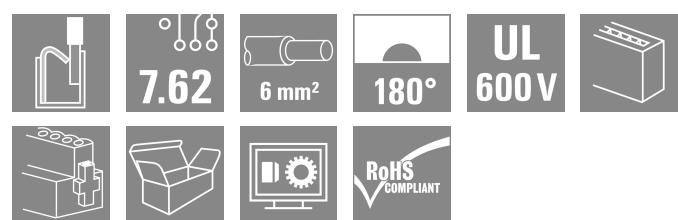
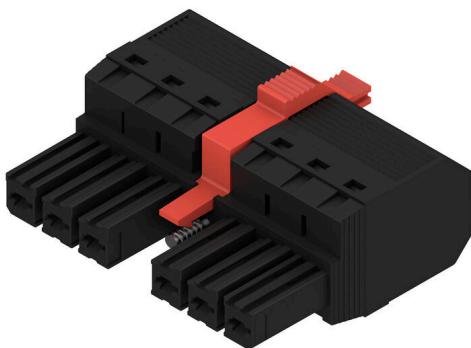


BVF 7.62HP/06/180MSF4 SN BK BX

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

www.weidmueller.com

Product image

180° female header with PUSH IN connection technology for field wiring in 6 mm² with 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1. Ideal touch-safe solution for the power output.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Variants: without flange, external flange, middle flange with detent fastening and optionally additional screw mount.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 6, 180°, PUSH IN without actuator, Tension-clamp connection, Clamping range, max. : 10 mm ² , Box
Order No.	1060700000
Type	BVF 7.62HP/06/180MSF4 SN BK BX
GTIN (EAN)	4032248809554
Qty.	25 items
Product data	IEC: 1000 V / 57 A / 0.5 - 10 mm ² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

BVF 7.62HP/06/180MSF4 SN BK BX

Weidmüller Interface GmbH & Co. KG
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Technical data

Approvals

Approvals



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

Dimensions and weights

Depth	47.7 mm	Depth (inches)	1.8779 inch
Height	22.9 mm	Height (inches)	0.9016 inch
Net weight	35 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	PUSH IN without actuator, Tension-clamp connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	6	L1 in mm	45.72 mm
L1 in inches	1.800 "	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
Screwdriver blade	0.6 x 3.5	Plugging cycles	25
Plugging force/pole, max.	17 N	Pulling force/pole, max.	15 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	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
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	125 °C

Conductors suitable for connection

Clamping range, min.	0.5 mm ²
Clamping range, max.	10 mm ²
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, max. H07V-R	10 mm ²

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Technical data

Flexible, min. H05(07) V-K 0.5 mm²

Flexible, max. H05(07) V-K 10 mm²

w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm²
min.

w. plastic collar ferrule, DIN 46228 pt 4, 6 mm²
max.

w. wire end ferrule, DIN 46228 pt 1, 0.5 mm²
min.

w. wire end ferrule, DIN 46228 pt 1, 10 mm²
max.

Clampable conductor

Cross-section for conductor connection

Type fine-wired

nominal 0.5 mm²

wire end ferrule

Stripping length nominal 14 mm

Recommended wire- [H0.5/12 OR](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 0.75 mm²

wire end ferrule

Stripping length nominal 14 mm

Recommended wire- [H0.75/18 W](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 1 mm²

wire end ferrule

Stripping length nominal 15 mm

Recommended wire- [H1.0/18 GE](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 1.5 mm²

wire end ferrule

Stripping length nominal 12 mm

Recommended wire- [H1.5/12](#)
end ferrule

Stripping length nominal 15 mm

Recommended wire- [H1.5/18D SW](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 2.5 mm²

wire end ferrule

Stripping length nominal 12 mm

Recommended wire- [H2.5/12](#)
end ferrule

Stripping length nominal 14 mm

Recommended wire- [H2.5/19D BL](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 4 mm²

wire end ferrule

Stripping length nominal 12 mm

Recommended wire- [H4.0/12](#)
end ferrule

Stripping length nominal 14 mm

Recommended wire- [H4.0/20D GR](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 6 mm²

wire end ferrule

Stripping length nominal 12 mm

Recommended wire- [H6.0/12](#)
end ferrule

Stripping length nominal 14 mm

Recommended wire- [H6.0/20 SW](#)
end ferrule

Cross-section for conductor connection

Type fine-wired

nominal 10 mm²

wire end ferrule

Stripping length nominal 12 mm

BVF 7.62HP/06/180MSF4 SN BK BX

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Technical data

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.	
Rated data acc. to IEC		Recommended wire-end ferrule H10,0/12
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)	51 A	Rated current, min. number of poles (Tu=40°C) 57 A
Rated current, max. number of poles (Tu=40°C)	45 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	6 kV	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.	12.7 mm	Clearance, min. 10.4 mm

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1121690
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)	33 A
Rated current (Use group C / CSA)	33 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)	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)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	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	354.00 mm
VPE width	139.00 mm	VPE height	61.00 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
	Evaluation	available
	Test	durability
	Evaluation	passed
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08
	Test	180° turned with coding elements
	Evaluation	passed

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	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 / 04.08
	Conductor type	Type of conductor solid 0.5 mm ² and conductor cross-section
		Type of conductor stranded 0.5 mm ² and conductor cross-section
		Type of conductor solid 6 mm ² and conductor cross-section
		Type of conductor stranded 6 mm ² and conductor cross-section
		Type of conductor AWG 24/1 and conductor cross-section
		Type of conductor AWG 24/19 and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00
	Requirement	0.3 kg
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section
		Type of conductor H05V-K0.5 and conductor cross-section
		Type of conductor AWG 20/1 and conductor cross-section
		Type of conductor AWG 20/19 and conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor H07V-U6 and conductor cross-section
		Type of conductor H07V-K6 and conductor cross-section
		Type of conductor AWG 10/1 and conductor cross-section
		Type of conductor AWG 10/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥20 N
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section

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Technical data

	Type of conductor and conductor cross-section	H05V-K0.5
	Type of conductor and conductor cross-section	AWG 20/1
	Type of conductor and conductor cross-section	AWG 20/19
Evaluation	passed	
Requirement	≥80 N	
Conductor type	Type of conductor and conductor cross-section	H07V-U6
	Type of conductor and conductor cross-section	H07V-K6
	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	<ul style="list-style-type: none"> Additional variants on request 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		

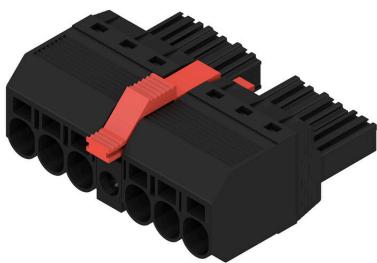
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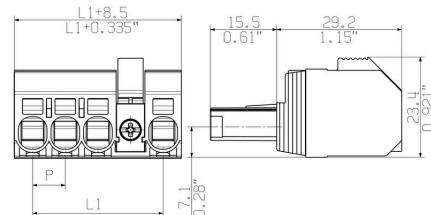
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Drawings

Product image



Dimensional drawing



Similar to illustration

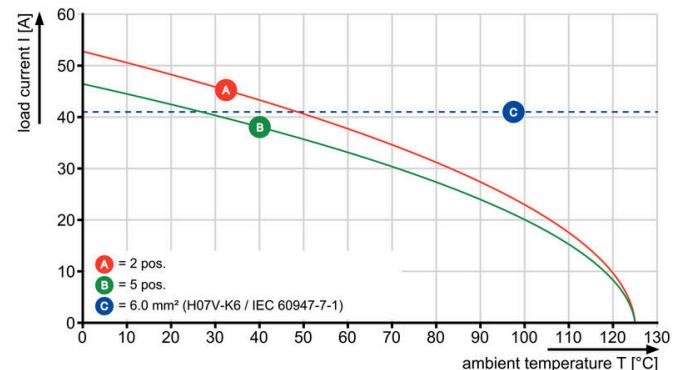
Connection diagram

6	M(S)F6	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	o
5	M(S)F4	o	o	o	X	o	o	o
5	M(S)F3	o	o	X	o	o	o	o
5	M(S)F2	o	X	o	o	o	o	o
4	M(S)F4	o	o	o	X	o	o	o
4	M(S)F3	o	o	X	o	o	o	o
4	M(S)F2	o	X	o	o	o	o	o
3	M(S)F3	o	o	X	o	o	o	o
3	M(S)F2	o	X	o	o	o	o	o
2	M(S)F2	o	X	o	o	o	o	o
		1	2	3	4	5	6	7
NO OF POLES	X = MIDDLE FLANGE POSITION	POS. 1 2 3 4 5						



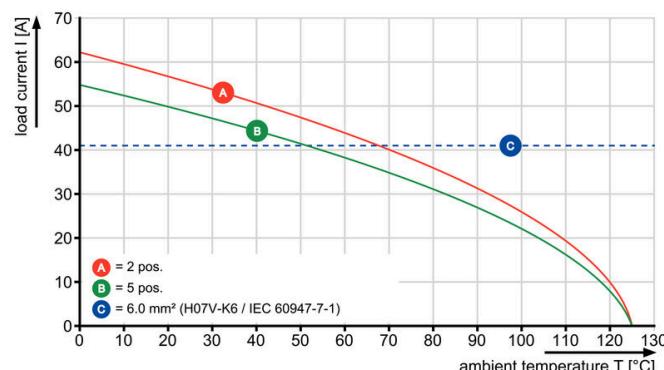
Graph

BVF 7.62HP/..180 - SV 7.62HP/..90



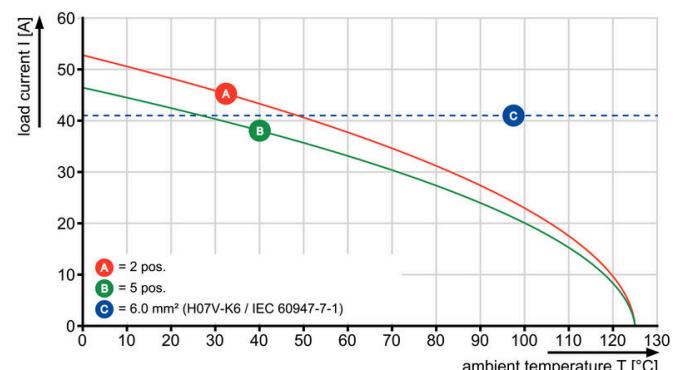
Graph

BVF 7.62HP/..180 - SVF 7.62HP/..180



Graph

BVF 7.62HP/..180 - SV 7.62HP/..270



Installation without toolsOutlet direction: 90° und 180°

BVF 7.62HP/06/180MSF4 SN BK BX

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Drawings

Product benefits



Installation without tools
Outlet direction: 90° und 180°

BVF 7.62HP/06/180MSF4 SN BK BX

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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

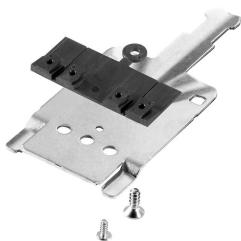
Our service:

Design your individual connectors simply by using the product configurator.

General ordering data

Type	BVF 7.62HP KO	Version
Order No.	1937590000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4032248608881	of poles: 1
Qty.	50 ST	

Shielding



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	BVF 7.62HP SH150 4-6 KIT	Version
Order No.	1118480000	PCB plug-in connector, Accessories, For a shield connection, black,
GTIN (EAN)	4032248899449	Number of poles: 0
Qty.	25 ST	
Type	BVF 7.62HP SH180 4-6 KIT	Version
Order No.	1118470000	PCB plug-in connector, Accessories, For a shield connection, black,
GTIN (EAN)	4032248899456	Number of poles: 0
Qty.	25 ST	

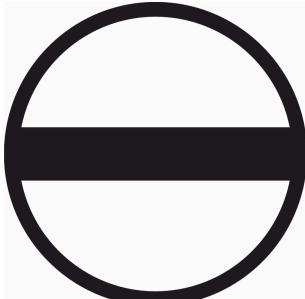
BVF 7.62HP/06/180MSF4 SN BK BX

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Accessories

Type	BVF 7.62HP SH210 4-6 KIT	Version
Order No.	1118490000	PCB plug-in connector, Accessories, For a shield connection, black,
GTIN (EAN)	4032248899302	Number of poles: 0
Qty.	25 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	

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 ST	

BVF 7.62HP/06/180MSF4 SN BK BX

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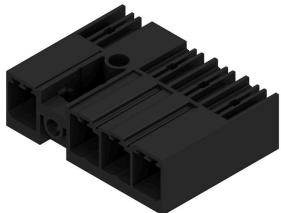
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Counterpart**SV 7.62HP 180MF SN**

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

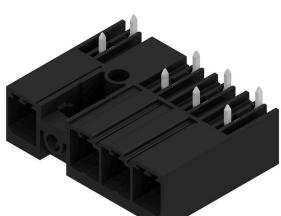
Type	SV 7.62HP/06/180MF4 3.5...	Version
Order No.	1048720000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786312	solder connection, 7.62 mm, Number of poles: 6, 180°, Solder pin
Qty.	30 ST	length (l): 3.5 mm, tinned, black, Box

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/06/90MF4 3.5S...	Version
Order No.	1048760000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786275	solder connection, 7.62 mm, Number of poles: 6, 90°, Solder pin
Qty.	30 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.

BVF 7.62HP/06/180MSF4 SN BK BX

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Counterpart**General ordering data**

Type	SV 7.62HP/06/270MF4 3.5...	Version
Order No.	1048740000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786299	solder connection, 7.62 mm, Number of poles: 6, 270°, Solder pin
Qty.	30 ST	length (l): 3.5 mm, tinned, black, Box

SV 7.62HP 180MSF

Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for lead-free wave soldering.

General ordering data

Type	SV 7.62HP/06/180MSF4 3....	Version
Order No.	1048730000	PCB plug-in connector, male header, closed side, Middle screw flange,
GTIN (EAN)	4032248786305	THT solder connection, 7.62 mm, Number of poles: 6, 180°, Solder
Qty.	30 ST	pin length (l): 3.5 mm, tinned, black, Box

SV 7.62HP 270MSF SN

Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

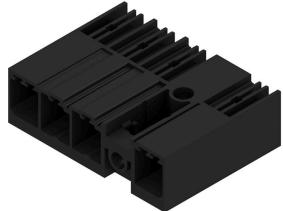
General ordering data

Type	SV 7.62HP/06/270MSF4 3....	Version
Order No.	1048750000	PCB plug-in connector, male header, closed side, Middle screw flange,
GTIN (EAN)	4032248786282	THT solder connection, 7.62 mm, Number of poles: 6, 270°, Solder
Qty.	30 ST	pin length (l): 3.5 mm, tinned, black, Box

BVF 7.62HP/06/180MSF4 SN BK BX

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Klingenbergsstraße 26
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Counterpart**SV 7.62HP 90MSF SN**

Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

Type	SV 7.62HP/06/90MSF4 3.5...	Version
Order No.	1048770000	PCB plug-in connector, male header, closed side, Middle screw flange,
GTIN (EAN)	4032248786268	THT solder connection, 7.62 mm, Number of poles: 6, 90°, Solder pin
Qty.	30 ST	length (l): 3.5 mm, tinned, black, Box