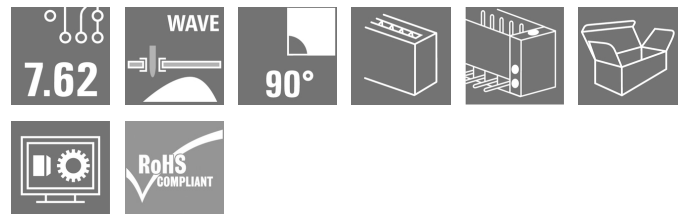


**SV 7.62HP/03/90MF2 3.5SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

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 op-  
tionally also be screwed, reduces space requirements by  
one pitch width in comparison with conventional solu-  
tions.

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: 3, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	<a href="#">1048490000</a>
Type	SV 7.62HP/03/90MF2 3.5SN BK BX
GTIN (EAN)	4032248786534
Qty.	60 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 40.5 A
Packaging	Box

Creation date June 5, 2024 11:34:01 PM CEST

## SV 7.62HP/03/90MF2 3.5SN BK BX

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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	Width	30.48 mm
Width (inches)	1.2 inch	Net weight	6.75 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 "	Outgoing elbow	90°
Number of poles	3	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	22.86 mm
L1 in inches	0.9 "	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	Protection degree	IP20, when fully mounted
Volume resistance	2.00 mΩ	Can be coded	Yes
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	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
Clearance, min.	6.9 mm	Creepage distance, min.	9.6 mm

## SV 7.62HP/03/90MF2 3.5SN BK BX

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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
Reference to approval values	Specifications are maximum values, details - see approval certificate.

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

## 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 B / UL 1059)	40.5 A
Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.9 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	300 V
Rated voltage (Use group F / UL 1059)	744 V
Rated current (Use group C / UL 1059)	40.5 A
Rated current (Use group F / UL 1059)	40.5 A
Creepage distance, min.	9.6 mm

## Packing

Packaging	Box	VPE length	352 mm
VPE width	135 mm	VPE height	40 mm

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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
ECLASS 12.0	27-46-02-01	ECLASS 13.0	27-46-02-01

## SV 7.62HP/03/90MF2 3.5SN BK BX

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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>• 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>

## Approvals

Approvals



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

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</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> <a href="#">PO OMNIMATE EN</a>

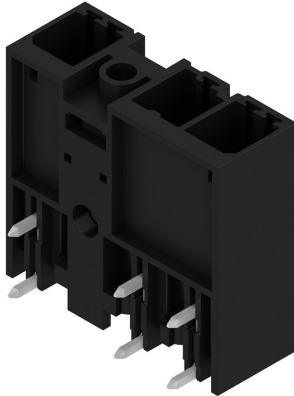
## SV 7.62HP/03/90MF2 3.5SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
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 Germany

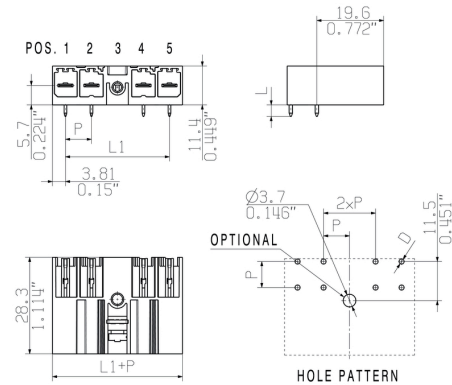
www.weidmueller.com


## Drawings

## Product image



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

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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

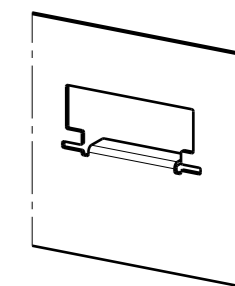
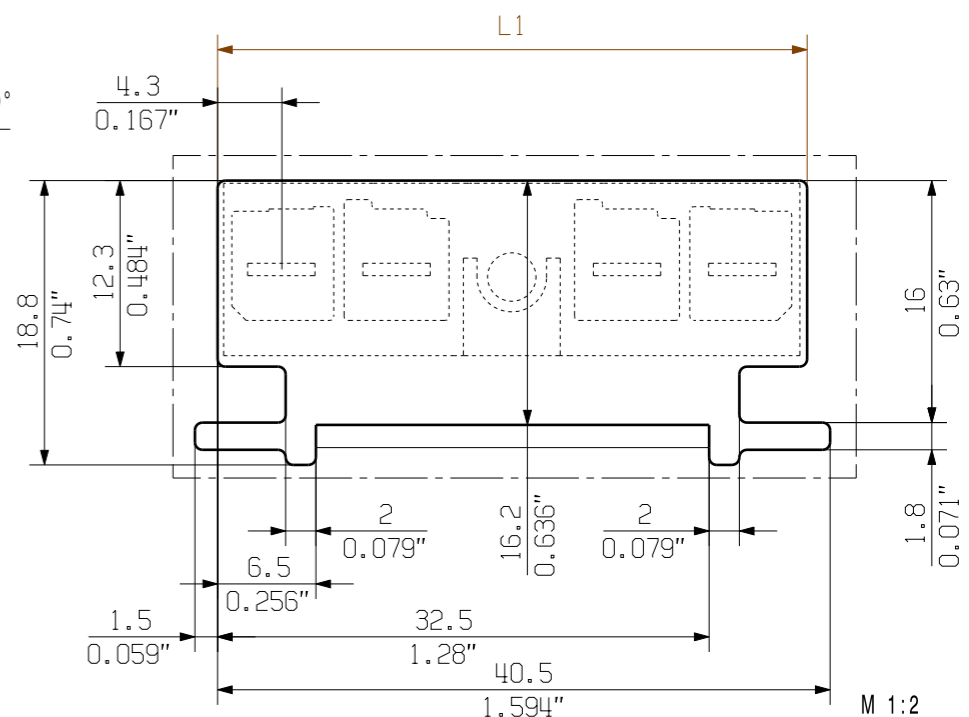
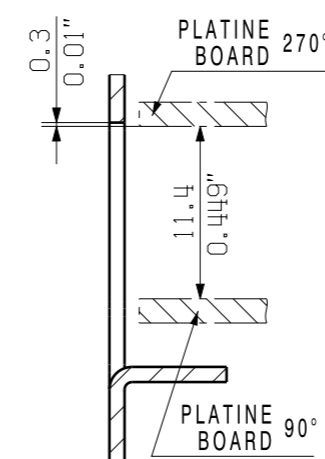
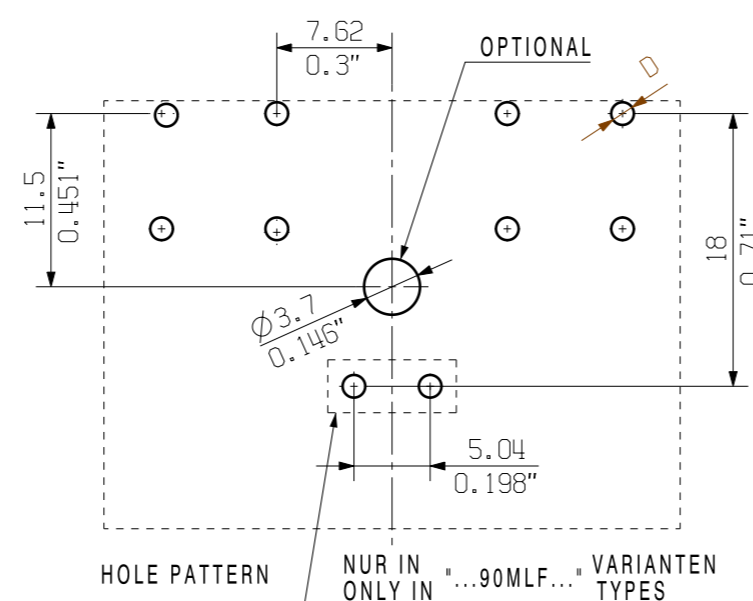
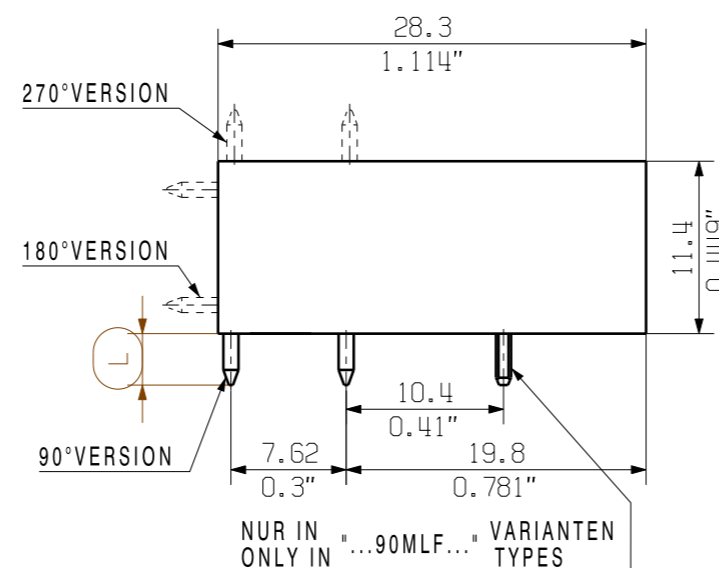
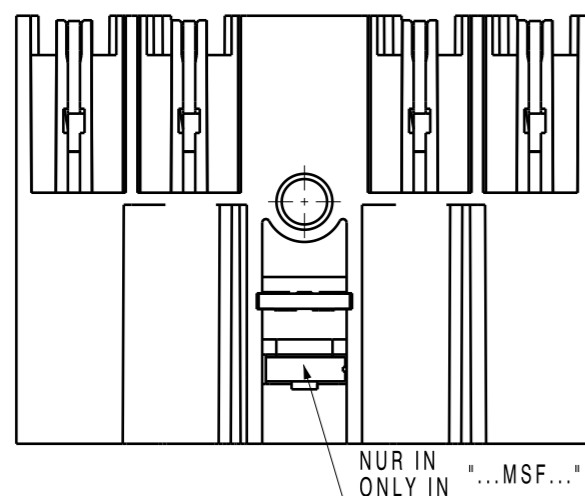
Our Service:

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).			

SHOWN: SV 7.62HP/04/90MSF

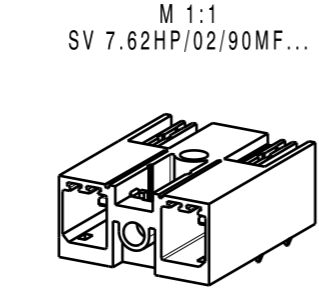
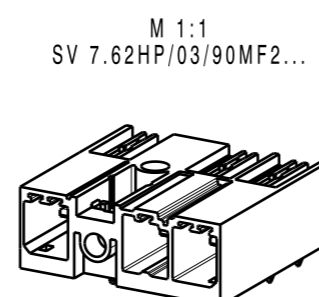


D = Ø 1.3  
d = 0.8 x 1.0

W	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	5	38.10	1.50									MF		
	SV 7.62HP/05/...M(S/L)F4									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	4	30.48	1.20						MF					
	SV 7.62HP/04/...M(S/L)F3									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						
description	n	no of poles	L1 [mm]	L1 [inch]	1	2	3	4	5	6	7	8			
					position MF										

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.



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

GENERAL TOLERANCE:  
DIN ISO 2768-m



Scale: 2:1

Supersedes: .

100459/5	
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2.06.18 HELIS MA

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Modification

	Date	Name
Drawn	24.02.2009	HELIS_MA
Responsible		KRUG_M
Checked	10.07.2018	HERTEL_S
Approved		LANG_T

**Weidmüller** 

3 49530 (19

Drawing no.	Issue
Sheet 01	of 01 sheet

SV 7.62HP...M(S/L)F...  
STIFTELEISTE  
MALE HEADER

Product file: SV/BVZ 7.62HP

7340

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
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Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

### 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  $260\text{ °C}$ . In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.