

## SV 7.62HP/02/90MF2 3.5SN BK BX

**Weidmüller Interface GmbH & Co. KG**

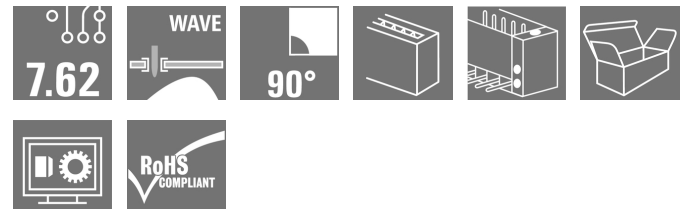
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

### Product image



Similar to illustration

90° male header with middle flange with a 7.62 pitch.

Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V.

Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.

The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.

On request: available with screw flange or without flange.

### General ordering data

Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	<a href="#">1048390000</a>
Type	SV 7.62HP/02/90MF2 3.5SN BK BX
GTIN (EAN)	4032248786633
Qty.	78 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 40.5 A
Packaging	Box

Creation date March 22, 2021 8:51:51 PM CET

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## Technical data

## Dimensions and weights

Depth	28.3 mm	Depth (inches)	1.114 inch
Height	14.9 mm	Height (inches)	0.587 inch
Height of lowest version	11.4 mm	Net weight	6.115 g

## System specifications

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Outgoing elbow	90°
Number of poles	2	Number of solder pins per pole	2
Solder pin length (l)	3.5 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Solder pin dimensions	0.8 x 1.0 mm	Solder eyelet hole diameter (D)	1.3 mm
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm	L1 in mm	15.24 mm
L1 in inches	0.6 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Touch-safe above the printed circuit board
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	2.00 mΩ
Can be coded	Yes		

## 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	Copper alloy	Contact surface	tinned
Layer structure of solder connection	1...3 μm Ni / 4...6 μm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	130 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	130 °C		

## 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 current, max. number of poles (Tu=40°C)	41 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	630 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	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 420 A

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## Technical data

## Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	35 A

Rated voltage (Use group C / CSA)	300 V
Rated current (Use group B / CSA)	35 A
Rated current (Use group D / CSA)	5 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	40.5 A

Rated voltage (Use group C / UL 1059)	300 V
Rated current (Use group B / UL 1059)	40.5 A
Rated current (Use group D / UL 1059)	5 A
Creepage distance, min.	9.6 mm

Clearance distance, min.

6.9 mm

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Packing

Packaging	Box	VPE length	35 mm
VPE width	135 mm	VPE height	350 mm

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ECLASS 9.0	27-44-04-02	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01

## 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

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- 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.
- MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Data sheet****SV 7.62HP/02/90MF2 3.5SN BK BX****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

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**Technical data****Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>

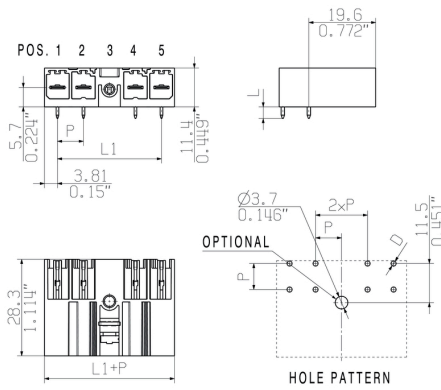
**SV 7.62HP/02/90MF2 3.5SN BK BX**

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**Drawings**

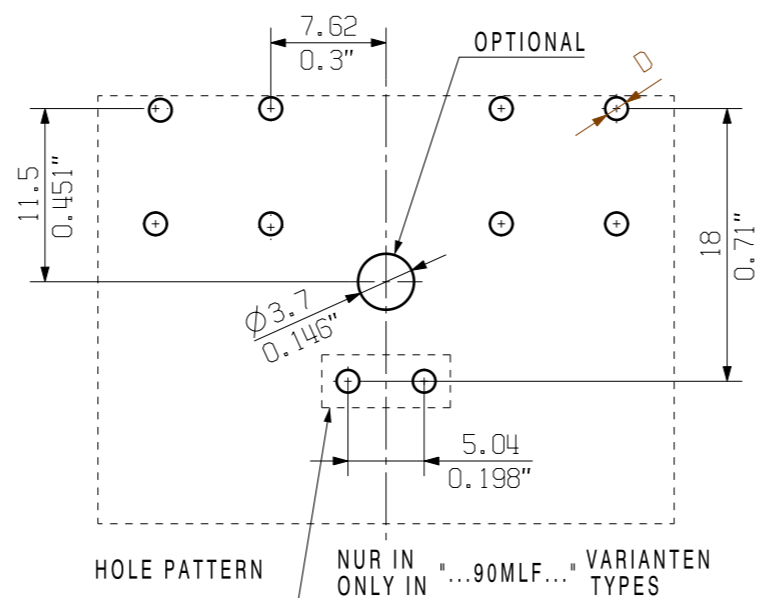
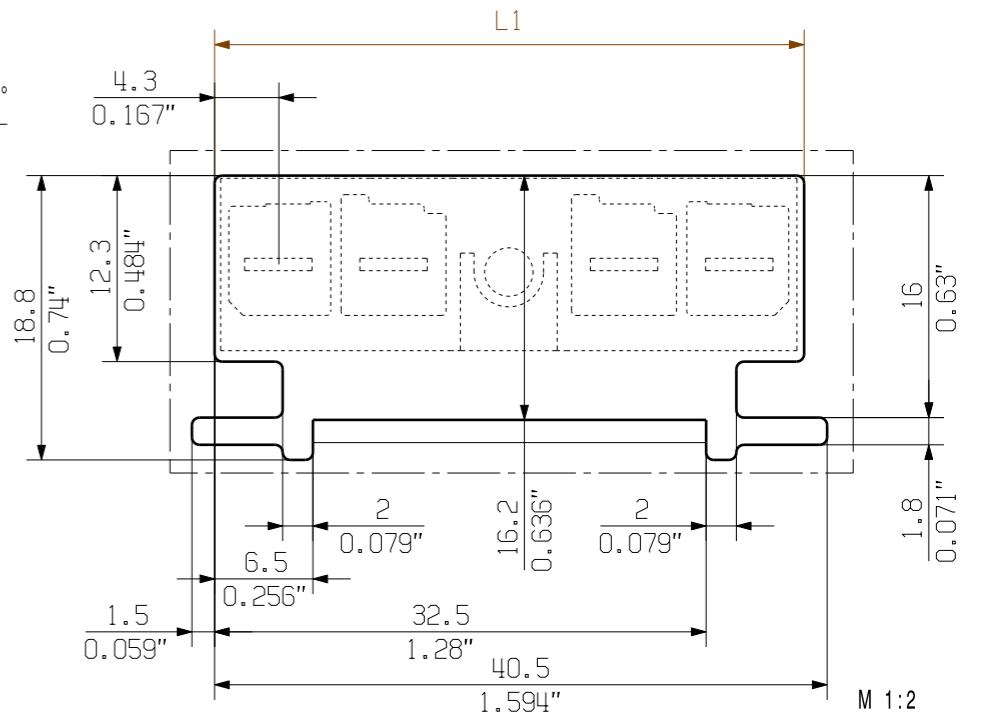
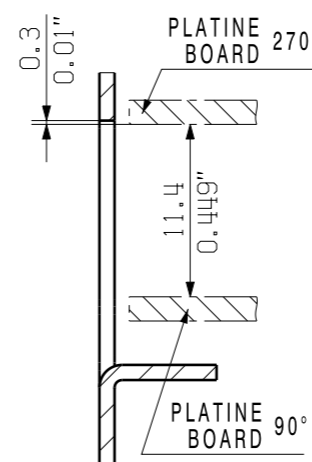
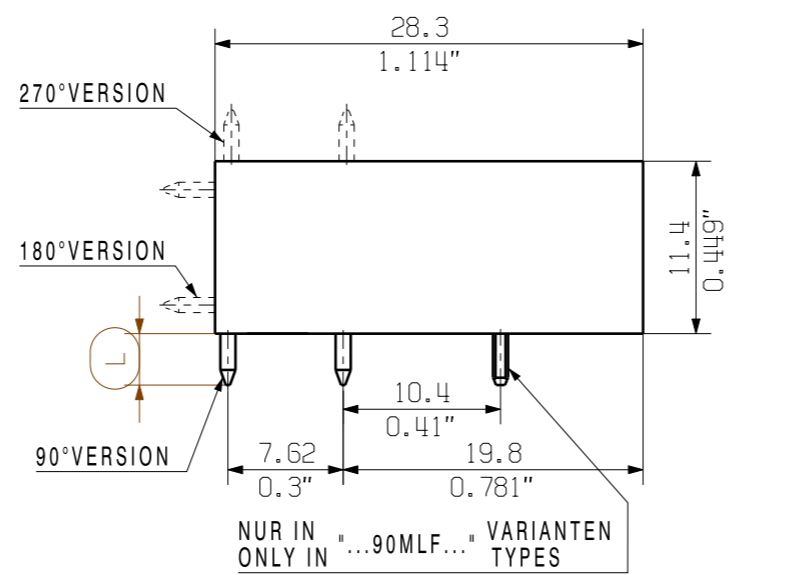
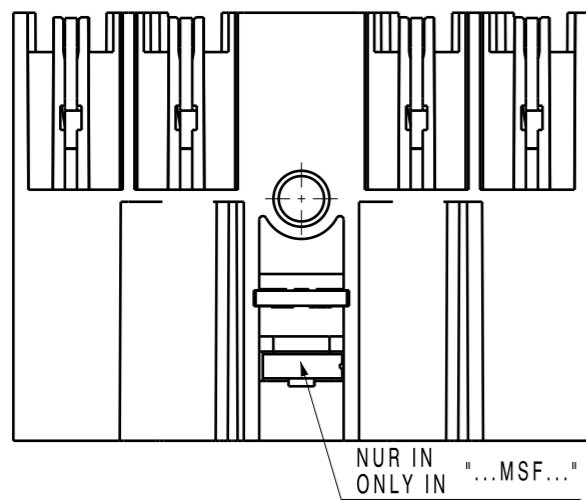
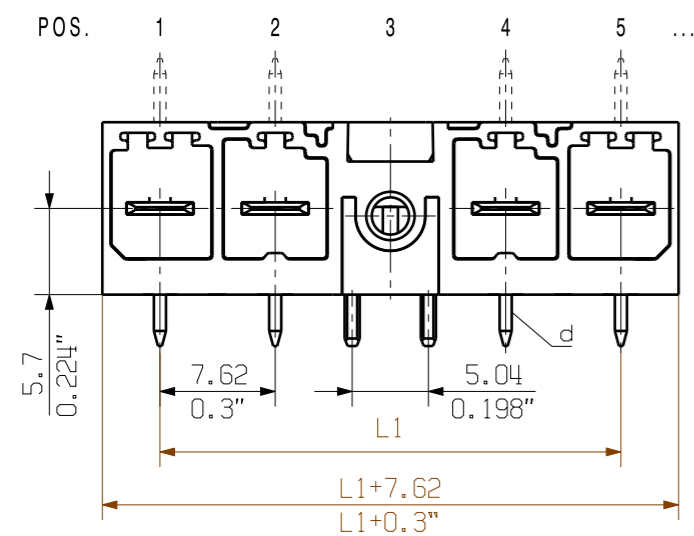
**Dimensional drawing**



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		
4	M(S)F3	o	o	X	o	o		
4	M(S)F2	o	X	o	o	o		
3	M(S)F3	o	o	X	o			
3	M(S)F2	o	X	o	o			
2	M(S)F2	o	X	o				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>NO OF POLES</b>	<b>X = MIDDLE FLANGE POSITION</b>							

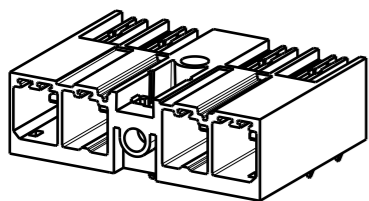
allgemeingültige Kundenzeichnung, aktueller Stand nur auf Anfrage / general customer drawing, topical version only if required

SHOWN: SV 7.62HP/04/90MSF

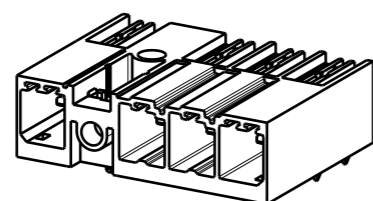


D=Ø1.3  
d=0.8x1.0

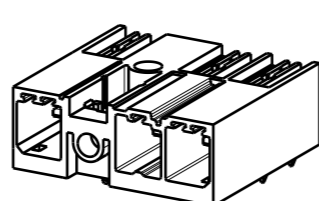
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SV 7.62HP/04/90MF...



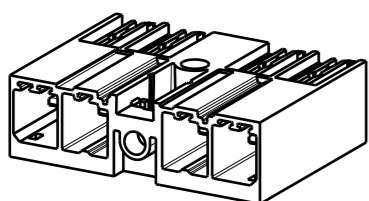
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SV 7.62HP/04/90MLF2...SO



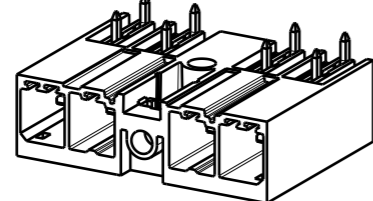
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SV 7.62HP/03/90MF2...



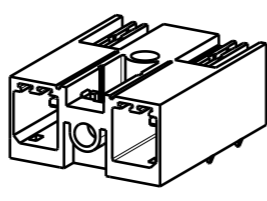
M 1:1  
SV 7.62HP/04/180MF...



M 1:1  
SV 7.62HP/04/270MF...



M 1:1  
SV 7.62HP/02/90MF...



- MF= Mittelflansch  
middle flange
- MSF= Mittelschraubflansch  
middle flange with screw
- MLF= Mittellötflansch  
middle solder flange

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.  
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / 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 EN 61984 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.

description	n no of poles	L1 [mm]	L1 [inch]	1	2	3	4	5	6	7	8	9
SV 7.62HP/08/...M(S/L)F5	8	60.92	2.34						MF			
SV 7.62HP/06/...M(S/L)F6									MF			
SV 7.62HP/06/...M(S/L)F5									MF			
SV 7.62HP/06/...M(S/L)F4	6	45.72	1.80				MF					
SV 7.62HP/06/...M(S/L)F3							MF					
SV 7.62HP/06/...M(S/L)F2							MF					
SV 7.62HP/05/...M(S/L)F5									MF			
SV 7.62HP/05/...M(S/L)F4	5	38.10	1.50				MF					
SV 7.62HP/05/...M(S/L)F3							MF					
SV 7.62HP/05/...M(S/L)F2							MF					
SV 7.62HP/04/...M(S/L)F4									MF			
SV 7.62HP/04/...M(S/L)F3	4	30.48	1.20				MF					
SV 7.62HP/04/...M(S/L)F2							MF					
SV 7.62HP/03/...M(S/L)F3	3	22.86	0.90				MF					
SV 7.62HP/03/...M(S/L)F2							MF					
SV 7.62HP/02/...M(S/L)F2	2	15.24	0.60				MF					

<b>GENERAL TOLERANCE:</b> DIN ISO 2768-m		100459/5 12.06.18 HELIS_MA	00
Modification		Date	Name
3.5		24.02.2009	HELIS_MA
+0.1			
-0.3			
Stiftlänge/ pin length L	Toleranz/ tolerance	Responsible	Checked
		10.07.2018	HERTEL_S
		Approved	LANG_T

Cat.no.: .

# Weidmüller

190459/5  
12.06.18 HELIS\_MA

3 49530 19

Sheet 01 of 01 sheets

## SV 7.62HP...M(S/L)F...

STIFTLIESTE  
MALE HEADER

Scale: 2:1  
Supersedes: .

Product file: SV/BVZ 7.62HP

3.5	+0.1
	-0.3
Stiftlänge/ pin length L	Toleranz/ tolerance

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
 Klängenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.