

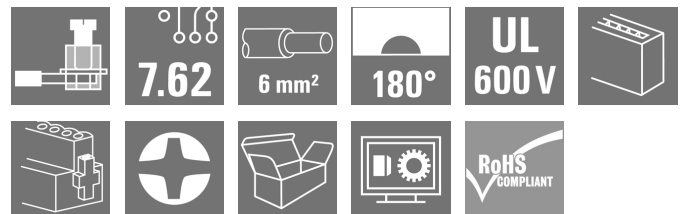
BVZ 7.62HP/02/180SF SN BK BX**Weidmüller Interface GmbH & Co. KG**

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: 2, 180°, Clamping yoke connection, Clamping range, max. : 10 mm², Box
Order No.	1930160000
Type	BVZ 7.62HP/02/180SF SN BK BX
GTIN (EAN)	4032248580033
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 7:41:45 PM CEST

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

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Technical data**Dimensions and weights**

Depth	42.1 mm	Depth (inches)	1.657 inch
Height	23.1 mm	Height (inches)	0.909 inch
Width	30.48 mm	Width (inches)	1.2 inch
Net weight	15.37 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	2	L1 in mm	7.62 mm
L1 in inches	0.3 "	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

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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.

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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)	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	334 mm
VPE width	149 mm	VPE height	89 mm

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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

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

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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/02/180SF SN BK BX**Weidmüller Interface GmbH & Co. KG**

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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](#)

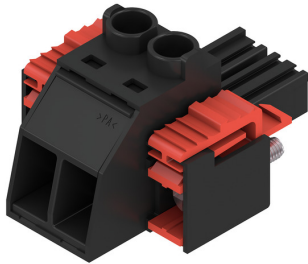
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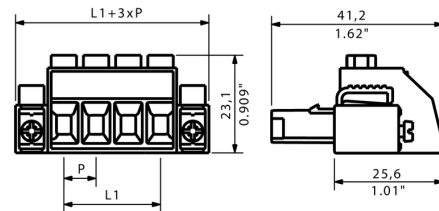
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Drawings

Product image



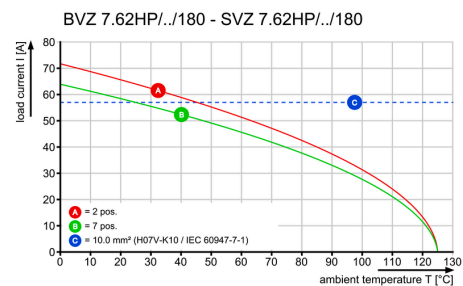
Dimensional drawing



Graph



Graph



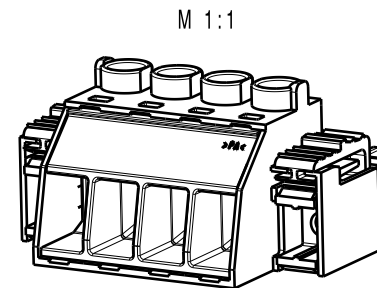
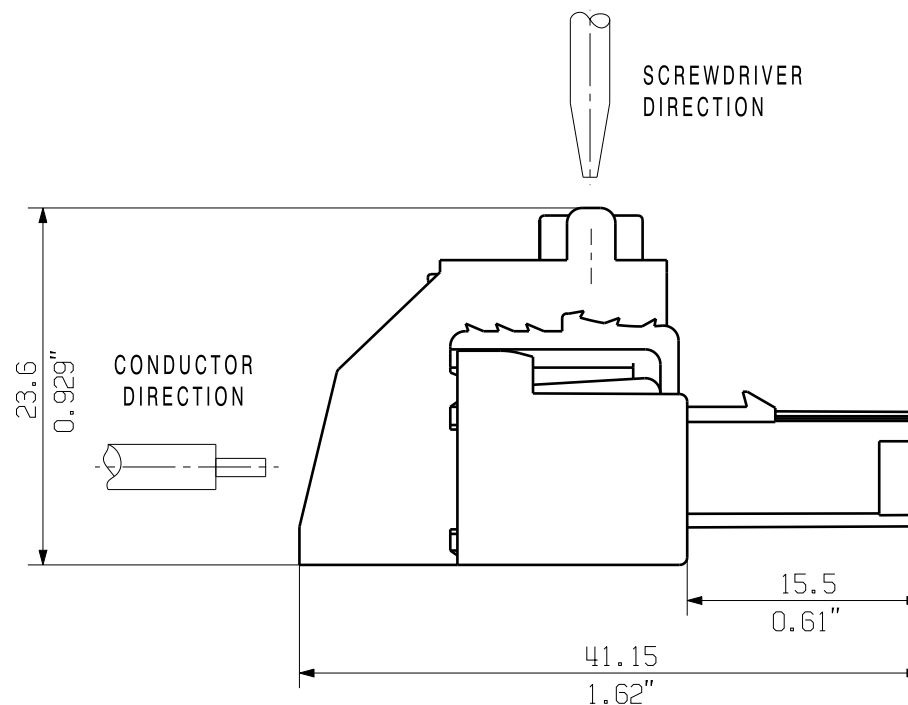
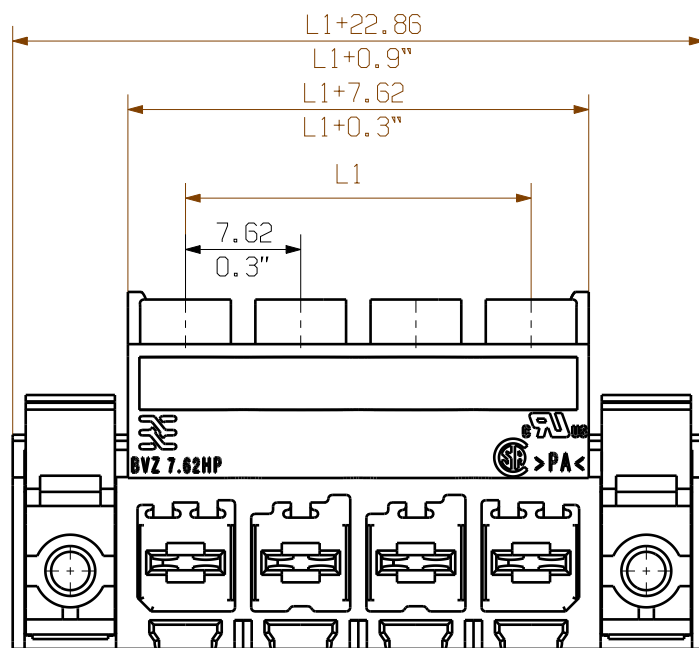
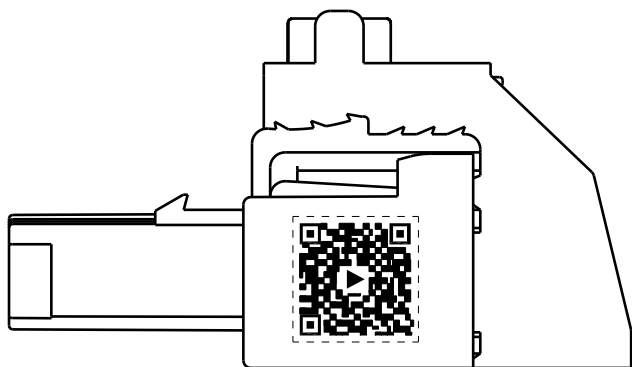
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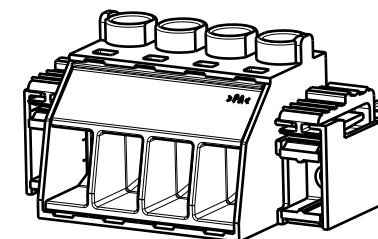
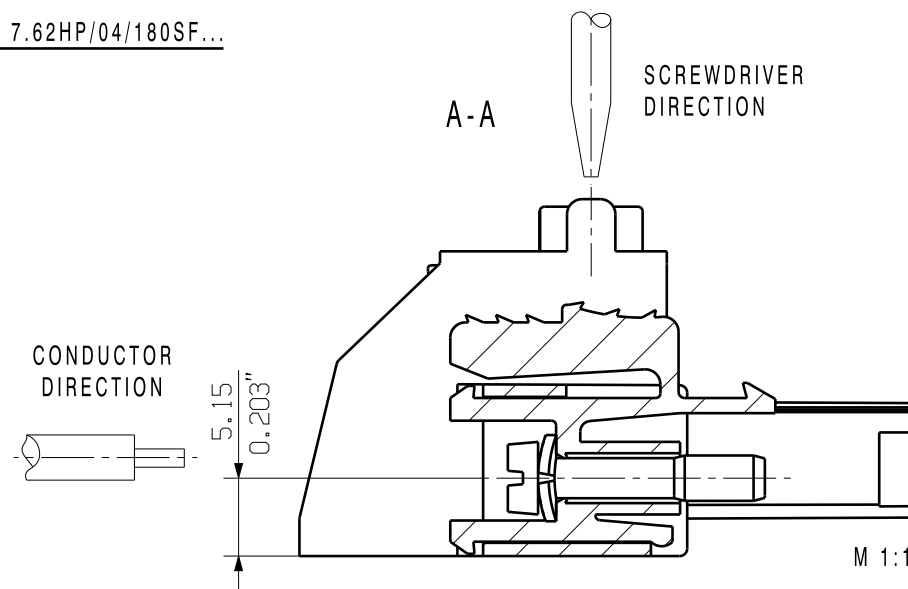
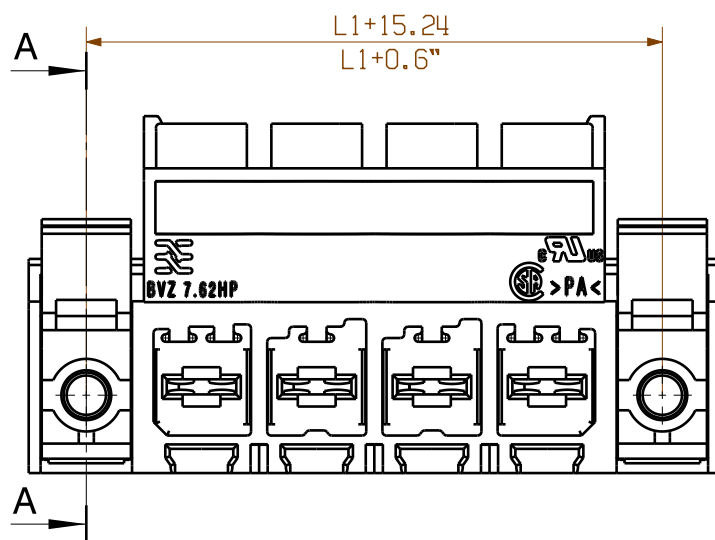
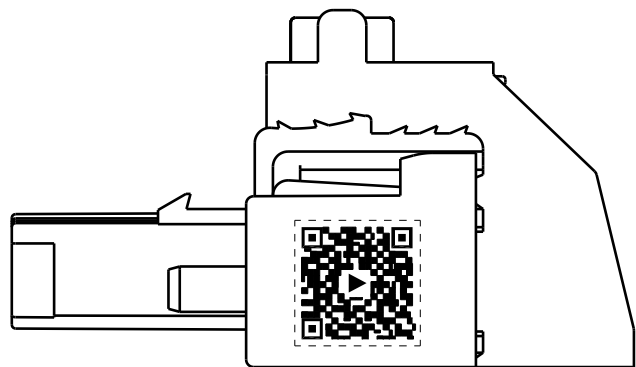
Dimensions without tolerances are no check dimensions

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.
	Drawn 23.05.2019	Date 23.05.2019	Name Helis, Maria	Sheet 02 of 03 sheets	
	Responsible	Date 18.06.2019	Name Döhrer, Karl	BVZ 7.62HP/...F BUCHSENSTECKER FEMALE PLUG	
Scale: 2:1 Size: A3 Drawings Assembly				Product file: 7340 SV/BVZ7.62HP	