

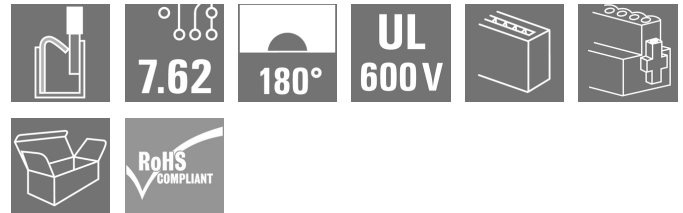
**SVFL 7.62HP/04/180MF3 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

180° inverted pin header with PUSH IN connection technology and adjustable actuator (pusher) for field wiring 6 mm<sup>2</sup> in a 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V Class C and IEC 61800-5-1. Variants: without flange, external flange, middle flange with snap-on mechanism and optional additional screw mount.

**General ordering data**

Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4, 180°, PUSH IN with actuator, Clamping range, max. : 6 mm <sup>2</sup> , Box
Order No.	<a href="#">1547580000</a>
Type	SVFL 7.62HP/04/180MF3 SN BK BX
GTIN (EAN)	4050118353181
Qty.	48 pc(s).
Product data	IEC: 1000 V / 41 A / 0.5 - 6 mm <sup>2</sup> UL: 600 V / 36 A / AWG 24 - AWG 10
Packaging	Box

Creation date June 29, 2024 6:52:20 PM CEST

Catalogue status 14.06.2024 / We reserve the right to make technical changes.

## SVFL 7.62HP/04/180MF3 SN BK BX

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## Technical data

## Dimensions and weights

Depth	47.7 mm	Depth (inches)	1.878 inch
Height	23.4 mm	Height (inches)	0.921 inch
Width	38.98 mm	Width (inches)	1.535 inch
Net weight	16 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 "	Conductor outlet direction	180°
Number of poles	4	L1 in mm	30.48 mm
L1 in inches	1.2 "	Number of rows	1
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	IP20 plugged	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
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	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

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, 1.5 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, 1.5 mm <sup>2</sup> min.	
w. wire end ferrule, DIN 46228 pt 1, 6 mm <sup>2</sup> max.	

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## Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired		
		nominal	2.5 mm <sup>2</sup>		
	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	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	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>		
	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>		
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, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=20°C)	41 A
Rated current, max. number of poles (Tu=40°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated voltage for surge voltage class / pollution degree III/2	800 V	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Clearance, min.	12.7 mm	Short-time withstand current resistance	3 x 1s with 420 A
		Creepage distance, min.	12.7 mm

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## Technical data

## Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-70176790

Rated voltage (Use group B / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	35 A
Wire cross-section, AWG, min.	AWG 24
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / CSA)	600 V
Rated current (Use group B / CSA)	35 A
Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, max.	AWG 10

## 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 D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	36 A
Wire cross-section, AWG, min.	AWG 24
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	600 V
Rated current (Use group B / UL 1059)	36 A
Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, max.	AWG 10

## Packing

Packaging	Box	VPE length	353 mm
VPE width	136 mm	VPE height	61 mm

## Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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	ECLASS 13.0	27-46-02-02

## Environmental Product Compliance

REACH SVHC

/

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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>• Additional variants on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</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>• Additional pole combinations on request</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>

## Approvals

Approvals



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

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
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>
User Documentation	<a href="#">QR-Code product handling video</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL BASE STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>

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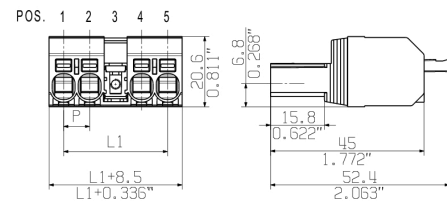
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## Drawings


## Product image



## Dimensional drawing



## Connection diagram

6	M(S)F6	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	
5	M(S)F4	o	o	o	X	o	o	
5	M(S)F3	o	o	X	o	o	o	
5	M(S)F2	o	X	o	o	o	o	
4	M(S)F4	o	o	o	X	o	o	
4	M(S)F3	o	o	X	o	o	o	
4	M(S)F2	o	X	o	o	o	o	
3	M(S)F3	o	o	X	o	o	o	
3	M(S)F2	o	X	o	o	o	o	
2	M(S)F2	o	X	o	o	o	o	
NO OF POLES		1 2 3 4 5 6 7						
X = MIDDLE FLANGE POSITION								

Similar to illustration

## Product benefits



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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

## General ordering data

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

## 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

## 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 pc(s).	

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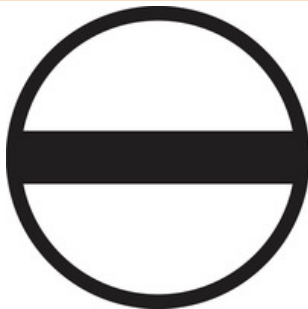
Germany

[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Coupling set**

With the aid of the SVF/BVF 7.62HP COUPLE SET the two plug-in elements can be connected back-to-back to form a 2-row connector with a maximum of 2 x 4 poles.

**General ordering data**

Type	SVF/BVF 7.62HP COUPLE S ...	Version	Product data	Packaging	
Order No.	<a href="#">1440850000</a>	PCB plug-in connector, Accessories, Mounting block, black		Box	
GTIN (EAN)	4050118247060				
Qty.	20 pc(s).				

**Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

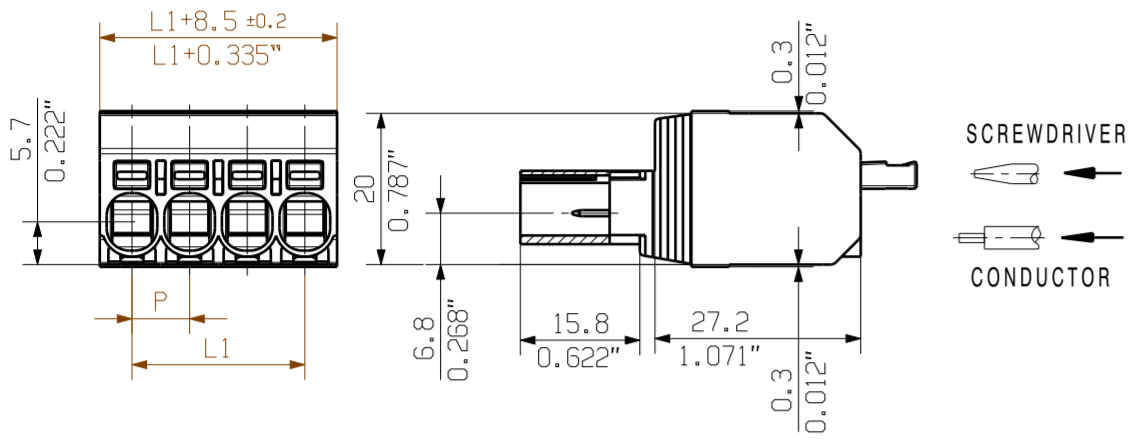
**General ordering data**

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

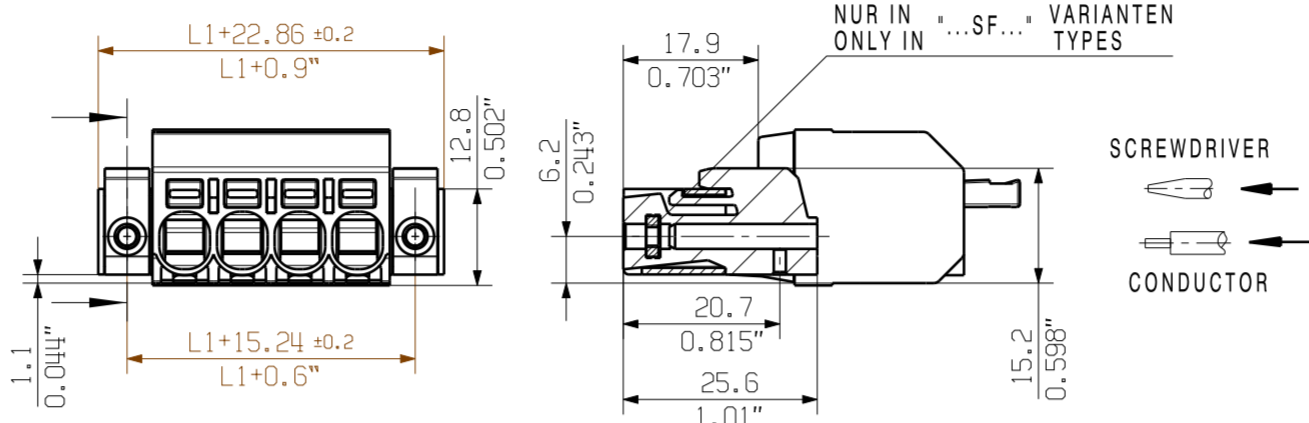
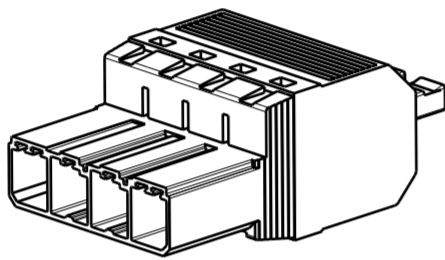
SHOWN: SVFL 7.62HP/04/180

SHOWN: SVFL 7.62HP/04/180SF

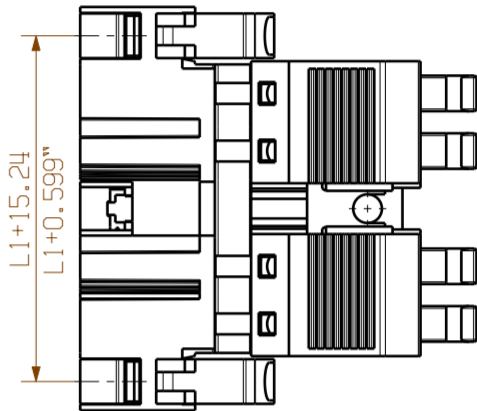
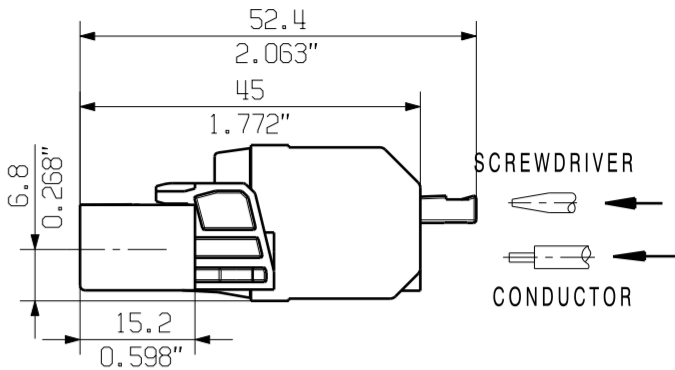
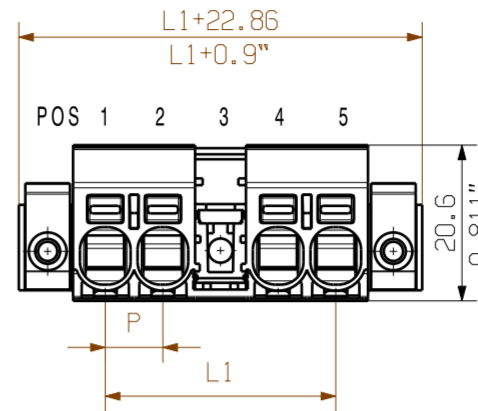
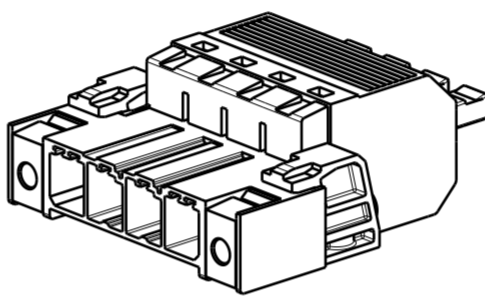
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M 1/1



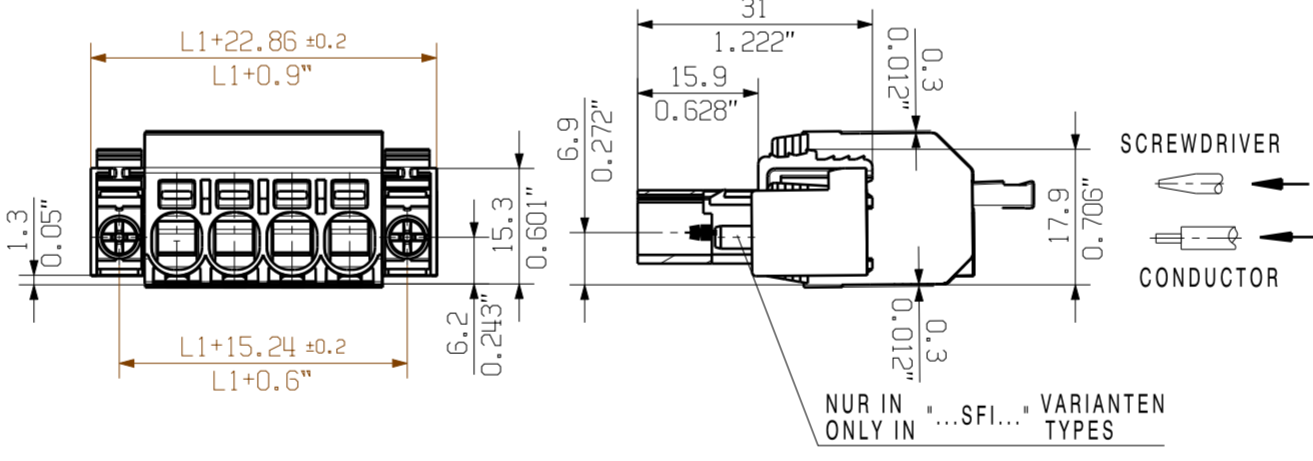
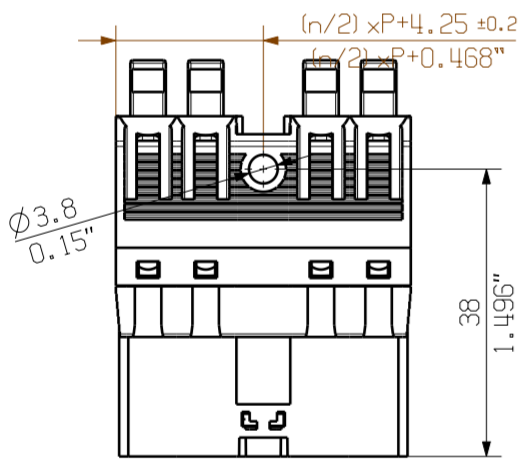
M 1/1



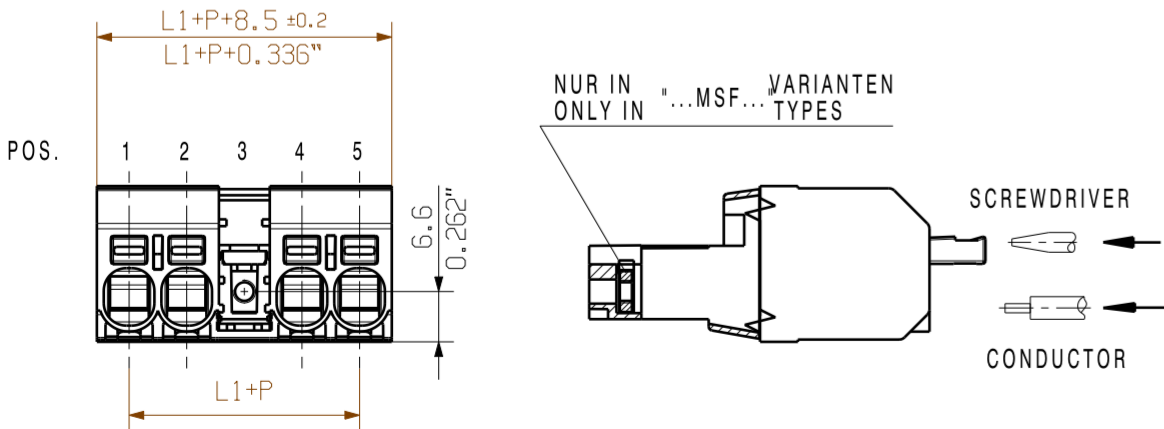
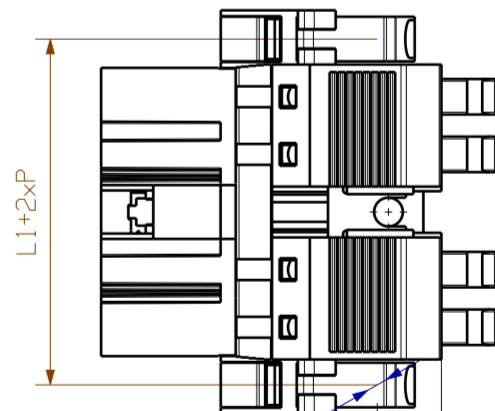
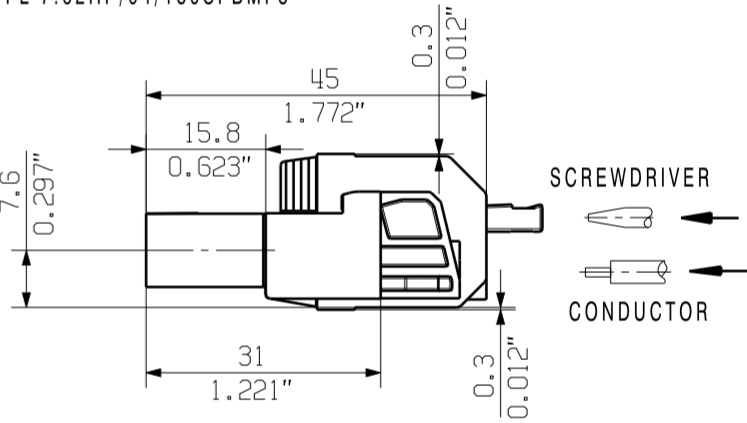
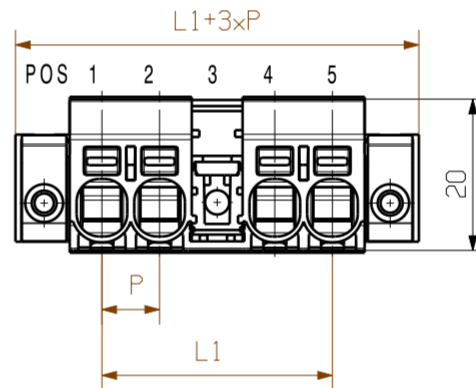
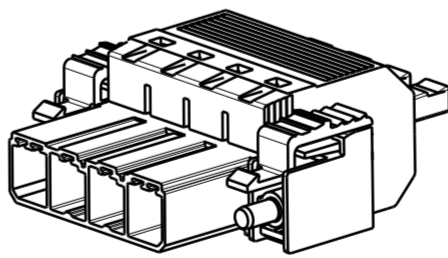
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SHOWN: SVFL 7.62HP/04/180SFI

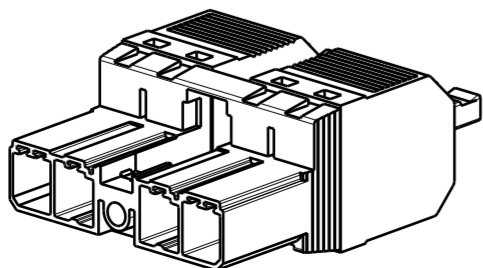
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M 1/1



M 1/1



P=RASTER/PITCH  
n=POLZAHL/NO. OF POLES  
MF=MITTELFANSCH/MIDDLE FLANGE

6 MF 4	POL	POL	POL	MF	POL	POL	POL
5 MF 4	POL	POL	POL	MF	POL	POL	
5 MF 3	POL	POL	MF	POL	POL	POL	
4 MF 4	POL	POL	POL	MF	POL		
4 MF 3	POL	POL	MF	POL	POL		
3 MF 3	POL	POL	MF	POL			
3 MF 2	POL	MF	POL	POL			
2 MF 2	POL	MF	POL				
POLE	1	2	3	4	5	6	7
n	POS.						

ORDER NUMBERS  
SEE DRAWING 46101 SHEET 01

6	38,10	1,5
5	30,48	1,2
4	22,86	0,9
3	15,24	0,6
2	7,62	0,3
n	L1 (mm)	L1 (Inch)

GENERAL TOLERANCE:  
DIN ISO 2768-m

First Issue Date  
28.08.2018

Modification  
Date  
Name

Drawn  
23.10.2018  
Administrator

Responsible  
Krug, Matthias

Scale: 2/1  
Size: A2  
Drawings Assembly

Prim PLM Part No.: 015882

Prim ERP Part No.: 1547550000

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4

SVFL 7.62HP/180  
STIFTSTECKER  
MALE PLUG

Product file: 7390 BVF/SVF 7.62HP

Weidmüller

60584  
Drawing no. 4  
Sheet 01 of 01 sheets

not released

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 with 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.