

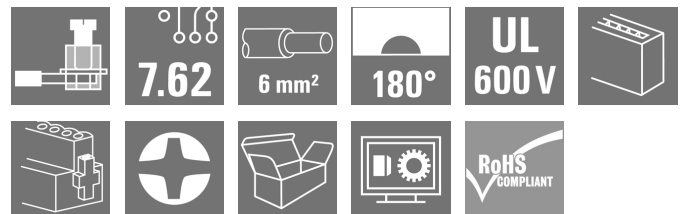
BVZ 7.62HP/03/180SF SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

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. | 1930170000 |
| Type | BVZ 7.62HP/03/180SF SN BK BX |
| GTIN (EAN) | 4032248580040 |
| Qty. | 100 pc(s). |
| Product data | IEC: 1000 V / 57 A / 0.2 - 10 mm² UL: 600 V / 40.5 A / AWG 24 - AWG 8 |
| Packaging | Box |

Creation date June 17, 2024 8:50:22 PM CEST

Catalogue status 14.06.2024 / We reserve the right to make technical changes.

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Depth | 42.1 mm | Depth (inches) | 1.657 inch |
| Height | 23.1 mm | Height (inches) | 0.909 inch |
| Width | 38.1 mm | Width (inches) | 1.5 inch |
| Net weight | 20.42 g | | |

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 " | Conductor outlet direction | 180° |
| Number of poles | 3 | L1 in mm | 15.24 mm |
| L1 in inches | 0.6 " | 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 | IP 20 |
| Protection degree | IP20 | Volume resistance | 4.50 mΩ |
| Can be coded | Yes | Stripping length | 12 mm |
| Tightening torque for screw flange, min. | 0.2 Nm | Tightening torque for screw flange, max. | 0.3 Nm |
| 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 | UL 94 flammability rating | V-0 |
| Contact base material | Copper alloy | Contact material | Copper alloy |
| 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 ² |
| Clamping range, max. | 10 mm ² |
| 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 ² |
| Solid, max. H05(07) V-U | 6 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 10 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max. | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.5 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, max. | 6 mm ² |

Creation date June 17, 2024 8:50:22 PM CEST

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

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 ² | |
| wire end ferrule | | Stripping length | nominal | 14 mm |
| | | Recommended wire-end ferrule | H0.5/18 OR | |
| 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 | |
| Cross-section for conductor connection | | Type | fine-wired | |
| | | nominal | 1.5 mm ² | |
| wire end ferrule | | Stripping length | nominal | 15 mm |
| | | Recommended wire-end ferrule | H1.5/18D SW | |
| wire end ferrule | | Stripping length | nominal | 12 mm |
| | | Recommended wire-end ferrule | H1.5/12 | |
| 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 | |
| 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 | |
| wire end ferrule | | Stripping length | nominal | 12 mm |
| | | Recommended wire-end ferrule | H2.5/12 | |
| 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 | |
| wire end ferrule | | Stripping length | nominal | 14 mm |
| | | Recommended wire-end ferrule | H4.0/20D GR | |
| 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 | |
| wire end ferrule | | 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.

BVZ 7.62HP/03/180SF SN BK BX

Weidmüller Interface GmbH & 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 (Tu=20°C) | 57 A |
| Rated current, max. number of poles (Tu=20°C) | 54 A | Rated current, min. number of poles (Tu=40°C) | 51 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 | 6,000 V | 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. | 10.2 mm | Creepage distance, min. | 13.8 mm |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1534443 |
| 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 |
| 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) | 600 V | Rated voltage (Use group C / UL 1059) | 600 V |
| Rated voltage (Use group D / UL 1059) | 600 V | Rated voltage (Use group F / UL 1059) | 1,000 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 | Rated current (Use group F / UL 1059) | 40.5 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 | 336 mm |
| VPE width | 149 mm | VPE height | 91 mm |

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**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 |
| 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 solid 0.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| | | Type of conductor and solid 6 mm ² conductor cross-section |
| | | Type of conductor and stranded 6 mm ² conductor cross-section |
| | | Type of conductor and AWG 24/1 conductor cross-section |
| | | Type of conductor and AWG 24/19 conductor cross-section |
| | | Type of conductor and AWG 10/1 conductor cross-section |
| | | Type of conductor and AWG 10/19 conductor cross-section |
| | Evaluation | passed |

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | |
|---|----------------|--|
| 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 AWG 24/1 conductor cross-section |
| | | Type of conductor and AWG 24/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.3 kg |
| | Conductor type | Type of conductor and solid 0.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| | Evaluation | passed |
| | Requirement | 1.4 kg |
| Pull-out test | Standard | DIN EN 60999-1 section 9.5 / 12.00 |
| | | ≥10 N |
| | Conductor type | Type of conductor and AWG 24/1 conductor cross-section |
| | | Type of conductor and AWG 24/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥20 N |
| | Conductor type | Type of conductor and solid 0.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥80 N |
| | Conductor type | Type of conductor and solid 6 mm ² conductor cross-section |
| | | Type of conductor and stranded 6 mm ² conductor cross-section |
| | | Type of conductor and AWG 10/1 conductor cross-section |
| | | Type of conductor and AWG 10/19 conductor cross-section |
| | Evaluation | passed |

BVZ 7.62HP/03/180SF SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | 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 | ECLASS 13.0 | 27-46-02-02 |

Environmental Product Compliance

REACH SVHC

/

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 with plastic collar to DIN 46228/4
- Wire end ferrule without plastic collar to DIN 46228/1
- 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.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



ROHS

Conform

UL File Number Search

UL Website

Certificate No. (cURus)

E60693

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Downloads**

Approval/Certificate/Document of Conformity

[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

Product Change Notification

[PCN_2016_138_PL33_Redesign_BVZ_762HP_Abstandshalter_DE](#)[PCN_2016_138_PL33_Redesign_BVZ_762HP_outside_pole_spacer_EN](#)[PCN_2016_275_PL33_plugable_SIBL_EN](#)[PCN_2016_275_PL33_Steckbare_SIBL_DE](#)[20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors](#)[20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder](#)[20220208 Visual change Temporarily different color for connectors and accessories](#)[20220208 Visuelle Änderung Vorübergehend anderer Farbton für Steckverbinder und Zubehör](#)[Packing change of BVZ 7.62HP and SVZ 7.62HP](#)[Änderung der Verpackung BVZ 7.62HP und SVZ 7.62HP](#)

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](#)

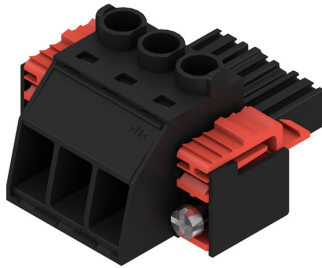
BVZ 7.62HP/03/180SF SN BK BX

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

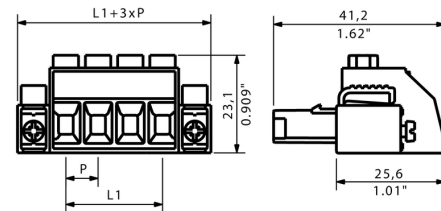
www.weidmueller.com

Drawings

Product image



Dimensional drawing



Graph



Graph



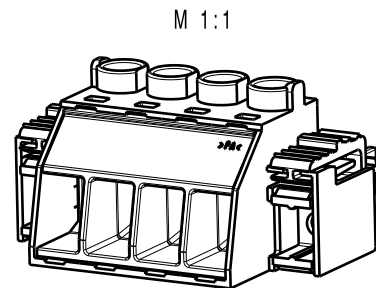
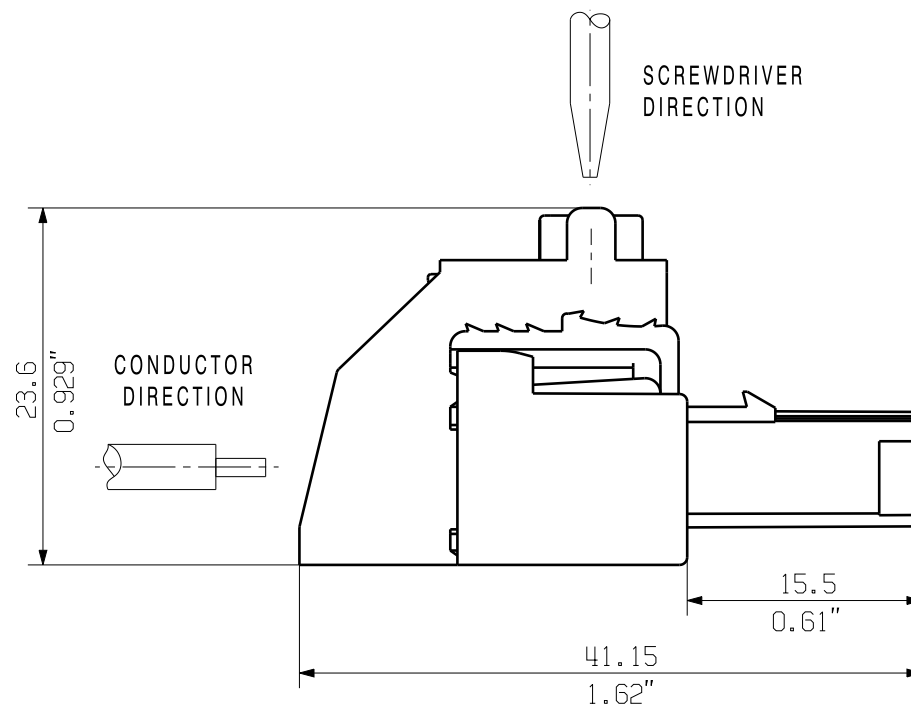
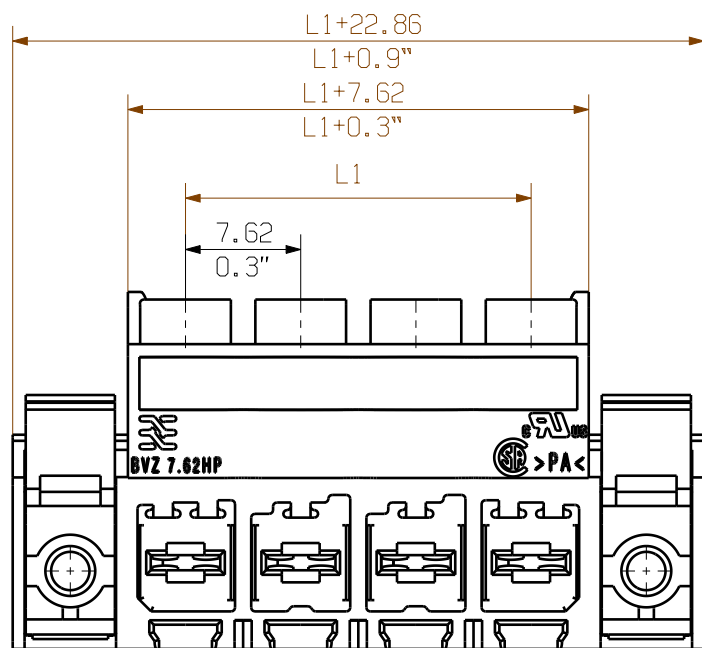
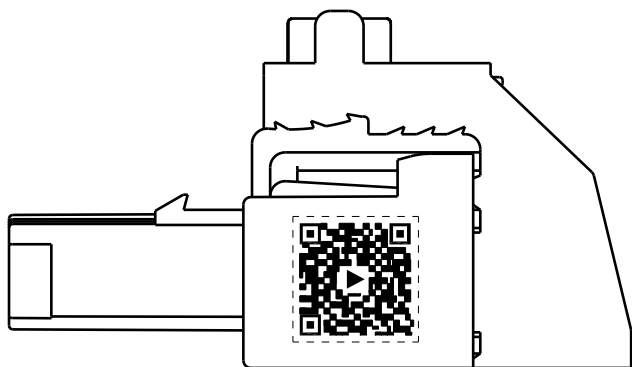
The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models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

© Weidmüller Interface GmbH & Co. KG

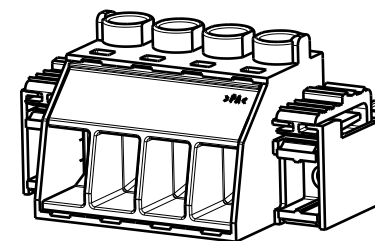
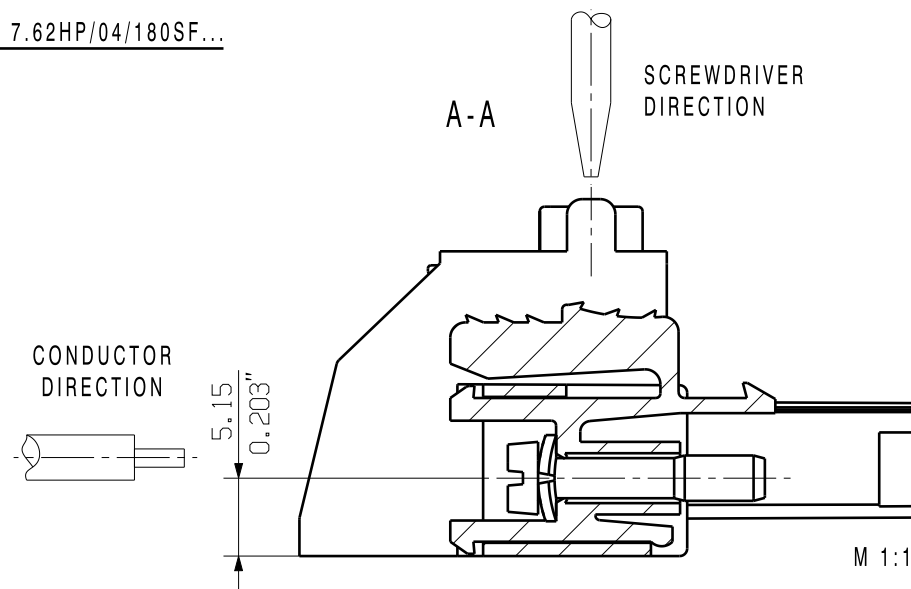
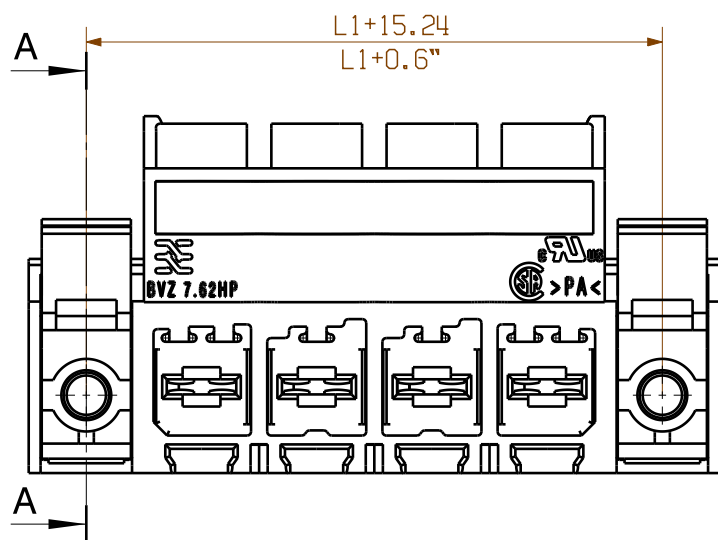
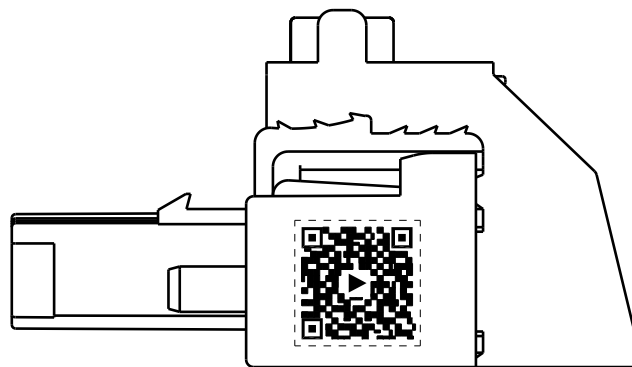
Dimensions without tolerances are no check dimensions

SHOWN: BVZ 7.62HP/04/180F ...

The English version is binding



SHOWN: BVZ 7.62HP/04/180SF...



| | | |
|----|------------------|----------------------------|
| 12 | 83.82 | 3.3 |
| 11 | 76.20 | 3.0 |
| 10 | 68.58 | 2.7 |
| 9 | 60.96 | 2.4 |
| 8 | 53.34 | 2.1 |
| 7 | 45.72 | 1.8 |
| 6 | 38.10 | 1.5 |
| 5 | 30.48 | 1.2 |
| 4 | 22.86 | 0.9 |
| 3 | 15.24 | 0.6 |
| 2 | 7.62 | 0.3 |
| n | POLZAHL POLES | L1 [mm] L1 [inch] |

HINWEIS: QR Code bitte noch nicht berücksichtigen!
INFORMATION: Please do not consider the QR code yet

ALLGEMEINGUELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

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 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.

GENERAL TOLERANCE:
DIN ISO 2768-mK

| | | | | | |
|--|--------------------------------|---------------------------|-------------------------------------|------------------------------------|--------------------------------|
| | EC00001750 | Prim PLM Part No.: 026887 | | Prim ERP Part No.: 1930070000 | |
| | First Issue Date 15.01.2007 | Max. nos. Modification | | | 42180 Drawing no. Issue no. |
| | Scale: 2:1 | Size: A3 | Drawn 23.05.2019 Helis, Maria | Date 18.06.2019 Lang, Thomas | Sheet 02 of 03 sheets |
| | Drawings Assembly | | | Product file: 7340 SV/BVZ7.62HP | |

BVZ 7.62HP/...F
BUCHSENSTECKER
FEMALE PLUG