

## BVFL 7.62HP/05/180F SN BK BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

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### Product image



180° female plug with PUSH IN connection system with adjustable actuator (pusher) for field wiring 6 mm<sup>2</sup> in a 7.62 pitch. Meets the requirements of UL 1059 600 V Class C ad IEC 61800-5-1. Also ideal as a touch-safe solution for the power output. The self-locking middle flange which can optionally also be screwed, reduces the space requirements by one pitch width in comparison with conventional solutions. Variants: without flange, external flange, middle flange with snap-on mechanism and optionally additional screw mount

### General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, PUSH IN with actuator, Clamping range, max.: 6 mm <sup>2</sup> , Box
Order No.	<a href="#">2549350000</a>
Type	BVFL 7.62HP/05/180F SN BK BX
GTIN (EAN)	4050118558821
Qty.	36 pc(s).
Product data	IEC: 1000 V / 41 A / 0.5 - 6 mm <sup>2</sup> UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

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**Technical data**
[www.weidmuller.com](http://www.weidmuller.com)
**Dimensions and weights**

Depth	52.1 mm	Depth (inches)	2.051 inch
Height	20.6 mm	Height (inches)	0.811 inch
Net weight	23.806 g		

**System Parameters**

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Conductor outlet direction	180°
Number of poles	5	L1 in mm	30.48 mm
L1 in inches	1.2 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	4.50 mΩ	Can be coded	Yes
Stripping length	12 mm	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)	≥ 600	UL 94 flammability rating	V-0
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.	125 °C		

**Conductors suitable for connection**

Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	6 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.5 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	6 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.	
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>

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

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**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	41 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	38 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 kV	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.	10.4 mm	Creepage distance, min.	12.7 mm

**Rated data acc. to CSA**

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)	33 A
Rated current (Use group C / CSA)	33 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

**Rated data acc. to UL 1059**

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)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

**Packing**

Packaging	Box	VPE length	354 mm
VPE width	137 mm	VPE height	61 mm

**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

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### Important note

IPC conformity Conformity: The products are developed, manufactured and delivered according to 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
- 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.
- Additional pole combinations on request
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

### Approvals

ROHS Conform

### Downloads

Engineering Data	<a href="#">CAD data – STEP</a>
Product Change Notification	<a href="#">EN - Change of isolation material</a> <a href="#">DE - Werkstoffänderung Pusher</a> <a href="#">20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors</a> <a href="#">20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder</a> <a href="#">20220208 Visual change Temporarily different color for connectors and accessories</a> <a href="#">20220208 Visuelle Änderung Vorübergehend anderer Farbton für Steckverbinder und Zubehör</a>
User Documentation	<a href="#">Operating Instruction BVFL</a> <a href="#">QR-Code product handling video</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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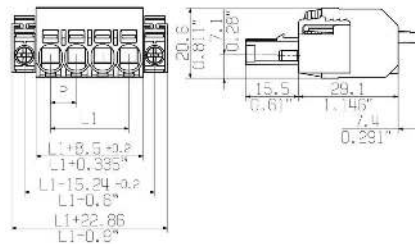
Fax. +49 5231 14-2083

Drawings

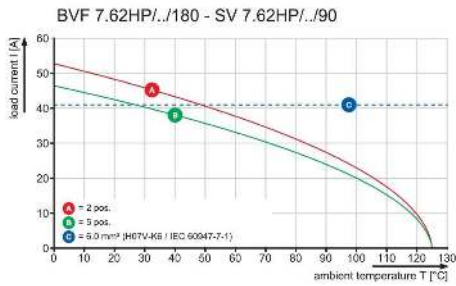
Product image



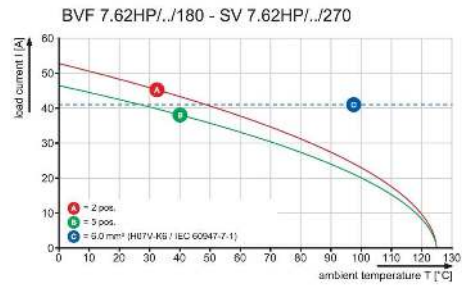
Dimensional drawing [info@weidmueller.com](mailto:info@weidmueller.com)



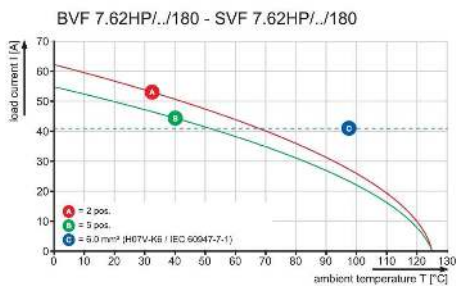
Graph



Graph



Graph



Product benefits



Secure connection of small conductors  
PUSH IN WIRE READY

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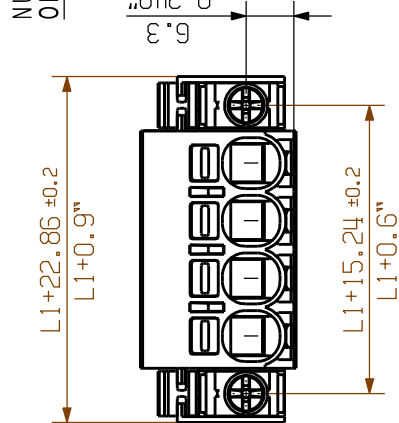
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**Drawings**

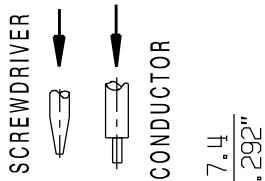
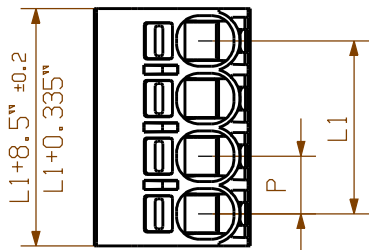
**Product benefits**



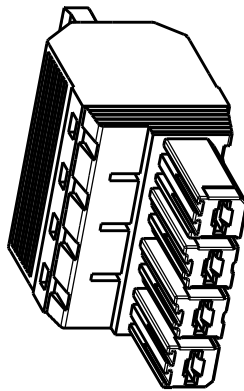
Installation without tools  
Outlet direction: 90° und 180°



SHOWN: BVFL 7.62HP/04/180

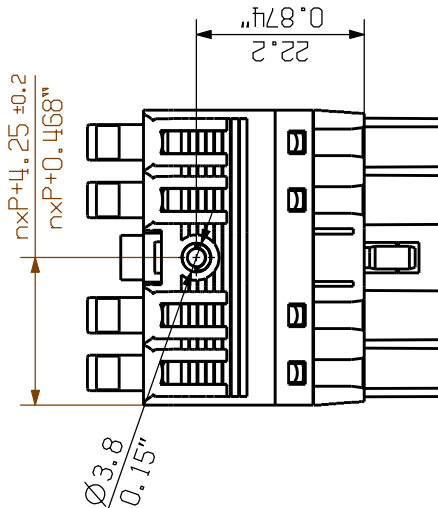


M 1:1



NUR FÜR DEN GEBRAUCH BEI WEIDMUELLER. WEIDMUELLER EXZLUSSIV REZERVIERT SICH DAS RECHT ZU PATENTEN, NUTZMUEDELN ODER DESIGNEN. FÜR DEN ABGABE VON SCHADENSERSATZ, VERWERTUNG UND MITTEILUNG SEINER INHALTS SIND VERBOTTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET. FÜR DEN ABGABE VON SCHADENSERSATZ, VERWERTUNG UND MITTEILUNG SEINER INHALTS SIND VERBOTTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET.

SHOWN: BVFL 7.62HP/04/180M(S)/F



M 1:1

F = Flansch / flange  
 SF = Schraubflansch / screw flang  
 MF = Mittelflansch / middle flange  
 MSF = Mittelschraubflansch / middle screw flange  
 P = Raster / pitch  
 n = Polzahl / no of poles

6M(S)/F4	P	P	P	P
5M(S)/F4	P	P	P	P