring in 6mm<sup>2</sup> in a 7.62 pitch, as a "three-flange variant" for enclosure feed-through. Suitable for enclosures with a max. wall thickness of 2mm. Also perfect as a touch-safe solution for reverse voltages. Meets the requirements of UL 1059 600 V Class C and IEC 61800-5-1.

### General ordering data

Type	SVF 7.62HP/05/180G SN B...	Version
Order No.	<a href="#">1060870000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4032248810840	5, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	40 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

## SVZ 7.62HP 180 SN



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

Type	SVZ 7.62HP/05/180G SN B...	Version
Order No.	<a href="#">1931660000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5,
GTIN (EAN)	4032248581658	180°, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Qty.	50 ST	