

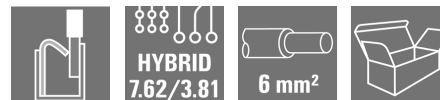
BVFL 7.62HP/4/180MF4 BCF/4 SNBKBX SH180**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

180° female plug with energy and signal contacts in PUSH IN wire connection in 7.62 pitch.
Fulfills the IEC 61800-5-1 requirement and for the energy contact UL 1059 ClassC 600 V.

The self-locking middle flange with automatic interlock reduces the space requirements by one pitch width in comparison with conventional solutions. Optionally also available with additional mounting screw.

Including pre-assembled pluggable shield connection for large area shielding in your application.

Directly during the plug-in process itself, the shield connection is attached vibration-proof to the contact area of the metal housing.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4, 180°, PUSH IN with actuator, Box
Order No.	2427960000
Type	BVFL 7.62HP/4/180MF4 BCF/4 SNBKBX SH180
GTIN (EAN)	4050118437133
Qty.	20 pc(s).
Product data	IEC: 800 V / 0.5 - 6 mm ² UL: / AWG 24 - AWG 8
Packaging	Box

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Technical data**Dimensions and weights**

Net weight	42.52 g
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System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 "	Conductor outlet direction	180°
Number of poles	4	L1 in mm	30.48 mm
L1 in inches	1.2 "	L2 in mm	3.81 mm
L2 in inch	0.15 "	Pin series quantity	1
Stripping length	12 mm	Screwdriver blade	0.6 x 3.5
Plugging cycles	25		

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	UL 94 flammability rating	V-0
Contact material	Cu-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		

Conductors suitable for connection

Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	6 mm ²
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

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
		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
		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
		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
		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**

Rated current, max. number of poles ($T_u=20^{\circ}\text{C}$)	38 A	Rated current, min. number of poles ($T_u=40^{\circ}\text{C}$)	34 A
Rated voltage for surge voltage class / pollution degree II/2	800 V	Rated voltage for surge voltage class / pollution degree III/2	630 V
Rated voltage for surge voltage class / pollution degree III/3	630 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV
Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV	Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV
Clearance, min.	10.4 mm	Creepage distance, min.	12.7 mm

Rated data acc. to UL 1059

Rated voltage (Use group F / UL 1059)	600 V	Rated current (Use group F / UL 1059)	33 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

Packing

Packaging	Box	VPE length	353 mm
VPE width	135 mm	VPE height	61 mm

Technical data - hybrid

Pitch in mm (Signal)	3.81 mm	Pitch in inches (Signal)	0.15 inch
Number of poles (Signal)	4	L2 in mm	3.81 mm
L2 in inch	0.15 "	Number of rows (Signal)	2
Contact material (Signal)	CuMg	Contact surface (Signal)	tinned
Layer structure of the plug contact (Sig- nal)	1-3 μ Ni / 4-8 μ Sn	Rated voltage for overvoltage class/pol- lution severity level II/2 (Signal)	250 V
Rated voltage for overvoltage class/pol- lution severity level III/2 (Signal)	150 V	Rated voltage for overvoltage class/pol- lution severity level III/3 (Signal)	63 V
Rated impulse voltage for overvoltage class/pollution severity level II/2 (Signal)	2.5 kV	Rated impulse voltage for overvoltage class/pollution severity level III/2 (Sig- nal)	2.5 kV
Rated impulse voltage for overvoltage class/pollution severity level III/3 (Sig- nal)	2.5 kV	Short-time withstand current resistance (Signal)	3 x 1s with 80 A
Connector cross-section (Signal)	AWG 26...AWG 16		

Conductors that can be connected - Hybrid

Clamping range, rated connection (Pow- er)	0.5...10 mm ²	Clamping range, rated connection (Sig- nal)	0.2...1.5 mm ²
Connector cross-section (Power)	AWG 24...AWG 8	Connector cross-section AWG (Signal)	AWG 26...AWG 16
solid, H05(07) V-U (Power)	0.5...10 mm ²	solid, H05(07) V-U (Signal)	0.14...1.5 mm ²
flexible, H05(07) V-K (Power)	0.5...6 mm ²	flexible, H05(07) V-K (Signal)	0.14...1.5 mm ²
with wire-end ferrule with collar (Power)	0.5...6 mm ²	with wire-end ferrule with collar, DIN 46 228/4 (Signal)	0.25...1.5 mm ²
with wire-end ferrule according to DIN 46 228/1 (Power)	0.5...6 mm ²	with wire-end ferrule according to DIN 46 228/1 (Signal)	0.25...1.5 mm ²

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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	27-46-03-02	ECLASS 13.0	27-46-03-02

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"> • Technical specifications refer to the power contacts • Technical data of signal contacts: 50V / 5A, stripping length 8mm • 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 • 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. • Additional pole combinations on request • 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

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www.weidmueller.com**Technical data****Downloads**Approval/Certificate/Document of Con-
formity[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

Product Change Notification

[EN - Change of isolation material](#)[DE - Werkstoffänderung Pusher](#)[20210408 OMNIMATE® Power – BVF\(L\) 7.62 HPIT fastening shielding plate](#)[20210408 OMNIMATE® Power BVF\(L\) 7.62 HPIT Schirmblechbefestigung](#)[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](#)

User Documentation

[Operating Instruction BVFL hybrid](#)[QR-Code product handling video](#)

Catalogues

[Catalogues in PDF-format](#)

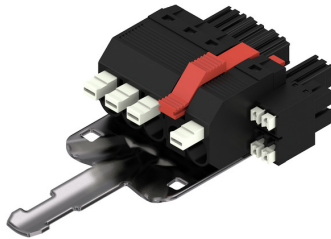
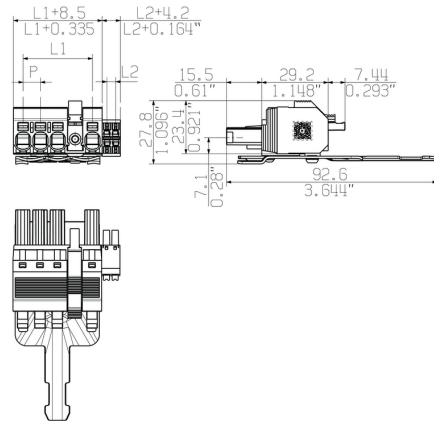
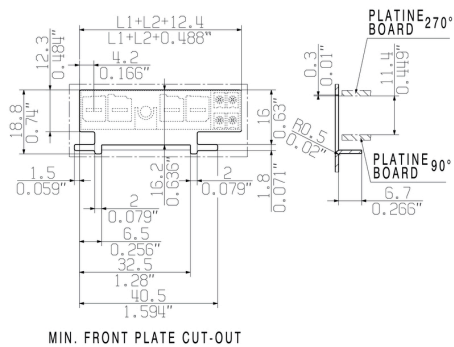
Brochures

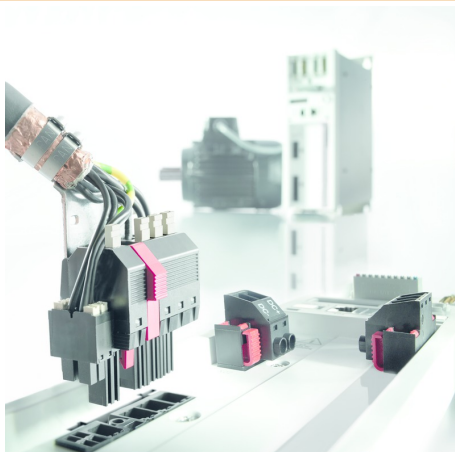
[FL DRIVES EN](#)[MB DEVICE MANUF. EN](#)[FL DRIVES DE](#)[FL HEATING ELECTR EN](#)[FL APPL INVERTER EN](#)[FL BASE STATION EN](#)[FL ELEVATOR EN](#)[FL POWER SUPPLY EN](#)[FL 72H SAMPLE SER EN](#)[PO OMNIMATE EN](#)

BVFL 7.62HP/4/180MF4 BCF/4 SNBKBX SH180

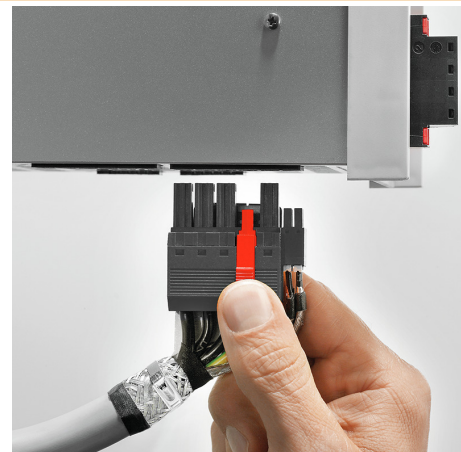
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Drawings
Product image

Dimensional drawing

Graph

Graph

Product benefits


one connector for: Power, Signal (data) and Shielding

Product benefits


Single-handed operation
 Automatic latching

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Accessories**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, 0.25mm ² , 6mm ² ,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 pc(s).	

Cable tie tools**General ordering data**

Type	WSM TOOL AUTOMATIK	Version
Order No.	1774470000	Stainless steel markers, Conductor and cable markers, 180 x 275 mm,
GTIN (EAN)	4032248149261	silver
Qty.	1 pc(s).	

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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

General ordering data

Type	BV/SV 7.62HP KO	Version	Product data	Packaging
Order No.	1937590000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248608881	of poles: 1		
Qty.	50 pc(s).			

Stainless steel


Weidmüller stainless steel Series contains a comprehensive assortment of stainless steel cable ties for extreme conditions such as high temperatures or severe chemical effects.

- stainless steel AISI 316,
- ideal for use outdoors,
- radiation- and corrosion-resistant,
- anti-magnetic,
- no serrations, so no damage to the insulation.

General ordering data

Type	SCT 4.6/127 C	Version
Order No.	1699800000	Cable ties, 4.6 x 127 mm, Stainless steel 1.4301, 445 N
GTIN (EAN)	4008190892241	
Qty.	100 pc(s).	

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www.weidmueller.com**Accessories****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 0.6X3.5X100	Version
Order No.	2749340000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118895568	thickness (A): 0.6 mm
Qty.	1 pc(s).	

WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.
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WEIDMUELLER INTERFACE GmbH & Co. KG

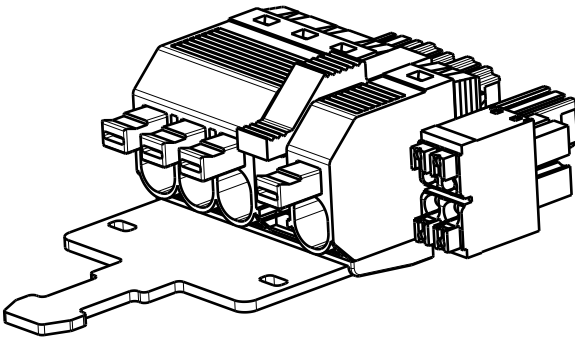
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

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

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING



M1/1



FEHL. MASSE UND ANGABEN SIEHE DATENBLATT
FURTHER DIM. & INFO. SEE DATA SHEET

P = RASTER/ PITCH
MF = MITTELFLANSCH / MIDDLE FLANGE

2427960000	BVFL 7.62HP/04/180MF4 BCF/04 SN BK BX SO	30.48	POL	POL	POL	MF	POL
			1	2	3	4	5
BESTELL-NR. CAT.NO.	TYP PART NAME	L1 [mm]	POS. MITTELFLANSCH POS. MIDDLEFLANGE				

GENERAL TOLERANCE:
DIN ISO 2768-mK



MAX. NRN./NOS.

86764/5
08.03.16 KRECHT_M 01

MODIFICATION

Weidmüller

3 62861 01

DRAWING NO. SHEET 01 OF 01 SHEETS



DATE 07.10.2015 NAME GUETZLAFF_T

RESPONSIBLE KRUG_M

SCALE: 2/1

CHECKED 08.03.2016 HELIS_MA

SUPERSEDES:

APPROVED LANG_T

BVFL 7.62HP/.. /180MF...SO
BUCHSENSTECKER
FEMALE PLUG

PRODUCT FILE: BVFL 7.62

7391

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.