

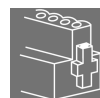
BVZ 7.62HP/03/180MF3 SN BK BX**Weidmüller Interface GmbH & Co. KG**

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.	1542980000
Type	BVZ 7.62HP/03/180MF3 SN BK BX
GTIN (EAN)	4050118347593
Qty.	40 items
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm² UL: 600 V / 40.5 A
Packaging	Box

BVZ 7.62HP/03/180MF3 SN BK BX

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

www.weidmueller.com

Technical data

Approvals

Approvals



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

Dimensions and weights

Depth	43.2 mm	Depth (inches)	1.7008 inch
Height	23.1 mm	Height (inches)	0.9094 inch
Width	30.48 mm	Width (inches)	1.2 inch
Net weight	18.02 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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)	0.300 "	Conductor outlet direction	180°
Number of poles	3	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm ²
Touch-safe protection acc. to DIN VDE 0470	IP 20	Protection degree	IP20
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	Moisture Level (MSL)	
UL 94 flammability rating	V-0	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

BVZ 7.62HP/03/180MF3 SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Flexible, max. H05(07) V-K		10 mm²		
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm² min.				
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm² max.				
w. wire end ferrule, DIN 46228 pt 1, min.		0.5 mm²		
w. wire end ferrule, DIN 46228 pt 1, max.		6 mm²		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H0.5/18 OR	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H1.0/18 GE	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H1.5/18D SW	
	Stripping length		nominal	12 mm
	Recommended wire-end ferrule		H1.5/12	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H0.75/18 W	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H2.5/19D BL	
	Stripping length		nominal	12 mm
	Recommended wire-end ferrule		H2.5/12	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H4.0/12	
	Stripping length		nominal	14 mm
	Recommended wire-end ferrule		H4.0/20D GR	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm²	
		wire end ferrule	Stripping length	nominal
	Recommended wire-end ferrule		H6.0/20 SW	
	Stripping length		nominal	12 mm
	Recommended wire-end ferrule		H6.0/12	
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.			

BVZ 7.62HP/03/180MF3 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	1000 V
Rated voltage for surge voltage class / pollution degree III/2	1000 V	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6000 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
Creepage distance, min.	13.8 mm	Clearance, min.	10.2 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)	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)	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)	1000 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, max.	AWG 8	Reference to approval values	Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Box	VPE length	338.00 mm
VPE width	130.00 mm	VPE height	44.00 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
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 solid 0.5 mm ² and conductor cross-section

BVZ 7.62HP/03/180MF3 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	Type of conductor and conductor cross-section		stranded 0.5 mm ²
	Type of conductor and conductor cross-section		solid 6 mm ²
	Type of conductor and conductor cross-section		stranded 6 mm ²
	Type of conductor and conductor cross-section		AWG 24/1
	Type of conductor and conductor cross-section		AWG 24/19
	Type of conductor and conductor cross-section		AWG 10/1
	Type of conductor and conductor cross-section		AWG 10/19
	Evaluation		passed
	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 ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
Pull-out test	Evaluation		passed
	Requirement		1.4 kg
	Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²
		Type of conductor and conductor cross-section	stranded 6 mm ²
		Type of conductor and conductor cross-section	AWG 10/1
		Type of conductor and conductor cross-section	AWG 10/19
	Evaluation		passed
	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

BVZ 7.62HP/03/180MF3 SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
	Type of conductor and conductor cross-section	stranded 0.5 mm ²
Evaluation	passed	
Requirement	≥80 N	
Conductor type	Type of conductor and conductor cross-section	solid 6 mm ²
	Type of conductor and conductor cross-section	stranded 6 mm ²
	Type of conductor and conductor cross-section	AWG 10/1
	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

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

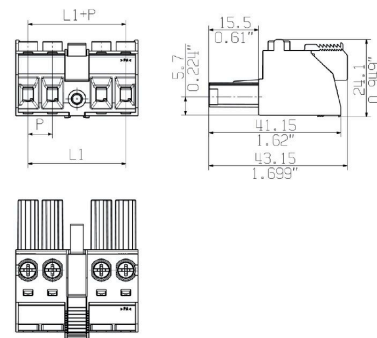
- Additional variants on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule with plastic collar to DIN 46228/4
- Wire end ferrule without plastic collar to DIN 46228/1
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage 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

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

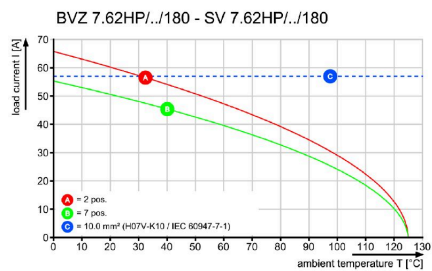
Drawings

Dimensional drawing

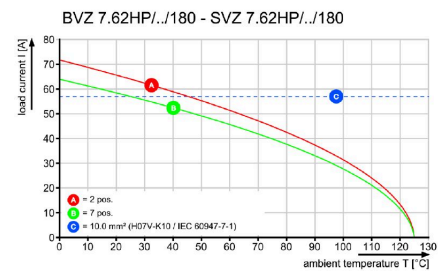


Similar to illustration

Graph



Graph



BVZ 7.62HP/03/180MF3 SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our service:

Design your individual connectors simply by using the product configurator.

General ordering data

Type	BV/SV 7.62HP KO RD 2022	Version
Order No.	2007300000	PCB plug-in connector, Accessories, Coding element, red, Number of
GTIN (EAN)	4050118392715	poles: 1
Qty.	20 ST	

Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.8X4.5X125	Version
Order No.	9009020000	Screwdriver, Screwdriver
GTIN (EAN)	4032248266883	
Qty.	1 ST	
Type	SDIS 0.8X4.0X100	Version
Order No.	9008400000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056361	
Qty.	1 ST	

BVZ 7.62HP/03/180MF3 SN BK BX

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

www.weidmueller.com

Accessories**Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PH1	Version
Order No.	9008480000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056477	
Qty.	1 ST	

Type	SDIK PH1	Version
Order No.	9008570000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056569	
Qty.	1 ST	

Crimping tools

Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

General ordering data

Type	PZ 6/5	Version
Order No.	9011460000	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm², 6mm²,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 ST	

BVZ 7.62HP/03/180MF3 SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

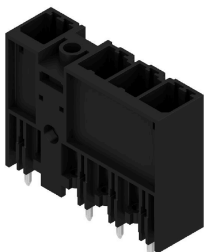
D-32758 Detmold

Germany

www.weidmueller.com

Counterpart

SV 7.62HP 180MF SN



180° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V.

Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.

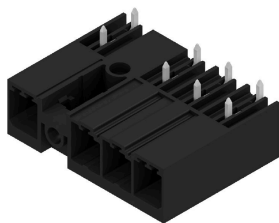
The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.

On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/03/180MF3 3.5...	Version
Order No.	1048420000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786602	solder connection, 7.62 mm, Number of poles: 3, 180°, Solder pin
Qty.	60 ST	length (l): 3.5 mm, tinned, black, Box

SV 7.62HP 270MF SN



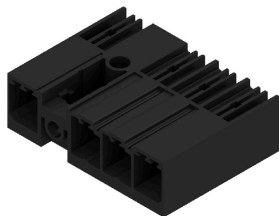
270° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V. Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.

The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.

On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/03/270MF3 3.5...	Version
Order No.	2625700000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118629330	connection, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l):
Qty.	60 ST	3.5 mm, tinned, black, Box
Type	SV 7.62HP/03/270MF3 3.5...	Version
Order No.	1048460000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786565	solder connection, 7.62 mm, Number of poles: 3, 270°, Solder pin
Qty.	60 ST	length (l): 3.5 mm, tinned, black, Box

BVZ 7.62HP/03/180MF3 SN BK BX**Weidmüller Interface GmbH & Co. KG**Klingenbergstraße 26
D-32758 Detmold
Germanywww.weidmueller.com**Counterpart****SV 7.62HP 90MF SN**

90° male header with middle flange with a 7.62 pitch.
Meets the requirements of IEC 61800-5-1 and enables
UL approval as per UL840 600 V.

Without a female header, the mating profile guarantees
minimum touch safety of >3 mm with 20 N pressure on
the test finger.

The automatically locking middle flange which can
optionally also be screwed, reduces space requirements
by one pitch width in comparison with conventional
solutions.

On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/03/90MF3 3.5S...	Version
Order No.	1048500000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786527	solder connection, 7.62 mm, Number of poles: 3, 90°, Solder pin
Qty.	60 ST	length (l): 3.5 mm, tinned, black, Box