

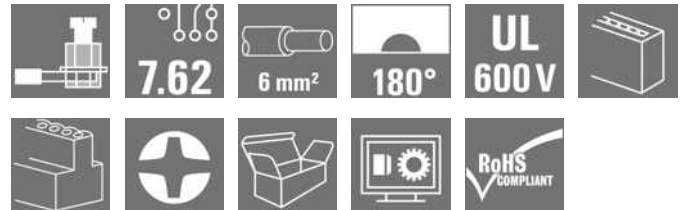
SVZ 7.62HP/05/180SH180 SN BK BX
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image


High-performance male 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 connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max.: 6 mm ² , Box
Order No.	1932480000
Type	SVZ 7.62HP/05/180SH180 SN BK BX
GTIN (EAN)	403224858359 1
Qty.	25 pc(s).
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm ² UL: 600 V / 42 A / AWG 24 - AWG 8
Packaging	Box

Creation date May 2, 2023 2:19:45 PM CEST

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Technical data

Dimensions and weights

Depth	85.5 mm	Depth (inches)	3.366 inch
Height	25.7 mm	Height (inches)	1.012 inch
Width	53.34 mm	Width (inches)	2.1 inch
Net weight	52.56 g		

Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
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System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	Clamping yoke connection	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 ²
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, min.	0.5 Nm	Tightening torque, max.	0.6 Nm
Clamping screw	M 3	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 base material	Copper alloy	Contact material	Copper 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.	0.2 mm ²
Clamping range, max.	6 mm ²
Wire connection cross section AWG, min.	AWG 22
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.25 mm ² min.	

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w. wire end ferrule, DIN 46228 pt 1, max.	6 mm ²															
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm															
Clampable conductor	<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>0.5 mm²</td> </tr> <tr> <td rowspan="2">wire end ferrule</td> <td>Stripping length</td> <td>nominal 14 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H0.5/18 OR</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	0.5 mm ²	wire end ferrule	Stripping length	nominal 14 mm	Recommended wire-end ferrule	H0.5/18 OR				
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	<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>1 mm²</td> </tr> <tr> <td rowspan="2">wire end ferrule</td> <td>Stripping length</td> <td>nominal 15 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H1.0/18 GE</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	1 mm ²	wire end ferrule	Stripping length	nominal 15 mm	Recommended wire-end ferrule	H1.0/18 GE				
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<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>0.75 mm²</td> </tr> <tr> <td rowspan="2">wire end ferrule</td> <td>Stripping length</td> <td>nominal 14 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H0.75/18 W</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	0.75 mm ²	wire end ferrule	Stripping length	nominal 14 mm	Recommended wire-end ferrule	H0.75/18 W					
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<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>2.5 mm²</td> </tr> <tr> <td rowspan="4">wire end ferrule</td> <td>Stripping length</td> <td>nominal 14 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H2.5/19D BL</td> </tr> <tr> <td>Stripping length</td> <td>nominal 12 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H2.5/12</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	2.5 mm ²	wire end ferrule	Stripping length	nominal 14 mm	Recommended wire-end ferrule	H2.5/19D BL	Stripping length	nominal 12 mm	Recommended wire-end ferrule	H2.5/12	
Cross-section for conductor connection	Type	fine-wired														
	nominal	2.5 mm ²														
wire end ferrule	Stripping length	nominal 14 mm														
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<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>4 mm²</td> </tr> <tr> <td rowspan="4">wire end ferrule</td> <td>Stripping length</td> <td>nominal 12 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H4.0/12</td> </tr> <tr> <td>Stripping length</td> <td>nominal 14 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H4.0/20D GR</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	4 mm ²	wire end ferrule	Stripping length	nominal 12 mm	Recommended wire-end ferrule	H4.0/12	Stripping length	nominal 14 mm	Recommended wire-end ferrule	H4.0/20D GR	
Cross-section for conductor connection	Type	fine-wired														
	nominal	4 mm ²														
wire end ferrule	Stripping length	nominal 12 mm														
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<table border="1"> <tr> <td>Cross-section for conductor connection</td> <td>Type</td> <td>fine-wired</td> </tr> <tr> <td></td> <td>nominal</td> <td>6 mm²</td> </tr> <tr> <td rowspan="4">wire end ferrule</td> <td>Stripping length</td> <td>nominal 14 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H6.0/20 SW</td> </tr> <tr> <td>Stripping length</td> <td>nominal 12 mm</td> </tr> <tr> <td>Recommended wire-end ferrule</td> <td>H6.0/12</td> </tr> </table>	Cross-section for conductor connection	Type	fine-wired		nominal	6 mm ²	wire end ferrule	Stripping length	nominal 14 mm	Recommended wire-end ferrule	H6.0/20 SW	Stripping length	nominal 12 mm	Recommended wire-end ferrule	H6.0/12	
Cross-section for conductor connection	Type	fine-wired														
	nominal	6 mm ²														
wire end ferrule	Stripping length	nominal 14 mm														
	Recommended wire-end ferrule	H6.0/20 SW														
	Stripping length	nominal 12 mm														
	Recommended wire-end ferrule	H6.0/12														

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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Technical data


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	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.	13.56 mm	Creepage distance, min.	13.8 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)	35 A
Rated current (Use group C / CSA)	35 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	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 C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	42 A
Rated current (Use group C / UL 1059)	42 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	261 mm
VPE width	157 mm	VPE height	77 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96
	Test	mark of origin, type identification, pitch, type of material
	Evaluation	available
	Test	durability
Test: Misengagement (Non-interchangeability)	Evaluation	passed
	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08
	Test	180° turned with coding elements
	Test	180° turned without coding elements
Evaluation	passed	

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Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
		Type of conductor and conductor cross-section	solid 6 mm ²
		Type of conductor and conductor cross-section	stranded 6 mm ²
		Type of conductor and conductor cross-section	AWG 24/1
		Type of conductor and conductor cross-section	AWG 24/19
		Type of conductor and conductor cross-section	AWG 10/1
		Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed		
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 24/1
		Type of conductor and conductor cross-section	AWG 24/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
	Evaluation	passed	
	Requirement	1.4 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²
		Type of conductor and conductor cross-section	stranded 6 mm ²
		Type of conductor and conductor cross-section	AWG 10/1
Type of conductor and conductor cross-section		AWG 10/19	
Evaluation	passed		

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Technical data

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥10 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 24/1	
		Type of conductor and conductor cross-section	AWG 24/19	
	Evaluation	passed		
	Requirement	≥20 N		
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²	
		Type of conductor and conductor cross-section	stranded 0.5 mm ²	
	Evaluation	passed		
	Requirement	≥80 N		
	Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²	
		Type of conductor and conductor cross-section	stranded 6 mm ²	
		Type of conductor and conductor cross-section	AWG 10/1	
		Type of conductor and conductor cross-section	AWG 10/19	
	Evaluation	passed		

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

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 variants on request
 - Rated current related to rated cross-section & min. No. of poles.
 - Wire end ferrule without plastic collar to DIN 46228/1
 - Wire end ferrule with plastic collar to DIN 46228/4
 - 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.
 - Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Data sheet

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Technical data

Approvals

Approvals



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

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	WSCAD
Product Change Notification	PCN_2016_275_PL33_plugable_SIBL_EN PCN_2016_275_PL33_Steckbare_SIBL_DE
User Documentation	QR-Code product handling video
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE 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 PO OMNIMATE EN

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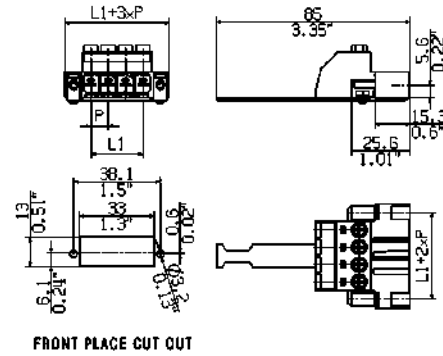
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Drawings

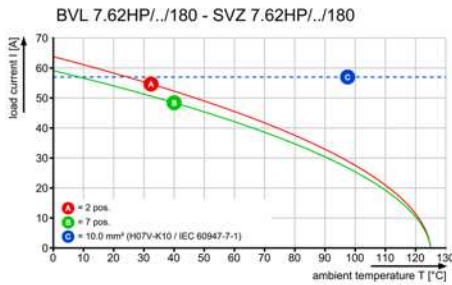
Product image



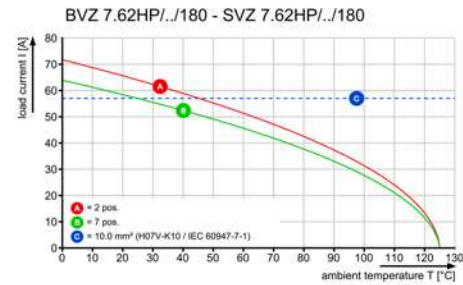
Dimensional drawing



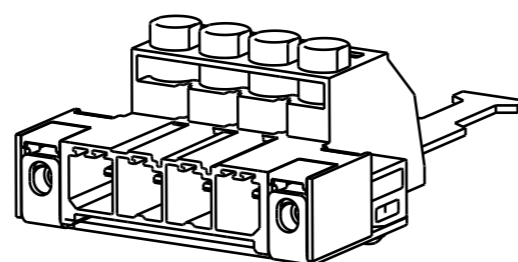
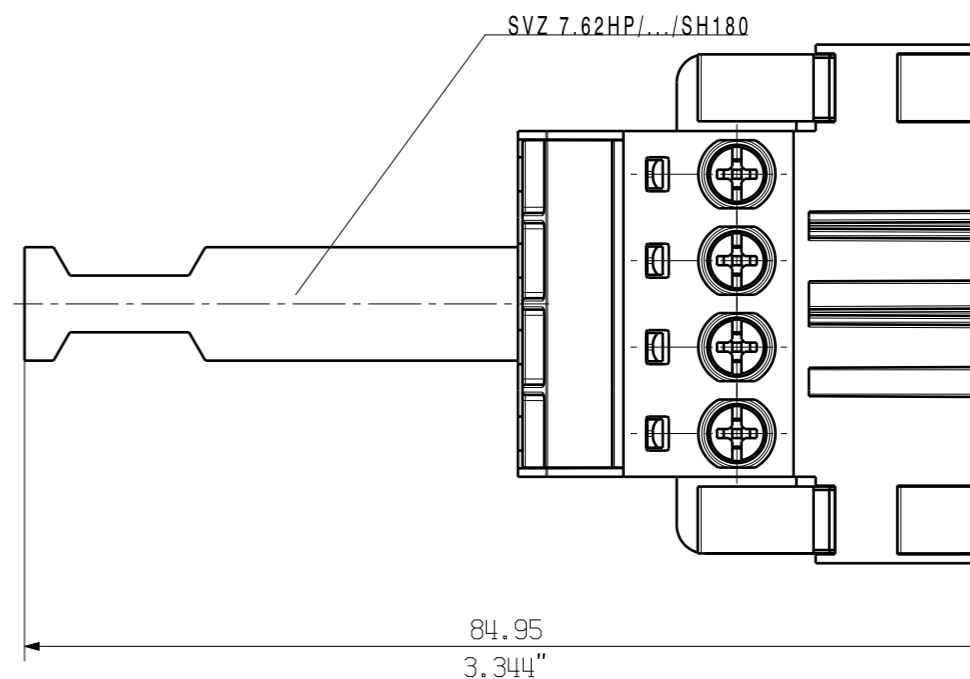
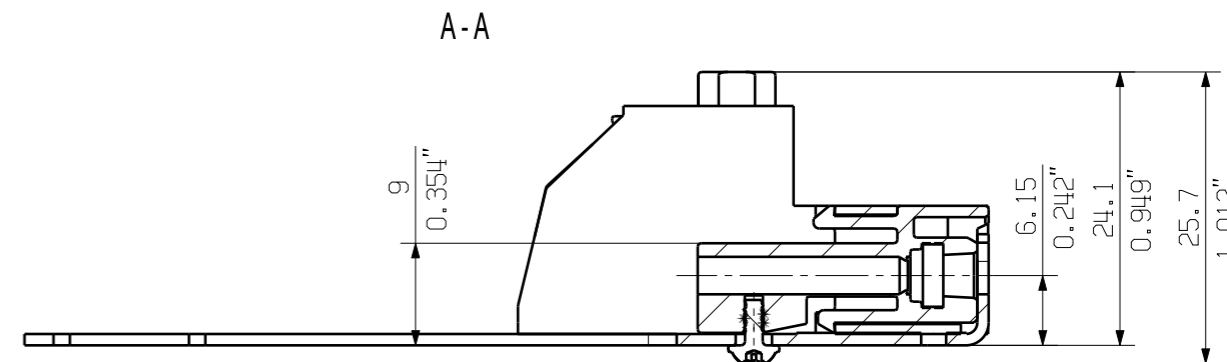
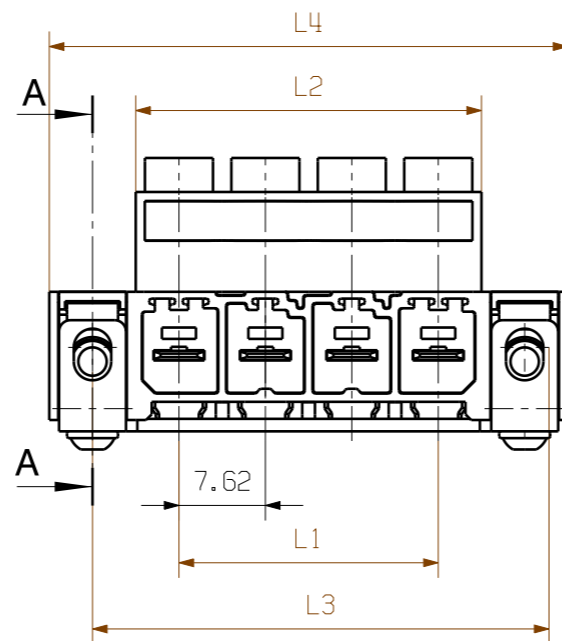
Graph



Graph



SVZ 7.62HP/...SH180



SVZ 7.62HP/...SH180

For the mounting on 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 to VDE 0110.

The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

6	38,10	1,50	45,72	1,80	53,34	2,10	60,96	2,40
5	30,48	1,20	38,10	1,50	45,72	1,80	53,34	2,10
4	22,86	0,90	30,48	1,20	38,10	1,50	45,72	1,80
3	15,24	0,60	22,86	0,90	30,48	1,20	38,10	1,50
n	L1 (mm)	L1 (Inch)	L2 (mm)	L2 (Inch)	L3 (mm)	L3 (Inch)	L4 (mm)	L4 (Inch)

	DIN ISO 2768-m		Cat.no.: .	
	91503/5 09.12.16 HELIS_MA	01		
Modification			3 42190	
			Drawing no. 3 42190 Issue no. 03 Sheet 01 of 02 sheets	
Scale: 1.5/1	Drawn	Date	Name	SVZ 7.62HP/...SH... STIFTSTECKER MALE PLUG
Supersedes: .	Responsible	16.12.2016	NEUMANN_G	
	Checked	LANG_T	HELI_MA	
	Approved			Product file: SV/BVZ 7.62 HP
				7340