

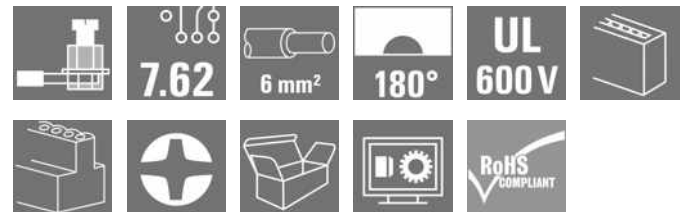
**SVZ 7.62HP/05/180RSH180I SN BK BX**
**Weidmüller Interface GmbH & Co. KG**

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 mm², Box |
| Order No.    | <a href="#">1932520000</a>  |
| Type         | SVZ 7.62HP/05/180RSH180I SN BK BX   |
| GTIN (EAN)   | 4032248584130   |
| Qty.         | 25 pc(s).   |
| Product data | IEC: 1000 V / 57 A / 0.2 - 10 mm²<br>UL: 600 V / 42 A / AWG 24 - AWG 8  |
| Packaging    | Box   |

Creation date May 4, 2023 4:16:45 PM CEST

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## Technical data

## Dimensions and weights

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 101.1 mm | Depth (inches)  | 3.98 inch  |
| Height     | 25.7 mm  | Height (inches) | 1.012 inch |
| Width      | 53.34 mm | Width (inches)  | 2.1 inch   |
| Net weight | 49.88 g  |                 |            |

## Temperatures

|                             |        |                             |        |
|-----------------------------|--------|-----------------------------|--------|
| Operating temperature, min. | -50 °C | Operating temperature, max. | 125 °C |
|-----------------------------|--------|-----------------------------|--------|

## 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 <sup>2</sup> |
| 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 <sup>2</sup> |
| Clamping range, max.   | 6 mm <sup>2</sup>   |
| 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 <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   | 10 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.25 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, 0.25 mm <sup>2</sup> min.       |                     |

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

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.0 mm; 2.4 mm

| Clampable conductor                    | Cross-section for conductor connection | Type                         | fine-wired                  |
|--|--|------------------------------|-----------------------------|
|  |  | nominal                      | 0.5 mm <sup>2</sup>         |
| wire end ferrule                       | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H0.5/18 OR</a>  |
|  |  |                              |                             |
| Cross-section for conductor connection | Type                                   | fine-wired                   |                             |
|  | nominal                                | 1 mm <sup>2</sup>            |                             |
| wire end ferrule                       | wire end ferrule                       | Stripping length             | nominal 15 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H1.0/18 GE</a>  |
|  |  |                              |                             |
| Cross-section for conductor connection | Type                                   | fine-wired                   |                             |
|  | nominal                                | 1.5 mm <sup>2</sup>          |                             |
| wire end ferrule                       | 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>     |
| Cross-section for conductor connection | Type                                   | fine-wired                   |                             |
|  | nominal                                | 0.75 mm <sup>2</sup>         |                             |
| wire end ferrule                       | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H0.75/18 W</a>  |
|  |  |                              |                             |
| Cross-section for conductor connection | Type                                   | fine-wired                   |                             |
|  | nominal                                | 2.5 mm <sup>2</sup>          |                             |
| wire end ferrule                       | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H2.5/19D BL</a> |
|  |  | Stripping length             | nominal 12 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H2.5/12</a>     |
| Cross-section for conductor connection | Type                                   | fine-wired                   |                             |
|  | nominal                                | 4 mm <sup>2</sup>            |                             |
| wire end ferrule                       | 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                       | wire end ferrule                       | Stripping length             | nominal 14 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H6.0/20 SW</a>  |
|  |  | Stripping length             | nominal 12 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H6.0/12</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.

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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 | 158 mm | VPE height | 80 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   |
|  | Evaluation | passed   |
| Test: Misengagement (Non-interchangeability) | Test       | 180° turned without coding elements  |
|  | Evaluation | passed   |

Creation date May 4, 2023 4:16:45 PM CEST

Catalogue status 28.04.2023 / We reserve the right to make technical changes.

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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 <sup>2</sup>    |
|   |                | Type of conductor and conductor cross-section                                      | stranded 0.5 mm <sup>2</sup> |
|   |                | Type of conductor and conductor cross-section                                      | solid 6 mm <sup>2</sup>      |
|   |                | Type of conductor and conductor cross-section                                      | stranded 6 mm <sup>2</sup>   |
|   |                | 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 <sup>2</sup>    |
|   |                | Type of conductor and conductor cross-section                                      | stranded 0.5 mm <sup>2</sup> |
|   | Evaluation     | passed   |                              |
|   | Requirement    | 1.4 kg   |                              |
|   | Conductor type | Type of conductor and conductor cross-section                                      | solid 6 mm <sup>2</sup>      |
|   |                | Type of conductor and conductor cross-section                                      | stranded 6 mm <sup>2</sup>   |
| 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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|               |                |   |                              |  |
|---------------|----------------|---|------------------------------|--|
| 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 <sup>2</sup>    |  |
|               |                | Type of conductor and conductor cross-section | stranded 0.5 mm <sup>2</sup> |  |
|               | Evaluation     | passed  |                              |  |
|               | Requirement    | ≥80 N   |                              |  |
|               | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>      |  |
|               |                | Type of conductor and conductor cross-section | stranded 6 mm <sup>2</sup>   |  |
|               |                | 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**

**SVZ 7.62HP/05/180RSH180I SN BK BX**

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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 | <a href="#">Declaration of the Manufacturer</a>  |
| Engineering Data                            | <a href="#">CAD data – STEP</a>  |
| Engineering Data                            | <a href="#">WSCAD</a>  |
| Product Change Notification                 | <a href="#">PCN_2016_275_PL33_plugable_SIBL_EN</a><br><a href="#">PCN_2016_275_PL33_Steckbare_SIBL_DE</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><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">FL HEATING ELECTR EN</a><br><a href="#">FL APPL_INVERTER EN</a><br><a href="#">FL_BASE_STATION EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a><br><a href="#">PO OMNIMATE EN</a> |

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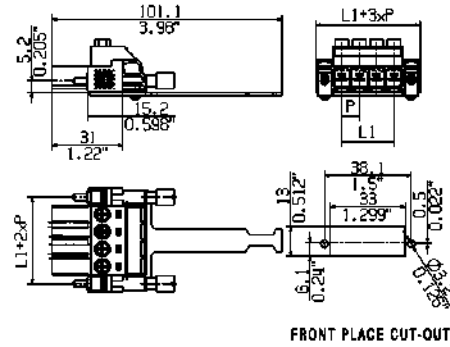
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**Drawings**

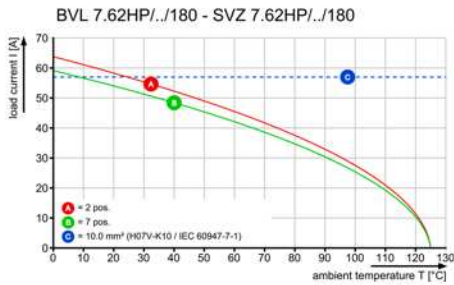
**Product image**



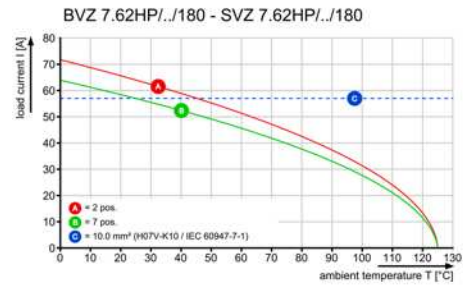
**Dimensional drawing**



**Graph**



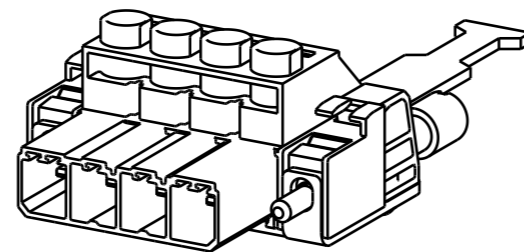
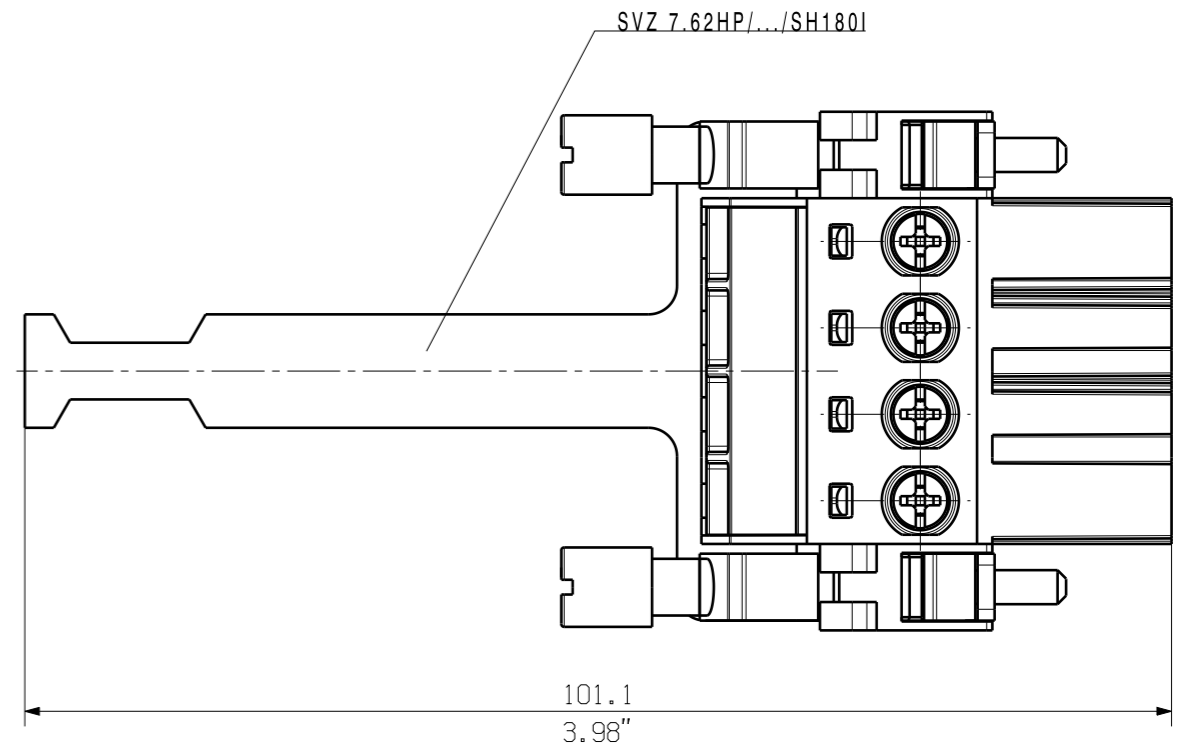
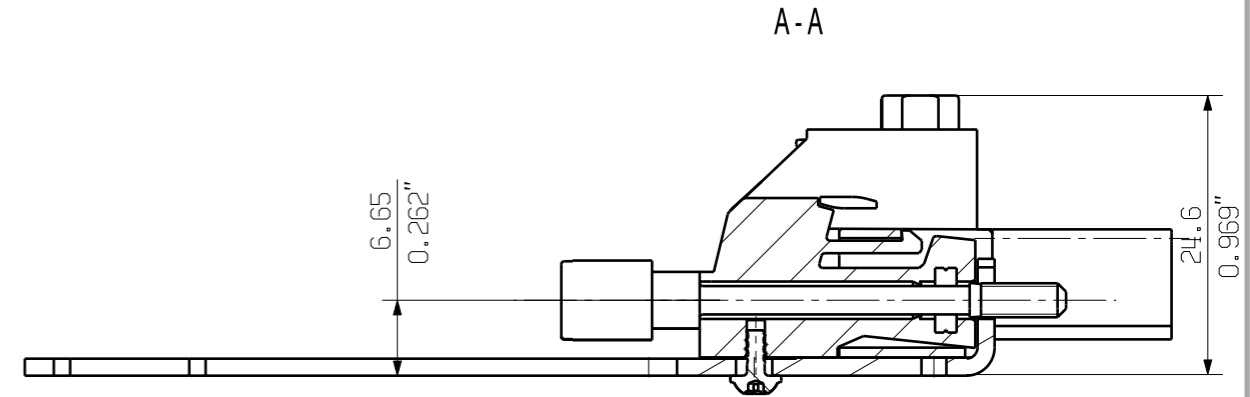
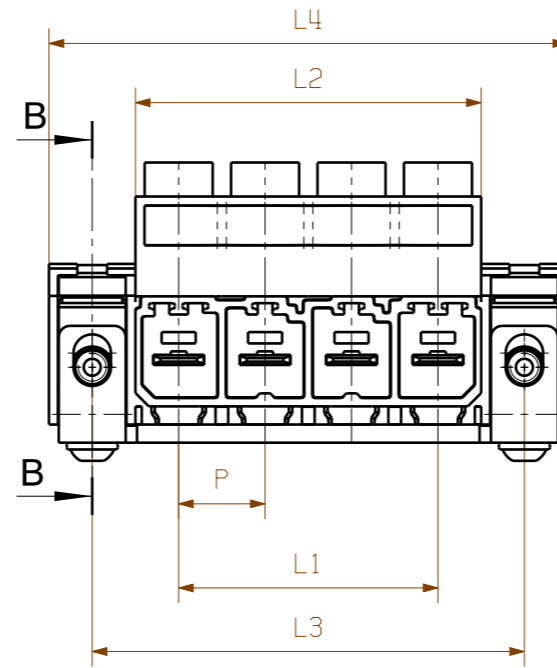
**Graph**



MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

SVZ 7.62HP/...SH180

DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING



SVZ 7.62HP/...SH180

|   |         |           |         |           |         |           |         |           |
|---|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 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) |

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.

|                              |                            |            |            |  |
|------------------------------|----------------------------|------------|------------|--|
|                              | DIN ISO 2768-m             |            | CAT.NO.: . |  |
|                              | 83639/4<br>07.09.15 KRUG_M | 01         |            |  |
| MODIFICATION                 |                            | DATE       | NAME       | <b>C 42191</b>   |
| DRAWN                        |                            | 04.05.2007 | HOHLBEIN_K | DRAWING NO. <b>04</b>                                    |
| RESPONSIBLE                  |                            |            | KRUG_M     | SHEET 01 OF 02 SHEETS                                    |
| SUPERSEDES: -                |                            | CHECKED    | 24.09.2015 | HERTEL_S   |
| SUPERSEDED BY: .             |                            | APPROVED   | LANG_T     | <b>SVZ 7.62HP/...SH...I</b><br>STIFTSTECKER<br>MALE PLUG |
| PRODUCT FILE: SV/BVZ 7.62 HP |                            |            |            | 7340   |

WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.  
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