

BVDF 7.62HP/07/180 SN BK BX

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

www.weidmueller.com

Product image



Bus connector with two connections per pole with the time-saving 6mm² 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: 7, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm ² , Box
Order No.	2720470000
Type	BVDF 7.62HP/07/180 SN BK BX
GTIN (EAN)	4050118780987
Qty.	15 items
Product data	IEC: 600 V / 46 A / 0.5 - 10 mm ² UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

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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	69.58 mm	Width (inches)	2.7394 inch
Net weight	73.17 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	7		
L1 in mm	45.62 mm		
L1 in inches	1.800 "		
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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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 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	0.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, min. H07V-R	1.5 mm ²
Stranded, max. H07V-R	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm ²

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

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		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H6,0/20 SW
	Cross-section for conductor connection	nominal	10 mm ²
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)	41 A	Rated current, min. number of poles (Tu=40°C)	38 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	338.00 mm
VPE width	130.00 mm	VPE height	54.00 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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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-6 10 "Class 2". Further claims on the products can be evaluated on request.
Notes	<ul style="list-style-type: none"> • Additional variants on request • 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. • 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		

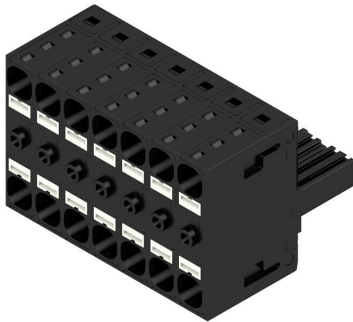
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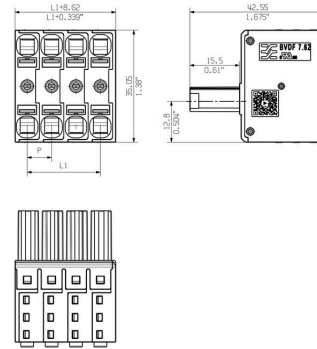
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Drawings

Product image

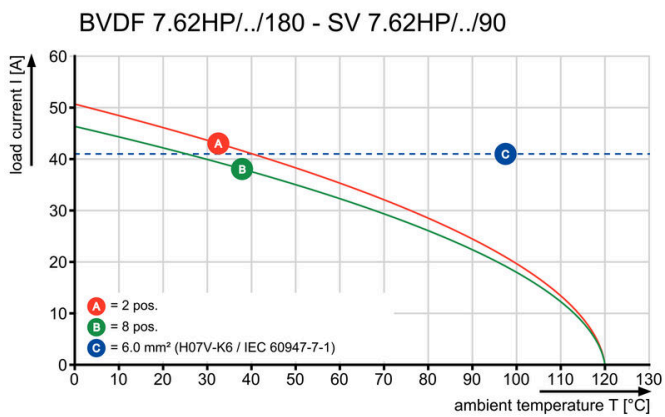


Dimensional drawing



Similar to illustration

Derating curve



Product benefits



Product benefits



Product benefits



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Counterpart

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/07/180G 3.5SN...	Version
Order No.	1930650000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580620	connection, 7.62 mm, Number of poles: 7, 180°, Solder pin length (l):
Qty.	30 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/07/270G 3.5SN...	Version
Order No.	1931310000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580347	connection, 7.62 mm, Number of poles: 7, 270°, Solder pin length (l):
Qty.	30 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/07/90G 3.5SN ...	Version
Order No.	1930320000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580194	connection, 7.62 mm, Number of poles: 7, 90°, Solder pin length (l):
Qty.	30 ST	3.5 mm, tinned, black, Box

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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/07/180G SN B...	Version
Order No.	1931680000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 7,
GTIN (EAN)	4032248581672	180°, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box
Qty.	25 ST	