

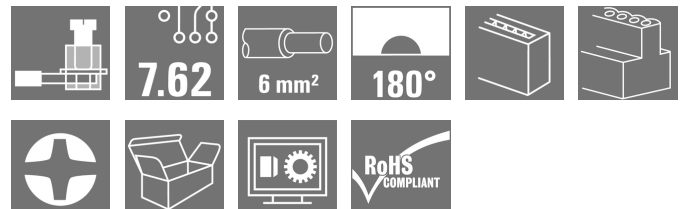
**BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Similar to illustration

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**

|              |                                                                                                                                    |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 3, 180°, Clamping yoke connection, Clamping range, max.: 10 mm², Box |
| Order No.    | <a href="#">1158850000</a>                                                                                                         |
| Type         | BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB                                                                                            |
| GTIN (EAN)   | 4032248947621                                                                                                                      |
| Qty.         | 50 pc(s).                                                                                                                          |
| Product data | IEC: 1000 V / 57 A / 0.2 - 10 mm²<br>UL: 600 V / 40.5 A                                                                            |
| Packaging    | Box                                                                                                                                |

Creation date April 15, 2021 12:15:17 PM CEST

**BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****Dimensions and weights**

|                |          |       |         |
|----------------|----------|-------|---------|
| Net weight     | 36.08 g  | Width | 38.1 mm |
| Width (inches) | 1.5 inch |       |         |

**System Parameters**

|                          |                                         |                            |                  |
|--------------------------|-----------------------------------------|----------------------------|------------------|
| Product family           | OMNIMATE Power - series<br>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          | 3                                       | Pin series quantity        | 1                |
| Rated cross-section      | 6 mm <sup>2</sup>                       | Volume resistance          | 4.50 mΩ          |
| 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                                      | Plugging force/pole, max.  | 16.5 N           |
| Pulling force/pole, max. | 11 N                                    |                            |                  |

**Material data**

|                                       |                    |                                       |        |
|---------------------------------------|--------------------|---------------------------------------|--------|
| Insulating material                   | PA GF              | Colour                                | black  |
| Colour chart (similar)                | RAL 9011           | Insulating material group             | II     |
| Comparative Tracking Index (CTI)      | ≥ 500              | Contact surface                       | tinned |
| Layer structure of plug contact       | 6...8 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. | 100 °C             |                                       |        |

**Conductors suitable for connection**

|                                                                     |                     |
|---------------------------------------------------------------------|---------------------|
| Clamping range, min.                                                | 0.2 mm <sup>2</sup> |
| Clamping range, max.                                                | 10 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.                             | AWG 24              |
| 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                                          | 0.2 mm <sup>2</sup> |
| Flexible, max. H05(07) V-K                                          | 10 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 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, min.                           | 0.5 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, max.                           | 6 mm <sup>2</sup>   |

**BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data**

|                                        |                                                                                                                                                                        |                              |                             |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|
| Clampable conductor                    | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 0.5 mm <sup>2</sup>         |
| 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                       |                                                                                                                                                                        | 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                       |                                                                                                                                                                        | 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                       |                                                                                                                                                                        | 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                       |                                                                                                                                                                        | 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                       |                                                                                                                                                                        | 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                       |                                                                                                                                                                        | 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. |                              |                             |

## BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data acc. to IEC

|                                                                              |                        |                                                                          |                   |
|------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                      | IEC 60664-1, IEC 61984 | Rated current, min. number of poles<br>(Tu=20°C)                         | 57 A              |
| Rated current, min. number of poles<br>(Tu=40°C)                             | 41 A                   | Rated voltage for surge voltage class /<br>pollution degree II/2         | 1,000 V           |
| Rated voltage for surge voltage class /<br>pollution degree III/2            | 1,000 V                | Rated voltage for surge voltage class /<br>pollution degree III/3        | 800 V             |
| Rated impulse voltage for surge voltage<br>class/ pollution degree II/2      | 6 kV                   | Rated impulse voltage for surge voltage<br>class/ pollution degree III/2 | 8 kV              |
| Rated impulse voltage for surge voltage<br>class/ contamination degree III/3 | 8 kV                   | Short-time withstand current resistance                                  | 3 x 1s with 420 A |

## 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) | 40.5 A |
| Rated current (Use group C / CSA) | 40.5 A | Rated current (Use group D / CSA) | 5 A    |
| Wire cross-section, AWG, min.     | AWG 24 | Wire cross-section, AWG, max.     | AWG 8  |

## 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) | 40.5 A |
| Rated current (Use group C / UL 1059) | 40.5 A                                                                              | Wire cross-section, AWG, max.         | AWG 8  |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.              |                                       |        |

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 322 mm |
| VPE width | 142 mm | VPE height | 84 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                                                                       |
|                                              | Evaluation | passed                                                                           |
| Test: Misengagement (Non-interchangeability) | Standard   | DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 512 part 7 section 5 / 05.94 |
|                                              | Test       | 180° turned with coding elements                                                 |
|                                              | Evaluation | passed                                                                           |
|                                              | Test       | 180° turned without coding elements                                              |
|                                              | Evaluation | passed                                                                           |

**BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data**

|                                                           |                |                                                                                    |                              |
|-----------------------------------------------------------|----------------|------------------------------------------------------------------------------------|------------------------------|
| 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 9.4 / 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                                                                             |                              |

## BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## 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 <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    |
| 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 |

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

**BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**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="#">WSCAD</a>                           |
| User Documentation                          | <a href="#">QR-Code product handling video</a>  |
| Brochure/Catalogue                          | <a href="#">Catalogues in PDF-format</a>        |

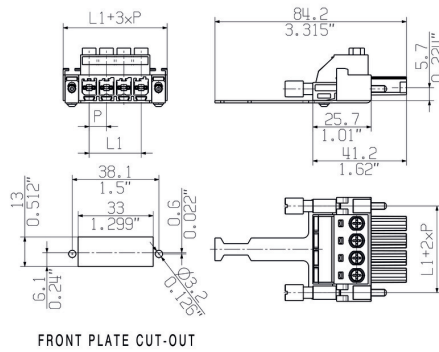
## BVZ 7.62HP/03/180RSH180 SN BK BX PRT TB

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

### Dimensional drawing

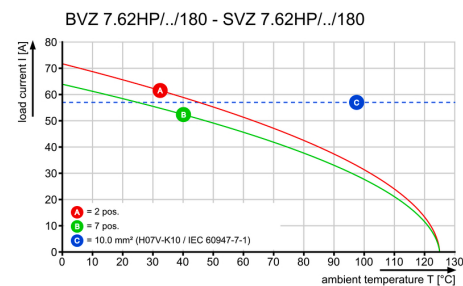


### Dimensional drawing

### Graph



### Graph



### Product benefits



Safe shielding  
Reliable and space-saving

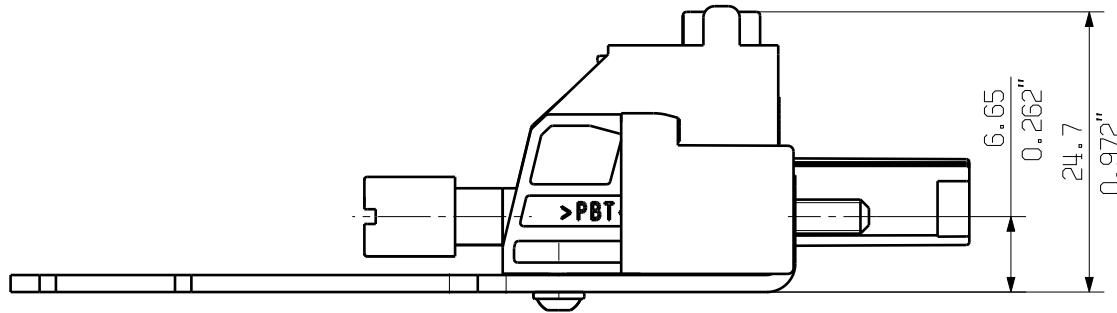
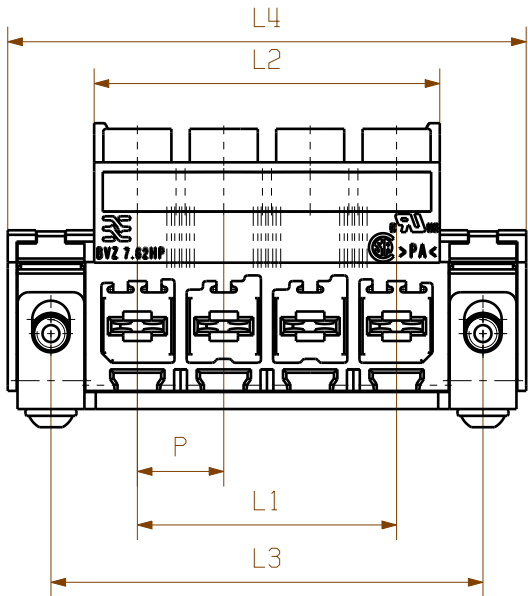
The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models or designs.

© Weidmüller Interface GmbH & Co. KG

Dimensions without tolerances are no check dimensions

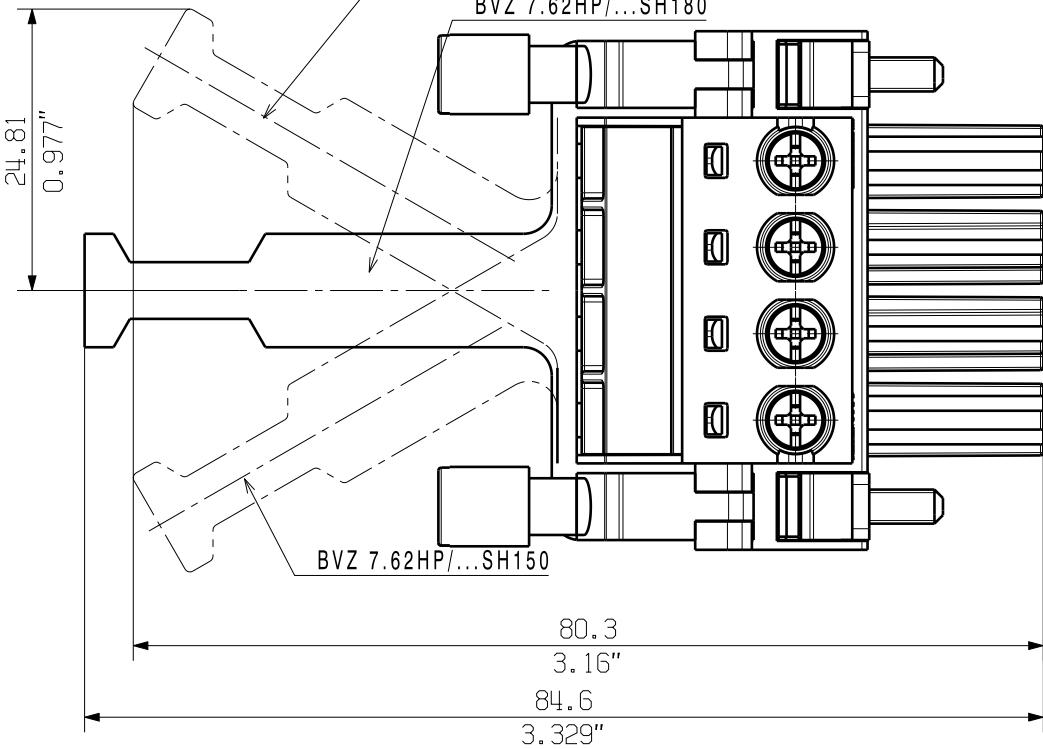
The English version is binding

BVZ 7.62HP/...SH180

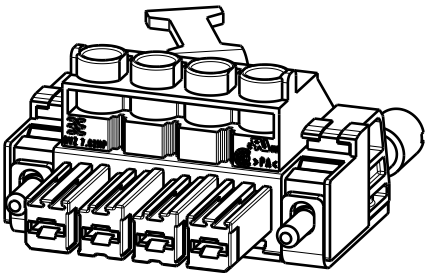


BVZ 7.62HP/...SH210

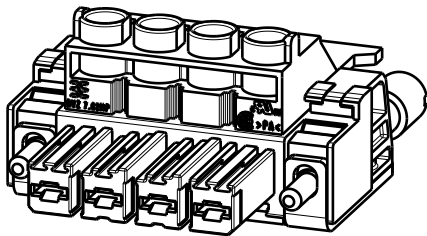
BVZ 7.62HP/...SH180



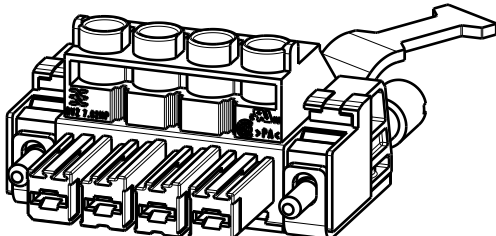
M 1/1



BVZ 7.62HP/...SH150



BVZ 7.62HP/...SH180



BVZ 7.62HP/...SH210

n=POLZAHL/ NO OF POLES  
P=RASTER/PITCH

|   |         |           |         |           |         |           |         |           |
|---|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 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 of 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 PCB components are tested to the DIN VDE 0627 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.

DIN ISO 2768-m

90775/5  
18.11.16 KRUG\_M

01

Modification

Date  
16.01.2007

Name  
NEUMANN\_G

Drawn  
Responsible  
Checked  
Approved

16.01.2007  
21.11.2016  
LANG\_T

Name  
KRUG\_M  
HERTEL\_S

Scale: 1.5:1  
Supersedes: .

Cat.no.: .  
3 42184 05  
Drawing no. 01 of 02 sheets  
Issue no.

**Weidmüller**

**BVZ 7.62HP/...SH**  
BUCHSENSTECKER  
FEMALE PLUG

Product file: SV/BVZ 7.62

7340