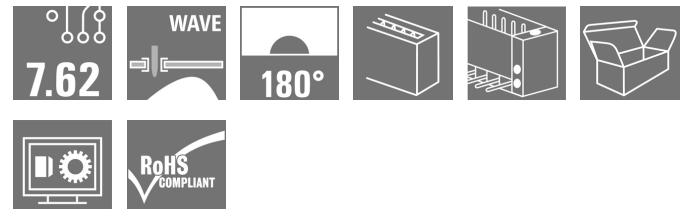


OMNIMATE Power - series BV/SV 7.62HP SV 7.62HP/05/180MF3 3.5SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

180° 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

Type	SV 7.62HP/05/180MF3 3.5SN BK BX
Order No.	1048590000
Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, Number of poles: 5, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4032248786435
Qty.	36 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 40.5 A
Packaging	Box

Creation date May 1, 2020 11:32:37 AM CEST

**OMNIMATE Power - series BV/SV 7.62HP
SV 7.62HP/05/180MF3 3.5SN BK BX**

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Technical data**Dimensions and weights**

Height	31.8 mm	Height (inches)	1.252 inch
Height of lowest version	28.3 mm	Depth	11.4 mm
Depth (inches)	0.449 inch	Net weight	3.75 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 inch	Outgoing elbow	180°
Number of poles	5	Number of solder pins per pole	2
Solder pin length (l)	3.5 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Tolerance of solder pin position	± 0.1 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	38.1 mm	L1 in inches	1.5 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
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	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	1-3 μm Ni / 4-6 μm Sn matt	Layer structure of plug contact	1-3 μm Ni / 4-6 μm Sn matt
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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


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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 C / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	35 A
Rated current (Use group C / 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 C / 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 C / UL 1059)	40.5 A	Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.9 mm	Creepage distance, min.	9.6 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	0 m
VPE width	0 m	VPE height	0 m

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		

Notes

Notes	<ul style="list-style-type: none"> • 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
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.

Data sheet

**OMNIMATE Power - series BV/SV 7.62HP
SV 7.62HP/05/180MF3 3.5SN BK BX**

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

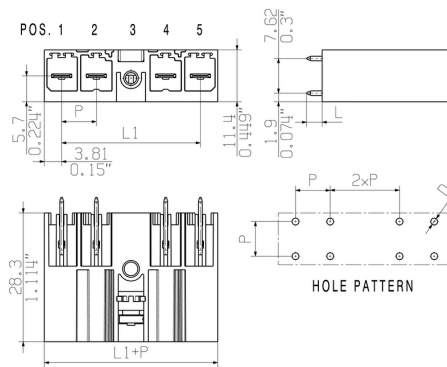
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Engineering Data	SV.zip
White paper power electronics connected correctly	Download Whitepaper
White paper UL 600 V	Download Whitepaper

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

**OMNIMATE Power - series BV/SV 7.62HP
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Mating connector (conditionally pluggable)
BVF 7.62HP/180MSF


180° female header with PUSH IN connection technology for field wiring in 6 mm² with 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1. Ideal touch-safe solution for the power output.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Variants: without flange, external flange, middle flange with detent fastening and optionally additional screw mount.

General ordering data

Type	BVF 7.62HP/05/180MSF3 S ... Version	Product data	Packaging
Order No.	1060680000	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5,	Box
GTIN (EAN)	4032248809578	180°, PUSH IN, Clamping range, max.: 10 mm ² , Box	UL: 600 V / 39 A / AWG 24 - AWG 8
Qty.	30 pc(s).		

**OMNIMATE Power - series BV/SV 7.62HP
SV 7.62HP/05/180MF3 3.5SN BK BX**

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Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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Mating connector (fully pluggable)
BVF 7.62HP/180MF


180° female header with PUSH IN connection technology for field wiring in 6 mm² with 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1. Ideal touch-safe solution for the power output.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Variants: without flange, external flange, middle flange with detent fastening and optionally additional screw mount.

General ordering data

Type	BVF 7.62HP/05/180MF3 SN ... Version	Product data	Packaging
Order No.	1060600000	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, IEC: 1000 V / 57 A / 0.5 - 10 mm ²	Box
GTIN (EAN)	4032248809943	180°, PUSH IN, Clamping range, max. : 10 mm ² , Box	UL: 600 V / 39 A / AWG 24 - AWG 8
Qty.	30 pc(s).		
Type	BVF 7.62HP/05/180MF3 SN ... Version	Product data	Packaging
Order No.	2460930000	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, IEC: 1000 V / 57 A / 0.5 - 10 mm ²	Box
GTIN (EAN)	4050118476323	180°, PUSH IN, Clamping range, max. : 10 mm ² , Box	UL: 600 V / 39 A / AWG 24 - AWG 8
Qty.	30 pc(s).		

BVZ 7.62HP 180MF SN


High-performance female 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 operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, protection against faulty wiring, 4-point contact. Suitable for labelling.

General ordering data

Type	BVZ 7.62HP/05/180MF3 SN ... Version	Product data	Packaging
Order No.	1543040000	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, IEC: 1000 V / 57 A	Box
GTIN (EAN)	4050118347821	180°, Clamping yoke connection, Clamping range, max. : 10 mm ² , Box	UL: 600 V / 40.5 A
Qty.	24 pc(s).		

Data sheet

OMNIMATE Power - series BV/SV 7.62HP SV 7.62HP/05/180MF3 3.5SN BK BX

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Accessories

Coding elements



**Only connects what is supposed to be connected:
the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

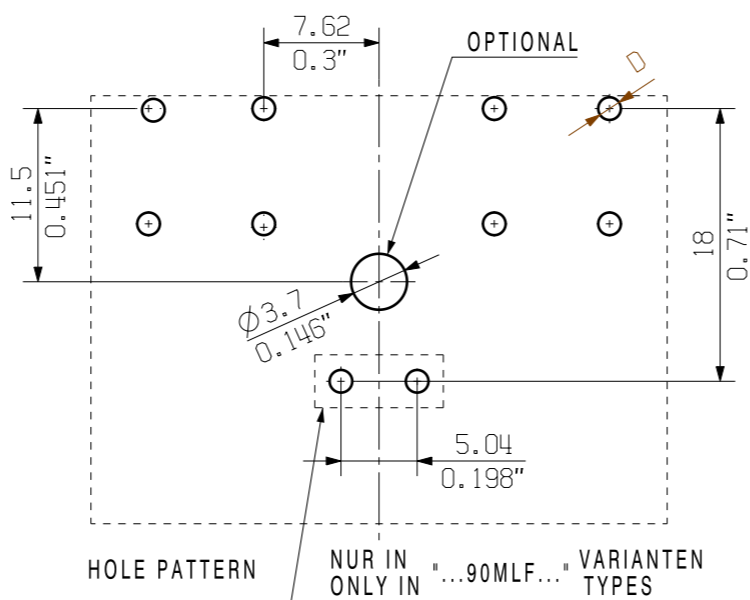
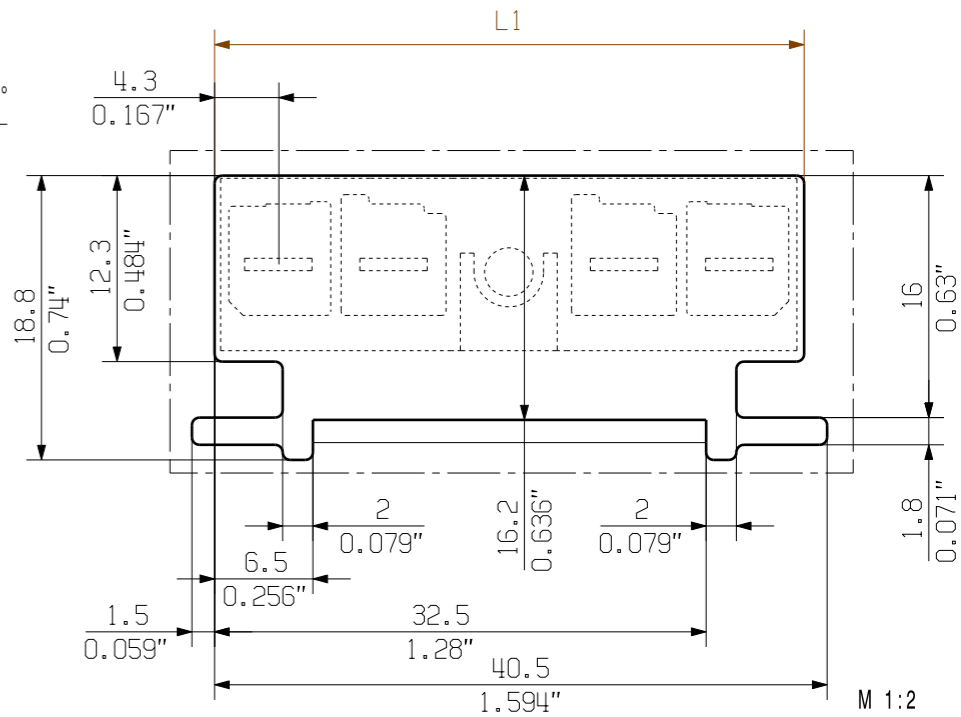
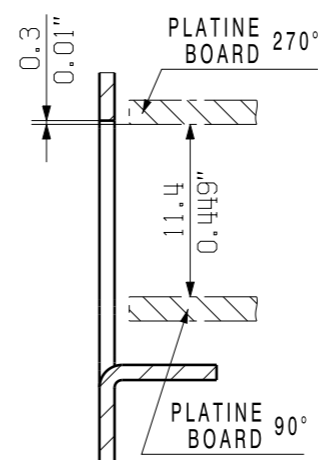
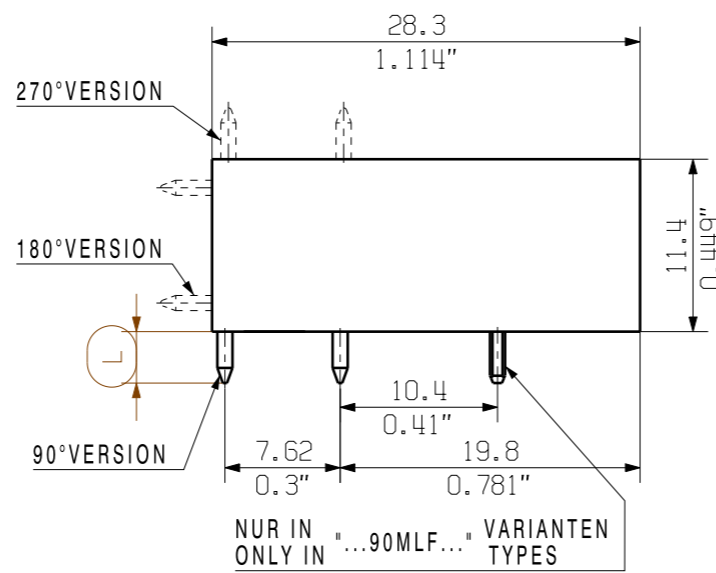
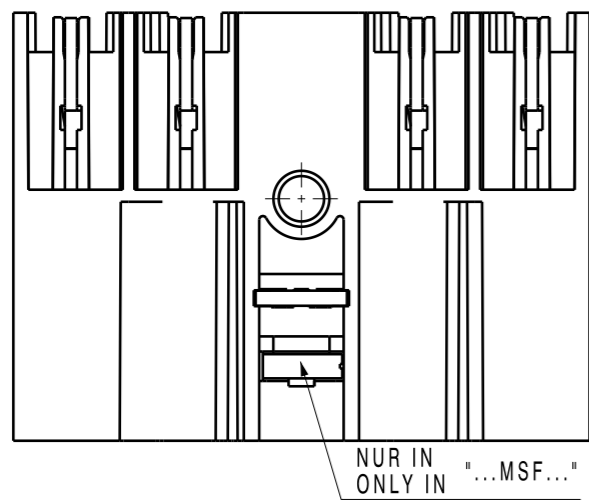
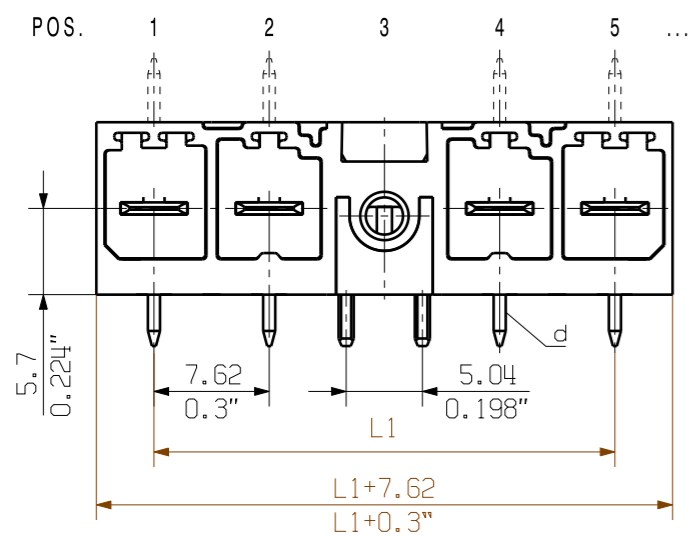
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	BV/SV 7.62HP KO	Version	Product data	Packaging
Order No.	1937590000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248608881	of poles: 1		
Qty.	50 pc(s).			
Type	VDS180 SV7.62	Version	Product data	Packaging
Order No.	1853940000	PCB plug-in connector, Accessories, black, Number of poles: 1		Box
GTIN (EAN)	4032248389513			
Qty.	50 pc(s).			

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

SHOWN: SV 7.62HP/04/90MSF

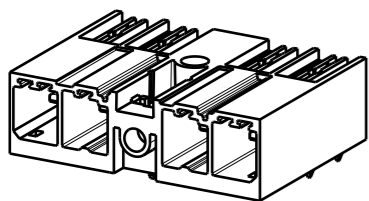


MF= Mittelflansch
middle flange
MSF= Mittelschraubflansch
middle flange with screw
MLF= Mittellötflansch
middle solder flange

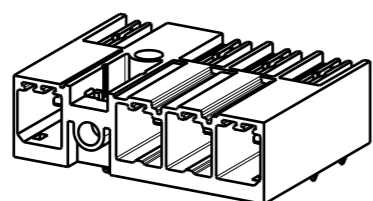
For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is 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			

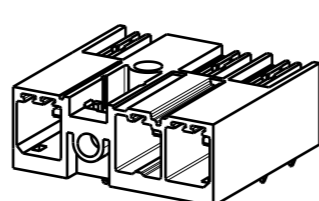
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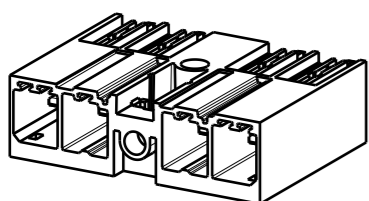
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SV 7.62HP/04/90MLF2...SO



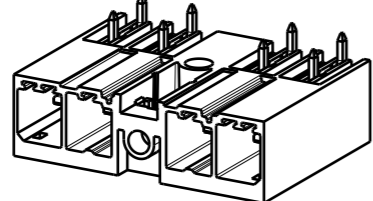
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SV 7.62HP/03/90MF2...



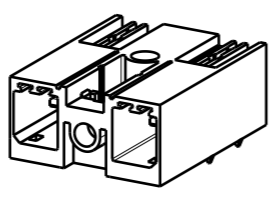
M 1:1
SV 7.62HP/04/180MF...



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



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



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

GENERAL TOLERANCE:
DIN ISO 2768-m



Scale: 2:1
Supersedes: .

100459/5	12.06.18	HELIS_MA	00
Modification			
Drawn	Date	Name	
Responsible		KRUG_M	
Checked	10.07.2018	HERTEL_S	
Approved		LANG_T	



Cat.no.: .	
3 49530	19
Drawing no.	Issue no.
Sheet 01	of 01 sheets

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

Product file: SV/BVZ 7.62HP

7340

Recommended wave soldering profiles

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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.