

OMNIMATE Power PCB Connectors

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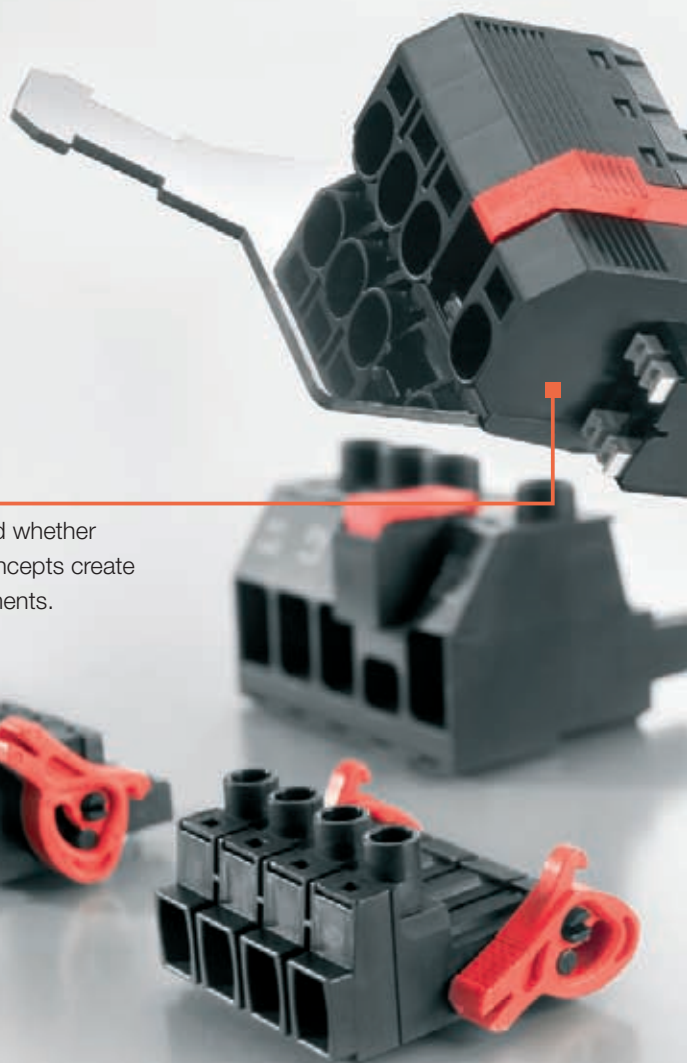
OMNIMATE Power on BOARD

Integrated connection systems delivering innovative drive applications

The OMNIMATE Power system excels in power electronics and drive applications because it has implemented and incorporated customer and market requirements.

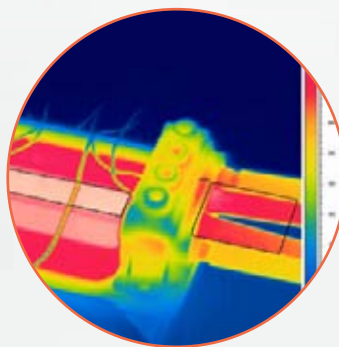
Custom-fit connection solutions for power electronics – resulting from the synergy between application-oriented components, individual services and competent design-in support.

The following pages show why OMNIMATE Power is the ideal system for power electronics and drive applications. This system has benefited from our broader perspective of component directives and our consistent implementation of requests from the market and customers.



Performance + Innovation

Designed with future requirements in mind whether for cars or servo-drives: hybrid design concepts create an efficient solution from two distinct elements.



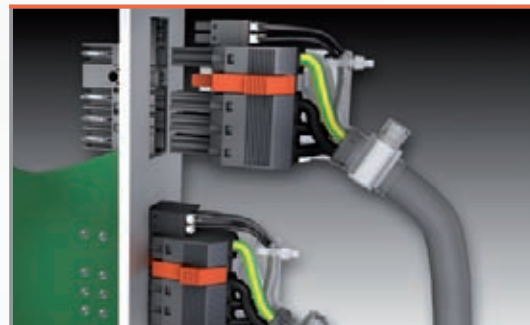
Performance + Support

Weidmüller delivers more than just components. Our design-in competence encompassing work from design and implementation to the market release phase delivers the top results.



Weidmüller's connection strategy for drive applications joins power and signals. It also takes advantage of innovative EMC protection for data transmissions between the communications modules.

Power – Signal – Data



An overview of OMNIMATE Power



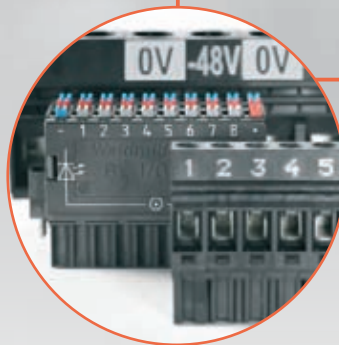
The single-source solution that omits no necessary components is a result of Weidmüller's technology and application expertise, delivering the optimal designed-in results.

The following pages describe the individual product lines in detail.

Design-In Services & Support



The path to top results starts before component selection and does not end with delivery. More information can be found in the "Services & Support" brochure (order number 1077670000) or at www.galaxy.weidmueller.com



Performance + Services

Customised services supplement our comprehensive standard portfolio. The housing colour, printing, coding, contact surfaces, packaging and much more can be configured online with just a few mouse clicks.

OMNIMATE Power for IT systems – scalable up to 50 kVA

Custom-fit solutions for special requirements

Increased compliance with standards and fewer compromises:

OMNIMATE Power for IT systems establishes a new level of excellence with its standard integrated details. These attributes streamline the design-in and approval processes and result in safer operations.

Results for the application and advantages for the user: unlimited use in 400-V IT systems and touch safety according to IEC 61800-5-1 (+ 5 mm). The self-snapping one-handed safety flange enables intuitive and safe usage. Operational reliability is guaranteed by the automatic interlock feature during the plug-in process. The application-oriented design means that no compromises are necessary during the approval process.

F



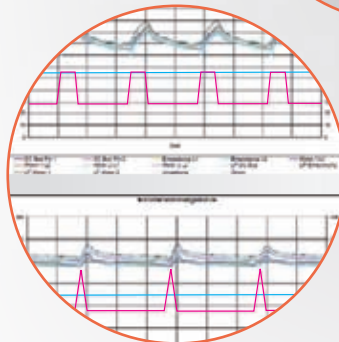
Uncompromised scalability

As much power as required, as little cost as needed: a device series for every power level and power type: scalable from 25 A/2.5 mm² to 41 A/6 mm² to 76 A/16 mm².



IEC 61800-5-1 approval

No additional measures or compromises in the system suitable, touch-safe certification according to IEC 61800-5-1:
+ 3.0 mm for 400 V TN systems,
+ 5.5 mm for 400 V IT networks.

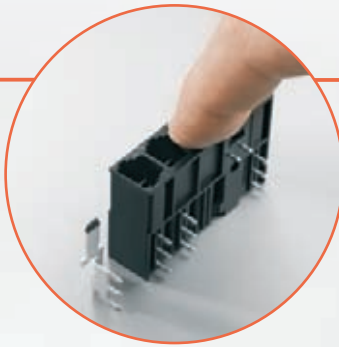


Uncompromised power capabilities

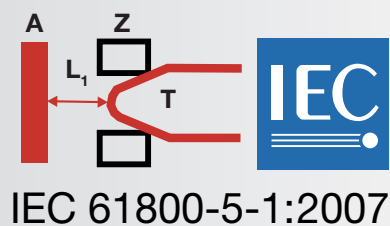
Uncompromised means high power reserves for superior overload capacity even under the high ambient temperatures of real-world applications.

Uncompromised safety

Details such as insulated contact tips that ensure the pin header is touch-safe and automatic snap-in for a secure interlocking connection.

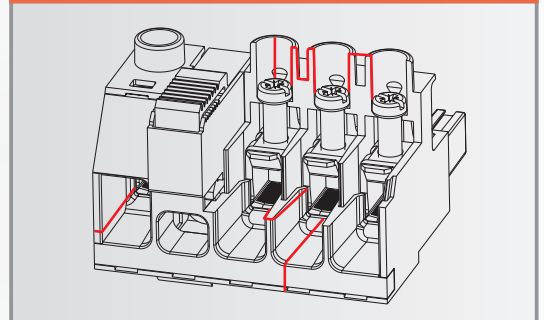


Finger safety according to DIN EN 61800-5-1



Since the end of 2007, device approval according to IEC Directive "Adjustable speed electrical power drive systems – Part 5-1: Safety requirements" requires that – regardless of the line-to-earth voltage – an additional finger safety interval exists (for example, + 3 mm for 400 V-TN systems (wire-to-earth voltage = 230 V), or + 5.5 mm for 400-V IT systems (wire-to-earth voltage up to 400 V in event of error)). An additional cover is required if the connection system, as a device section, does not fulfil these requirements. The OMNIMATE Power HP product line already complies with the stricter IEC requirements for additional touch protection.

Clearance and creepage distances, acc. to UL



A 600-V connector must have the approval of the UL 1059 component directive – but the potential installation situations must first be taken into consideration. This allows you to avoid making approval compromises – such as UL 508C or incorporating complex additions such as coatings or protective hoods. The OMNIMATE Power HP product line already complies with the UL requirements for 600-V creepage and clearance distances.


600 V




UL approval without compromise

No limitation for UL approval with 600-V applications: with optimised creepage and clearance distance even under difficult installation situations.


Connectors for IT systems
Quick selection




= Wire to board




= Board to board

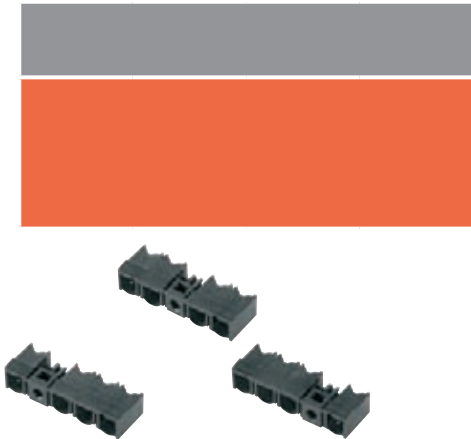
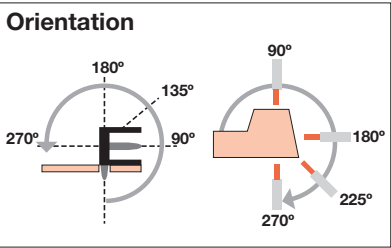


= Wire to wire



= Board to wire





Connection cross-section

Type

Orientation

Flange options

Page

4 mm²

SL

SL

SL

90°

90°

90°

MF2

MF3

MF4

F.8

F.9

F.9

F



Screw
Clamping yoke

4 mm² / AWG 12



BLZ

180°

MF2

F.10







BLZ

180°

MF3

F.11







BLZ

180°

MF4

F.11





6 mm² / AWG 10



BVZ

180°

MF2

F.16



BVZ

180°

MF3

F.17



BVZ

180°

MF4

F.17

16 mm² / AWG 6



BUZ

180°

MF2

F.22



BUZ

180°

MF3

F.23



BUZ

180°

MF4

F.23

MF2 = Centre snap flange at position 2
MF3 = Centre snap flange at position 3
MF4 = Centre snap flange at position 4

Male header



Solder connection



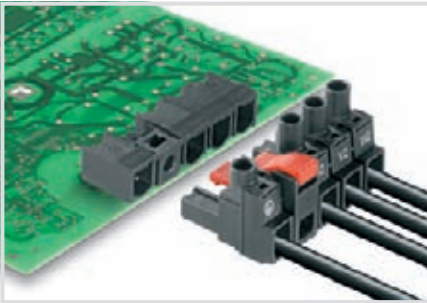
	6 mm ²			16 mm ²		
	SV	SV	SV	SU	SU	SU
	90° / 270°	90° / 270°	90° / 270°	90° / 270°	90° / 270°	90° / 270°
	MF2	MF3	MF4	MF2	MF3	MF4
	F.12/14	F.13/15	F.13/15	F.18/20	F.19/21	F.19/21
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Connectors for IT systems in 7.62 mm pitch

Series BL/SL 7.62 IT – connects up to 4 mm²

SL 7.62IT/./90MF



Male header available in 90° outlet direction with a leading PE contact for IT networks. UL approval according to UL840 (600 V). Used together with the BLZ 7.62 IT female plug. It complies with the expanded requirements for 5.5 mm of touch protection with (400 V relative to earth), according to IEC 61800-5-1. When no female plug is present, the mating profile ensures at least 1 mm of finger protection with a test finger pressure of 20 N.

The middle solder flange interlock feature decreases the space required by one pole width when compared to other solutions.

Available on request with screw flange mounting block or without flange.

Product data

IEC: 630 V / 29 A
UL: 300 V / 20 A

For additional articles and information, refer to catalog.weidmueller.com

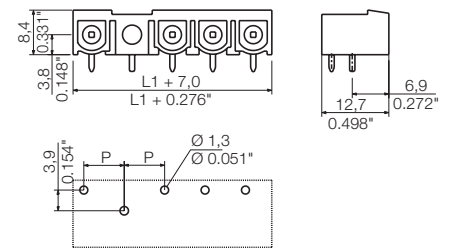
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SL 7.62IT/./90MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984			
Clamping range, max.	mm ²		
Solid core H05(07) V-U	mm²		
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²		
Flexible with ferrule	mm ²		
Ferrule with plastic collar	mm ²		
Stripping length	mm		
Screwdriver blade	mm		
According to norm			
Tightening torque range	Nm		
Rated current, max.	A	29	25
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²		
Overvoltage category		III	II
Pollution severity		3	2
Rated voltage	V	400	500
Rated impulse voltage	kV	6	6
UL / CUL (Use Group)	B C D		
Rated voltage	V	300	600
Rated current	A	20	5
AWG conductor	AWG	-	
CSA (Use Group)	B C D		
Rated voltage	V	300	600
Rated current	A	20	5
AWG conductor	AWG	-	
General data			
Type of insulation material		PBT GF	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm	1.0 x 1.0	
Solder eyelet Ø = D	mm	1.3	
Solder eyelet Ø tolerance	mm	+ 0,1	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BLZ/SL KO OR	1573010000
BLZ/SL KO SW	1545710000

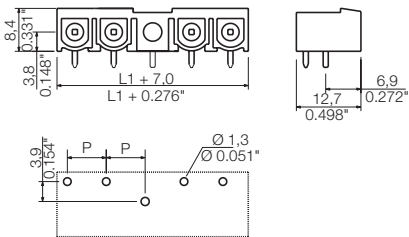
Ordering data

Solder pin length		3.2 mm
Colour		black
Pitch	7.62 mm	
Pol.	L1 (inch)	Qty. Order No.
2	7.62 0.300	100 1173610000
3	15.24 0.600	100 1173640000
4	22.86 0.900	100 1173730000

SL 7.62IT/..90MF3



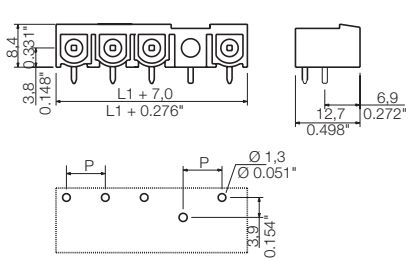
Dimensioned drawing



SL 7.62IT/..90MF4



Dimensioned drawing



Ordering data

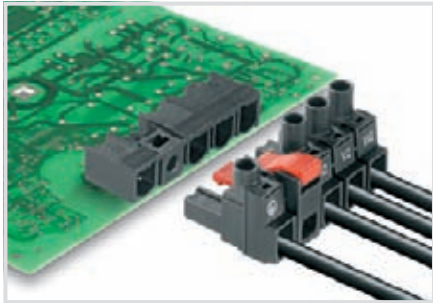
Solder pin length		3.2 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1	(inch)	Qty. Order No.
3	15.24	0.600	100 1173690000

Ordering data

Solder pin length		3.2 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1	(inch)	Qty. Order No.
4	22.86	0.900	100 1173770000

Connectors for IT systems in 7.62 mm pitch
Series BL/SL 7.62 IT – connects up to 4 mm²

BLZ 7.62IT/./180MF



Female plug in 180° outlet direction for IT networks. Fulfils the requirements of UL1059 600 V Class C. With a leading PE contact when used with SL 7.62IT male header. Fulfils the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1.

The middle flange interlocks automatically and is optionally available with screw connection. It decreases the space required by one pole when compared to other solutions.

Available optionally without middle flange interlock.

Product data

IEC: 630 V / 29 A / 0.08 - 4 mm²
UL: 600 V / 20 A / AWG 28 - 12

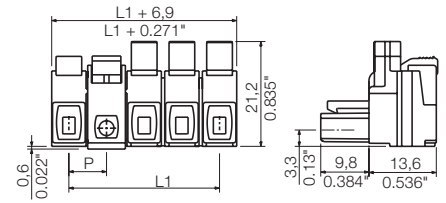
For additional articles and information, refer to catalog.weidmueller.com

- Note:**
- Additional colours on request
 - Gold-plated contact surfaces on request
 - Rated current related to rated cross-section and min. No. of poles.
 - Wire end ferrule without plastic collar to DIN 46228/1
 - Wire end ferrule with plastic collar to DIN 46228/4
 - P on drg. = 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.

BLZ 7.62IT/./180MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984			
Clamping range, max.	mm²	0.08...4	
Solid core H05(07) V-U	mm²	0.08...4	
Stranded H07 V-R			
Flexible H05(07) V-K	mm²	0.08...4	
Flexible with ferrule	mm²	0.2...2.5	
Ferrule with plastic collar	mm²	0.2...2.5	
Stripping length	mm	7	
Screwdriver blade	mm	0.6 x 3.5	
According to norm		DIN 5264	
Tightening torque range	Nm	0.4...0.5	
Rated current, max.	A	29	25
At ambient temperature		20°C	40°C
For conductor cross-section	mm²	2.5	
Overvoltage category		III	II
Pollution severity		3	2
Rated voltage	V	400	630
Rated impulse voltage	kV	6	4
UL / CUL (Use Group)		B	C
Rated voltage	V	600	600
Rated current	A	20	5
AWG conductor	AWG	28-12	
CSA (Use Group)		B	C
Rated voltage	V	600	600
Rated current	A	18.5	5
AWG conductor	AWG	28-12	
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm		
Solder eyelet Ø = D	mm		
Solder eyelet Ø tolerance	mm		

Accessories

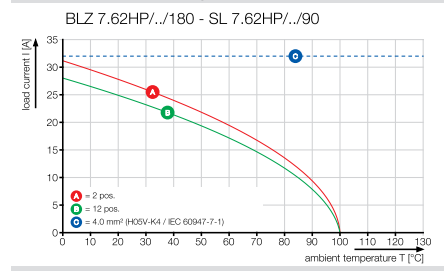
Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BLZ/SL KO OR	1573010000
BLZ/SL KO SW	1545710000
Screwdriver	
SD 0,6x3,5x100	9008330000
SDI 0,6x3,5x100	9008390000

Ordering data

Solder pin length				
Colour			black	
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	50	1173490000
3	15.24	0.600	50	1173500000
4	22.86	0.900	50	1173520000

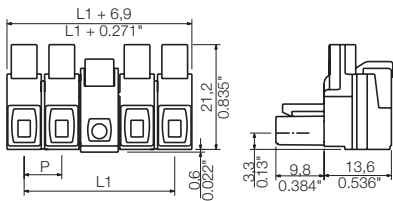
Representative derating curve



BLZ 7.62IT/./180MF3



Dimensioned drawing



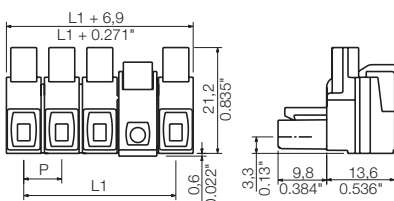
Ordering data

Solder pin length				
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
3	15.24	0.600	50	1173510000

BLZ 7.62IT/./180MF4



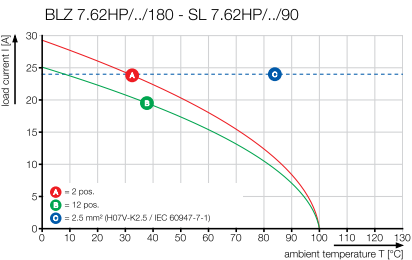
Dimensioned drawing



Ordering data

Solder pin length				
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
4	22.86	0.900	50	1173530000

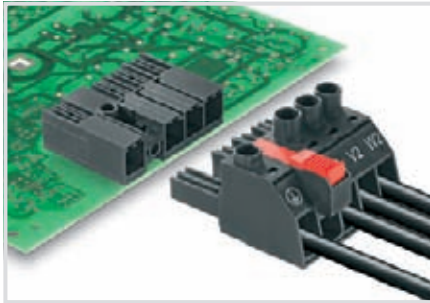
Additional derating curves



Connectors for IT systems in 7.62 mm pitch

Series BV/SV 7.62 IT – wire connection up to 6 mm²

SV 7.62IT/.. /90MF



Male header in 90° outlet direction with a leading PE contact for IT networks. UL approval according to UL840 for 600 V. Used together with a BVZ 7.62 IT female plug. It complies with the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1. When no female plug is present, the mating profile ensures at least 1 mm of finger protection with a test finger pressure of 20 N.

The middle solder flange interlock feature decreases the space required by one pole when compared to other solutions.

Available on request with screw flange mounting block or without flange.

Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

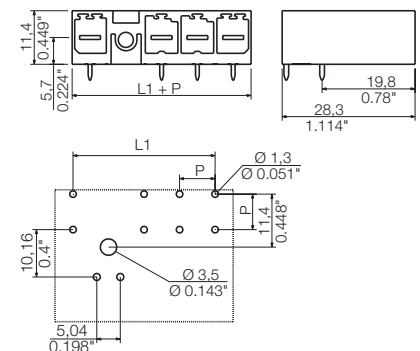
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SV 7.62IT/.. /90MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm ²			
Flexible with ferrule	mm ²			
Ferrule with plastic collar	mm ²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm ²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000
Mounting foot	
BV/SV7.62HP MOFU GR	1937600000

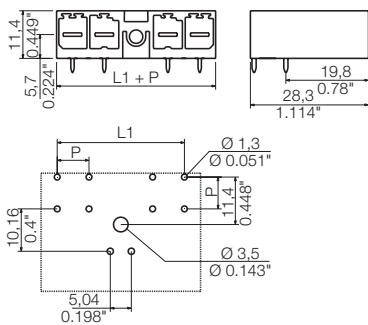
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	15.24	0.600	78	1156540000
3	22.86	0.900	60	1156550000
4	30.48	1.200	48	1156580000

SV 7.62IT/./90MF3



Dimensioned drawing



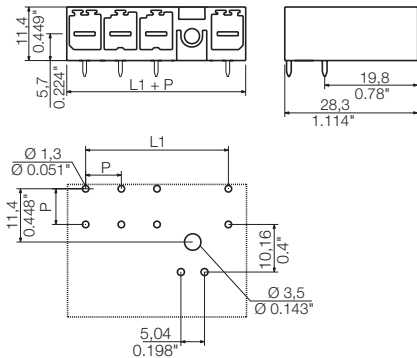
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1 (inch)	Qty.	Order No.
3	22.86 0.900	60	1156570000

SV 7.62IT/./90MF4



Dimensioned drawing



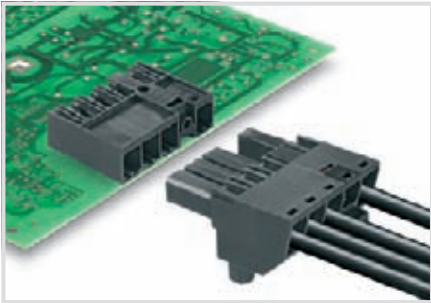
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1 (inch)	Qty.	Order No.
4	30.48 1.200	48	1156590000

Connectors for IT systems in 7.62 mm pitch

Series BV/SV 7.62 IT – wire connection up to 6 mm²

SV 7.62IT/..../270MF



Male header in 270° outlet direction with a leading PE contact for IT networks. UL approval according to UL840 for 600 V. Used together with a BLZ 7.62 IT female plug. It complies with the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1. When no female header is present, the mating profile ensures at least 1 mm of finger protection with a test finger pressure of 20 N.

The middle solder flange interlock feature decreases the space required by one pole when compared to other solutions.

Available on request with screw flange mounting block or without flange.

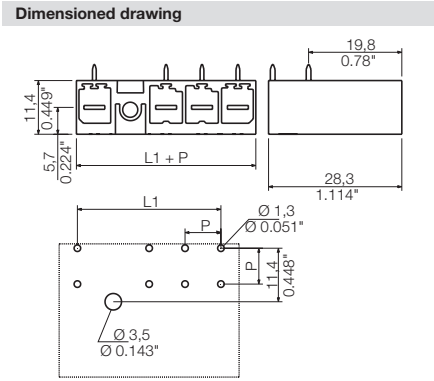
Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

- Note:**
- Additional colours on request
 - Rated current related to rated cross-section and min. No. of poles.
 - P on drg. = 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.

SV 7.62IT/..../270MF2




Technical data

In compliance with IEC 60664-1 / IEC 61984				
Clamping range, max.	mm²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm²			
Flexible with ferrule	mm²			
Ferrule with plastic collar	mm²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-	-	-
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-	-	-
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000
	
Mounting foot	
BV/SV7.62HP MOFU GR	1937600000

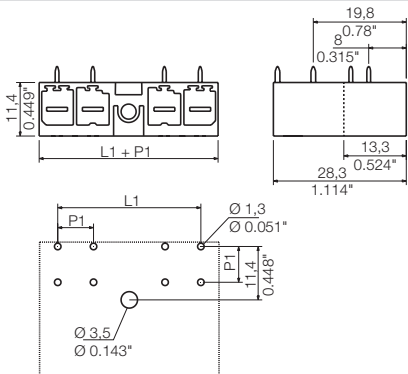
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	15.24	0.600	50	1156490000
3	22.86	0.900	50	1156500000
4	30.48	1.200	50	1156520000

SV 7.62IT/..../270MF3



Dimensioned drawing



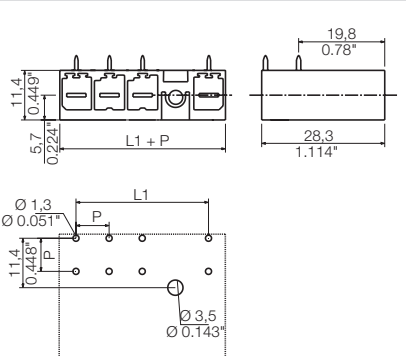
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1 (inch)	Qty.	Order No.
3	22.86 0.900	50	1156510000

SV 7.62IT/..../270MF4



Dimensioned drawing



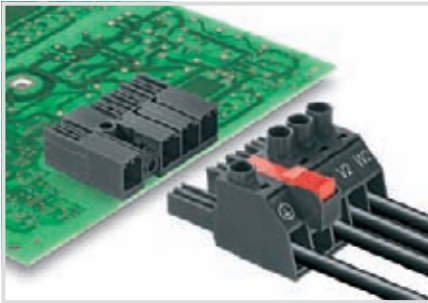
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1 (inch)	Qty.	Order No.
4	30.48 1.200	50	1156530000

Connectors for IT systems in 7.62 mm pitch

Series BV/SV 7.62 IT – wire connection up to 6 mm²

BVZ 7.62IT../180MF



Female plug in 180° outlet direction for IT networks. Fulfills the requirements of UL1059 for 600 V Use Group C. With leading PE contact when used with SV 7.62IT male header. Fulfills the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1.

The middle flange interlocks automatically and is optionally available with screw connection. It decreases the space required by one pole when compared to other solutions.

Available optionally without middle flange interlock.

Product data

IEC: 1000 V / 41 / 0.2 - 6 mm²
UL: 600 V / 35 A / AWG 24 - 10

For additional articles and information, refer to catalog.weidmueller.com

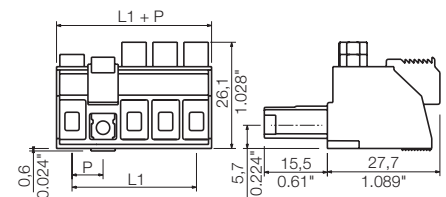
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

BVZ 7.62IT../180MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²	0.2...6
Solid core H05(07) V-U	mm²	0.2...6
Stranded H07 V-R		
Flexible H05(07) V-K	mm ²	0.5...6
Flexible with ferrule	mm ²	0.25...6
Ferrule with plastic collar	mm ²	0.25...6
Stripping length	mm	12
Screwdriver blade	mm	0.8 x 4.5
According to norm		DIN 5264-A
Tightening torque range	Nm	0.5...0.6
Rated current, max.	A	41 41
At ambient temperature	20°C	40°C
For conductor cross-section	mm ²	6
Overvoltage category	III	III II
Pollution severity	3	2 2
Rated voltage	V	800 1000 1000
Rated impulse voltage	kV	8 8 6
UL / CUL (Use Group)	B C D	B C D
Rated voltage	V	600 600 600
Rated current	A	35 35 5
AWG conductor	AWG	24-10
CSA (Use Group)	B C D	B C D
Rated voltage	V	600 600 600
Rated current	A	35 35 5
AWG conductor	AWG	24-10
General data		
Type of insulation material		PA GF
Flammability class UL 94		V-0
Contact base material		Copper alloy
Material of contact surface		tinned
Pin dimensions = d	mm	
Solder eyelet Ø = D	mm	
Solder eyelet Ø tolerance	mm	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

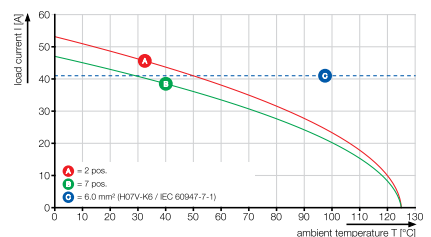
Coding	Order No.
BV/SV 7.62HP KO	1937590000
Strain relief	
BV/SV 7.62HP/02 ZE GR	1937550000
BV/SV 7.62HP/04 ZE GR	1937560000
Screwdriver	
SD 0,8x4,5x125	9009020000
Crosshead screwdriver	
SDK PH1	9008480000

Ordering data

Solder pin length				
Colour	black			
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	50	1156710000
3	15.24	0.600	50	1156720000
4	22.86	0.900	50	1156740000

Representative derating curve

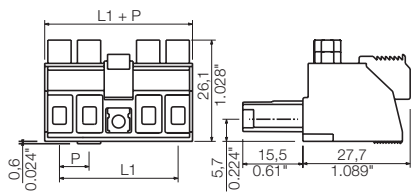
BVZ 7.62HP../180 - SV 7.62HP../180



BVZ 7.62IT/./180MF3



Dimensioned drawing



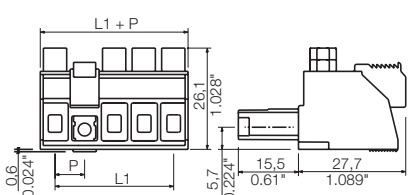
Ordering data

Solder pin length				
Colour				
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
3	15.24	0.600	50	1156730000

BVZ 7.62IT/./180MF4



Dimensioned drawing

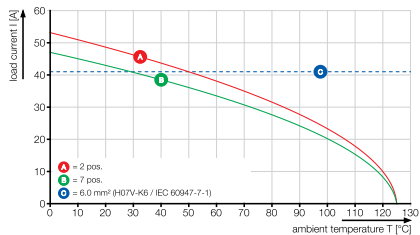


Ordering data

Solder pin length				
Colour				
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
4	22.86	0.900	50	1156750000

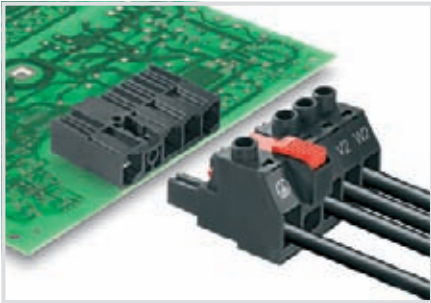
Additional derating curves

BVZ 7.62HP/./180 - SV 7.62HP/./180



Connectors for IT systems in 10.16 mm pitch
Series BU/SU 10.16 IT – connects up to 16 mm²

SU 10.16IT/./90MF



Male header in 90 ° outlet direction with a leading PE contact for IT networks. UL approval according to UL840 for 600 V. Used together with a BUZ 10.16 IT female plug. It complies with the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1. When no female plug is present, the mating profile ensures at least 1 mm of finger protection with a test finger pressure of 20 N.

The middle flange interlock feature decreases the space required by one pole when compared to other solutions.

Available on request with screw flange mounting block or without flange.

Technical data

In compliance with IEC 60664-1 / IEC 61984				
Clamping range, max.	mm²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm²			
Flexible with ferrule	mm²			
Ferrule with plastic collar	mm²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	76	72	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	690	1000	1000
Rated impulse voltage	kV	8	8	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	54	54	5
AWG conductor	AWG		-	
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	54	54	5
AWG conductor	AWG		-	
General data				
Type of insulation material		PBT GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	1.2 x 1.1		
Solder eyelet Ø = D	mm	1.6		
Solder eyelet Ø tolerance	mm	+ 0,1		

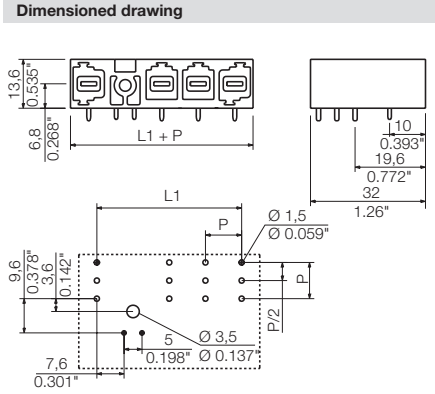
Product data

IEC: 1000 V / 76
UL: 300 V / 54 A


For additional articles and information, refer to catalog.weidmueller.com

- Note:**
- Additional colours on request
 - Rated current related to rated cross-section and min. No. of poles.
 - P on drg. = 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.

SU 10.16IT/./90MF2



Accessories

Note: Refer to the Accessories chapter for additional accessories.		
Coding	Order No.	
	KO BV/SV7.62	1824410000

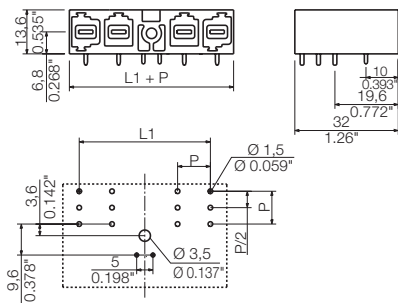
Ordering data

Solder pin length			3.5 mm	
Colour			black	
Pitch 10.16 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	20.32	0.800	60	1156650000
3	30.48	1.200	42	1156670000
4	40.64	1.600	36	1156690000

SU 10.16IT/./90MF3



Dimensioned drawing



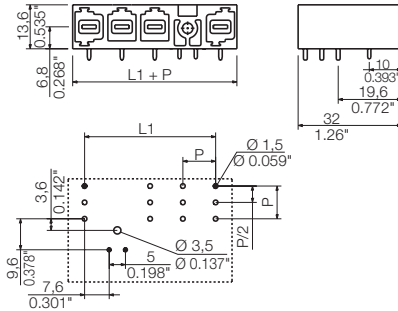
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch 10.16 mm				
Pol.	L1	(inch)	Qty.	Order No.
3	30.48	1.200	42	1156680000

SU 10.16IT/./90MF4



Dimensioned drawing



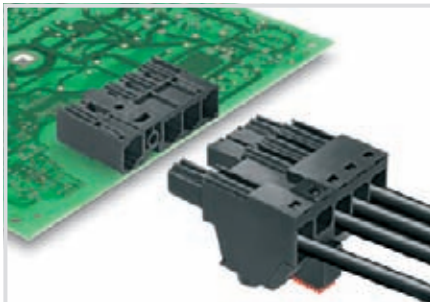
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch		10.16 mm		
Pol.	L1	(inch)	Qty.	Order No.
4	40.64	1.600	36	1156700000

Connectors for IT systems in 10.16 mm pitch

Series BU/SU 10.16 IT – connects up to 16 mm²

SU 10.16IT/./270MF



Male header in 270° outlet direction with a leading PE contact for IT networks. UL approval according to UL840 for 600 V. Used together with a BUZ 10.16 IT female plug. It complies with the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1. When no female plug is present, the mating profile ensures at least 1 mm of finger protection with a test finger pressure of 20 N.

The middle flange interlock feature decreases the space required by one pole when compared to other solutions.

Available on request with screw flange mounting block or without flange.

Product data

IEC: 1000 V / 76
UL: 300 V / 54 A

For additional articles and information, refer to catalog.weidmueller.com

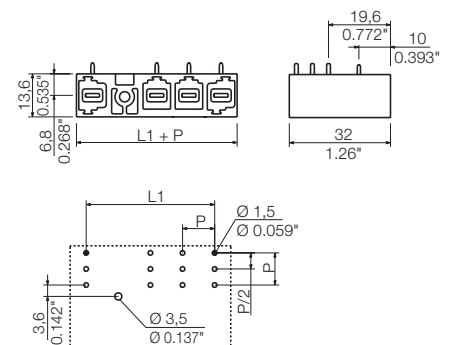
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SU 10.16IT/./270MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²		
Solid core H05(07) V-U	mm²		
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²		
Flexible with ferrule	mm ²		
Ferrule with plastic collar	mm ²		
Stripping length	mm		
Screwdriver blade	mm		
According to norm			
Tightening torque range	Nm		
Rated current, max.	A	76	72
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²		
Overvoltage category		III	III
Pollution severity		3	2
Rated voltage	V	690	1000
Rated impulse voltage	kV	8	8
UL / CUL (Use Group)	B C D		
Rated voltage	V	300	300
Rated current	A	54	54
AWG conductor	AWG	-	5
CSA (Use Group)	B C D		
Rated voltage	V	300	300
Rated current	A	54	54
AWG conductor	AWG	-	-
General data			
Type of insulation material		PBT GF	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm	1.2 x 1.1	
Solder eyelet Ø = D	mm	1.6	
Solder eyelet Ø tolerance	mm	+ 0,1	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
KO BV/SV7.62	1824410000

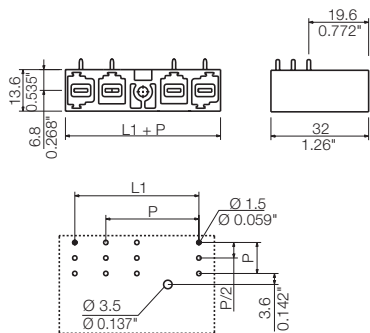
Ordering data

Solder pin length			3.5 mm	
Colour			black	
Pitch		10.16 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	20.32	0.800	50	1157310000
3	30.48	1.200	50	1157320000
4	40.64	1.600	50	1157340000

SU 10.16IT/..../270MF3



Dimensioned drawing



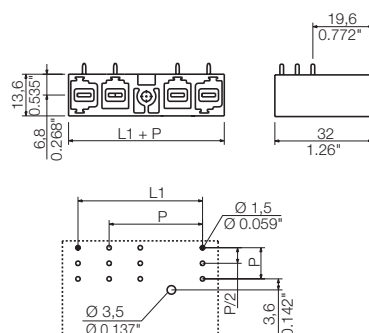
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		10.16 mm	
Pol.	L1	(inch)	Qty. Order No.
3	30.48	1.200	50 1157330000

SU 10.16IT/..../270MF4



Dimensioned drawing



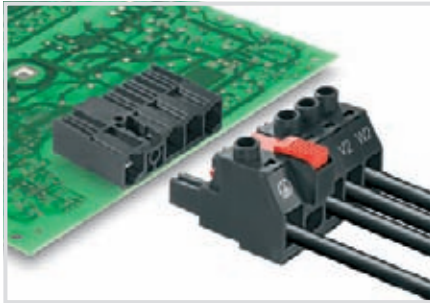
Ordering data

Solder pin length		3.5 mm	
Colour		black	
Pitch		10.16 mm	
Pol.	L1	(inch)	Qty. Order No.
4	40.64	1.600	50 1157350000

Connectors for IT systems in 10.16 mm pitch

Series BU/SU 10.16 IT – connects up to 16 mm²

BUZ 10.16IT../180MF



Female plug in 180° outlet direction for IT networks. Fulfills the requirements of UL1059 for 600 V Use Group C. With leading PE contact when used with SU 10.16IT male header. Fulfills the expanded requirements for 5.5 mm of touch protection (400 V relative to earth), according to IEC 61800-5-1.

The middle flange interlocks automatically and is optionally available with screw connection. It decreases the space required by one pole when compared to other solutions.

Available optionally without middle flange interlock.

Product data

IEC: 1000 V / 78 A / 0.2 - 16 mm²
UL: 300 V / 54 A / AWG 22 - 6

For additional articles and information, refer to catalog.weidmueller.com

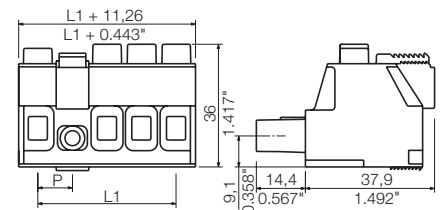
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

BUZ 10.16IT../180MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²	0.2...16
Solid core H05(07) V-U	mm²	0.2...16
Stranded H07 V-R		6...16
Flexible H05(07) V-K	mm ²	0.5...16
Flexible with ferrule	mm ²	0.25...16
Ferrule with plastic collar	mm ²	0.25...10
Stripping length	mm	12
Screwdriver blade	mm	1.0 x 5.5
According to norm		DIN 5264
Tightening torque range	Nm	1.2...1.5
Rated current, max.	A	78 72
At ambient temperature	20°C	40°C
For conductor cross-section	mm ²	16
Overvoltage category		III III II
Pollution severity		3 2 2
Rated voltage	V	1000 1000 1000
Rated impulse voltage	kV	8 8 6
UL / CUL (Use Group)	B C D	
Rated voltage	V	300 600 600
Rated current	A	54 54 5
AWG conductor	AWG	22-6
CSA (Use Group)	B C D	
Rated voltage	V	300 600 600
Rated current	A	54 54 5
AWG conductor	AWG	22-6
General data		
Type of insulation material		PA GF
Flammability class UL 94		V-0
Contact base material		Copper alloy
Material of contact surface		tinned
Pin dimensions = d	mm	
Solder eyelet Ø = D	mm	
Solder eyelet Ø tolerance	mm	

Accessories

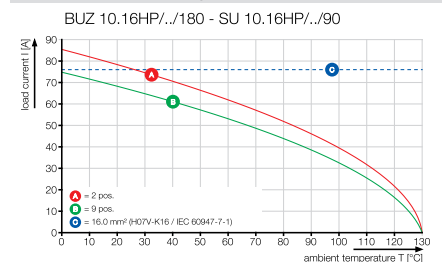
Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
KO BV/SV7.62	1824410000
Screwdriver	
SDI 1,0x5,5x125	9008410000
Crosshead screwdriver	
SDIK PZ2	9008890000
SDK PZ2	9008540000

Ordering data

Solder pin length					
Colour	black				
Pitch	10.16 mm				
Pol.	L1	(inch)	Qty.	Order No.	
2	10.16	0.400	50	1156600000	
3	20.32	0.800	50	1156610000	
4	30.48	1.200	50	1156630000	

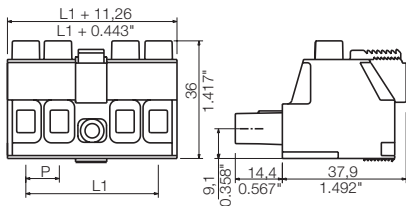
Representative derating curve



BUZ 10.16IT/./180MF3



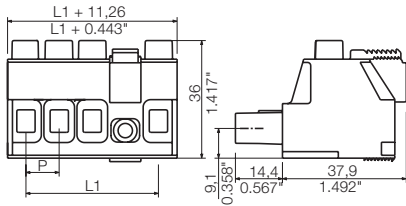
Dimensioned drawing



BUZ 10.16IT/./180MF4



Dimensioned drawing



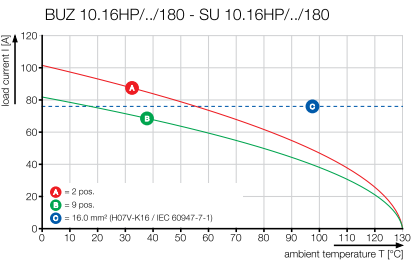
Ordering data

Solder pin length				
Colour			black	
Pitch 10.16 mm				
Pol.	L1	(inch)	Qty.	Order No.
3	20.32	0.800	50	1156620000

Ordering data

Solder pin length				
Colour			black	
Pitch 10.16 mm				
Pol.	L1	(inch)	Qty.	Order No.
4	30.48	1.200	50	1156640000

Additional derating curves



OMNIMATE Power BL/SL 7.62HP – the 12 kVA power class Custom-fit solutions for compact devices

Compact power for more safety and efficiency: The compact class in the OMNIMATE Power BL/SL 7.62HP power connector series integrates previously-conflicting market requirements to provide a custom-fit solution for drive applications.

This closes the gap between increasing miniaturisation and unlimited 600-V UL approval. The system extension to the 12 kVA power class enables a touch-safe, inverted motor connection with one-handed safety interlock. The PUSH IN connection system also provides a quick and reliable wire connection. Double-sided touch protection guarantees full protection even with inverse voltages. Thus even OMNIMATE Power's compact class is qualified for use with the DC link bus.

F



Compact safety

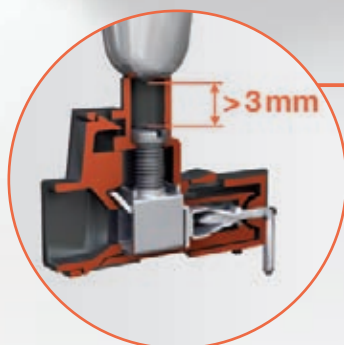
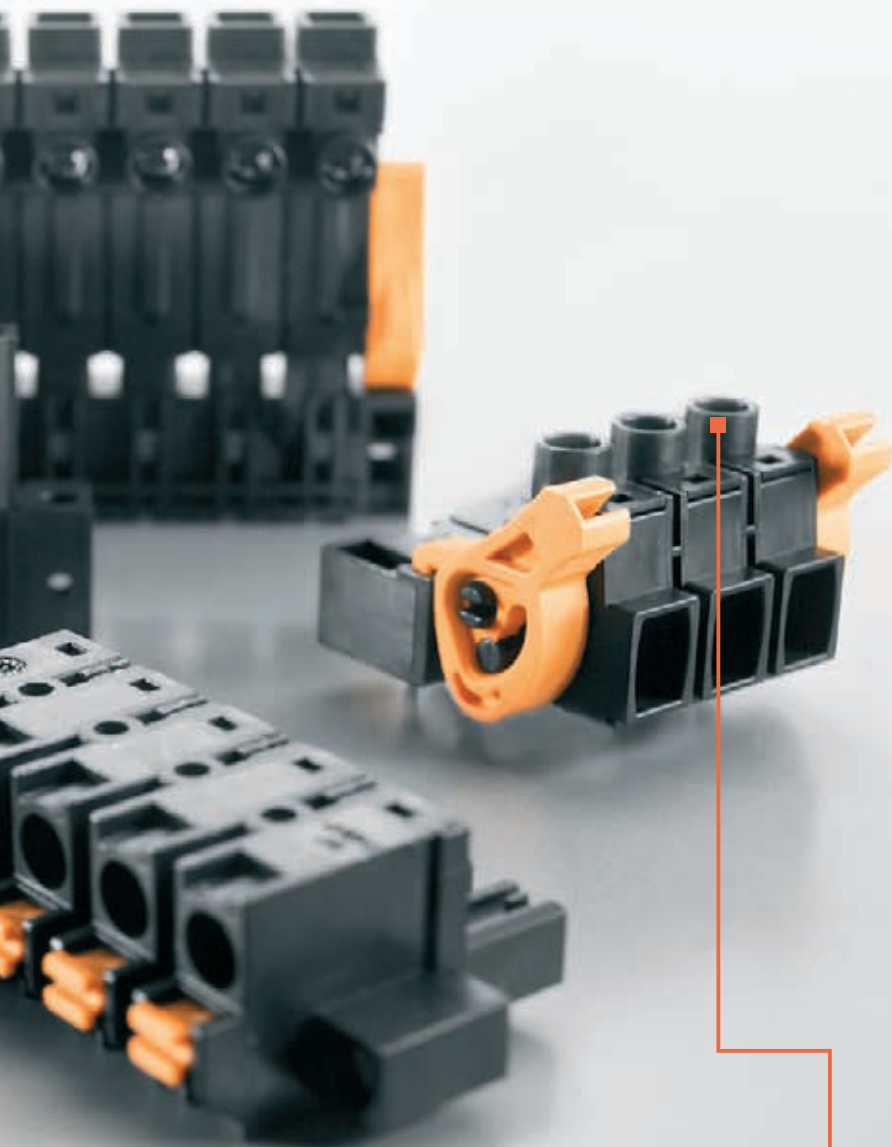
No additional measures required for DC links or inverse voltage: the inverted versions have finger-safe male header and female header even when not plugged in.



Compact reliability

Maintenance-free and vibration-proof connections: quick and simple PUSH IN connections, or the self-fastening Weidmüller steel clamp with plus/minus screw and WIRE GUARD.





Compact integration

No compromises during design and approval: compact and standard-compliant with additional + 3.0 mm finger safety, according to IEC 61800-5-1, and increased creepage and clearance distances according to UL.

Compact system power



An overview of OMNIMATE Power's 12 kVA class: The compact system with either standard or inverted mating profile, with screw or PUSH IN wire connection; optionally with lock & release lever, screw flange or one-handed safety interlock.

Unrivalled current-carrying capacity



The highest load capacity in the 12 kVA compact class: with up to 29 A current-carrying capacity at 1.000 V (IEC) with a 4 mm² wire cross-section or 18.5 A at 600 V according to UL.

Individualised configuration



Standard + Services = custom design with simple configuration across the entire range of services: features include colour coding, application-oriented labelling and custom modifications or design. More information can be found in the "Services & Support" brochure (order number 1077670000) or at www.galaxy.weidmueller.com





Connectors in 7.62 mm pitch - Series BL/SL 7.62 - connects up to 4 mm²
Quick selection

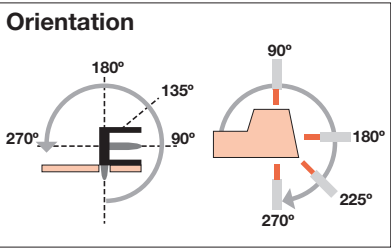
= Wire to board

= Board to board


= Wire to wire

= Board to wire













Male header



Solder connection



		Type				SL		SL	
				Orientation		90°	180°		
				Flange options		G/F/LF	G/F/LF		
				Page		F.28	F.30		
F	Female plug	 <div>Screw Clamping yoke</div>		BLZ	180° (G)/LR	F.36	<div></div>	<div></div>	
		 <div>Spring PUSH IN</div>		BLF	180° (G)/F/LR	F.38	<div></div>	<div></div>	
	Female header	 <div>Solder connection</div>		BLL	90° (G)/F/LF	F.40			
				BLL	180° (G)/F/LF	F.42			

Female plug and header:
(G) = Closed (without flange)
F = Screw flange with screw
LR = Lock & Release lever

Male header and plug:
G = Closed (without flange)
F = Screw flange with nut
LF = Solder flange with nut

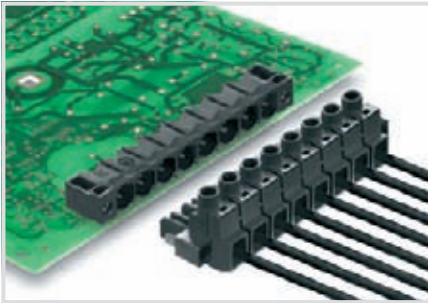
	SLZ	SLF
	180°	180°
	G/F/LR	G/F/LR
	F.32	F.34

	●	●

Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

SL 7.62HP/./90



Male header in 90° outlet direction. The compact and efficient solution for UL-600 V applications in the lower power range meets in conjunction with a female plug, the 600 V requirements for UL508 / UL840 and the increased need for touch-safe protection according to IEC 68100-5-1.

- Available with screw flange (F) and a solder flange (SF).

Product data

IEC: 630 V / 26 A
UL: 300 V / 20 A

For additional articles and information, refer to catalog.weidmueller.com

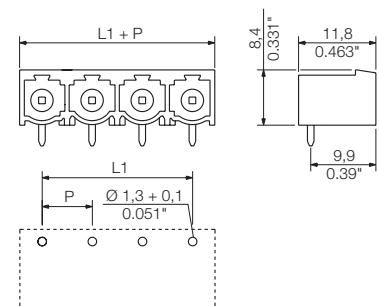
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SL 7.62HP/./90G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²		
Solid core H05(07) V-U	mm²		
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²		
Flexible with ferrule	mm ²		
Ferrule with plastic collar	mm ²		
Stripping length	mm		
Screwdriver blade	mm		
According to norm			
Tightening torque range	Nm		
Rated current, max.	A	29	25
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²		
Overvoltage category		III	II
Pollution severity		3	2
Rated voltage	V	400	500
Rated impulse voltage	kV	6	6
UL / CUL (Use Group)		B	C
Rated voltage	V	300	600
Rated current	A	20	5
AWG conductor	AWG	-	
CSA (Use Group)		B	C
Rated voltage	V	300	600
Rated current	A	20	5
AWG conductor	AWG	-	
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm	1.0 x 1.0	
Solder eyelet Ø = D	mm	1.3	
Solder eyelet Ø tolerance	mm	+ 0,1	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BLZ/SL KO OR	1573010000
BLZ/SL KO SW	1545710000

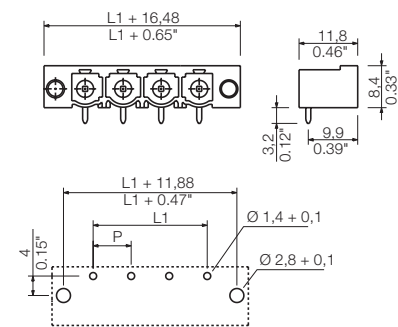
Ordering data

Solder pin length		3.2 mm
Colour		black
Pitch	7.62 mm	
Pol.	L1	Qty.
2	7.62	100
3	15.24	100
4	22.86	100
5	30.48	50
6	38.10	50
7	45.72	50
8	53.34	50
9	60.96	50
10	68.58	50
11	76.20	50
12	83.82	50

SL 7.62HP/./90F



Dimensioned drawing



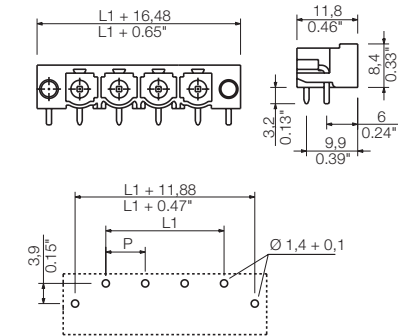
Ordering data

Solder pin length				3.2 mm
Colour				black
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1026850000
3	15.24	0.600	100	1026860000
4	22.86	0.900	100	1026870000
5	30.48	1.200	50	1026880000
6	38.10	1.500	50	1124250000
7	45.72	1.800	50	1124270000
8	53.34	2.100	50	1124280000
9	60.96	2.400	50	1124290000
10	68.58	2.700	50	1124300000
11	76.20	3.000	50	1124310000
12	83.82	3.300	50	1124320000

SL 7.62HP/./90LF



Dimensioned drawing



Ordering data

Solder pin length			3.2 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1095920000
3	15.24	0.600	100	1095930000
4	22.86	0.900	100	1095940000
5	30.48	1.200	50	1095950000
6	38.10	1.500	50	1095960000
7	45.72	1.800	50	1095970000
8	53.34	2.100	50	1095980000
9	60.96	2.400	50	1095990000
10	68.58	2.700	50	1096000000
11	76.20	3.000	50	1096010000
12	83.82	3.300	50	1096020000

Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

SL 7.62HP/./180



Male header in 180° outlet direction. The compact and efficient solution for UL-600 V applications in the lower power range meets in conjunction with a female plug, the 600 V requirements for UL508 / UL840 and the increased need for touch-safe protection according to IEC 68100-5-1.

- Available with screw flange (F) and a solder flange (SF).

Product data

IEC: 630 V / 26 A
UL: 300 V / 20 A

For additional articles and information, refer to catalog.weidmueller.com

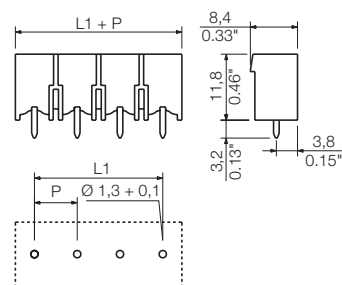
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SL 7.62HP/./180G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²		
Solid core H05(07) V-U	mm²		
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²		
Flexible with ferrule	mm ²		
Ferrule with plastic collar	mm ²		
Stripping length	mm		
Screwdriver blade	mm		
According to norm			
Tightening torque range	Nm		
Rated current, max.	A	29	25
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²		
Overvoltage category		III	III
Pollution severity		3	2
Rated voltage	V	400	500
Rated impulse voltage	kV	6	6
UL / CUL (Use Group)	B	C	D
Rated voltage	V	300	300
Rated current	A	20	20
AWG conductor	AWG	-	5
CSA (Use Group)	B	C	D
Rated voltage	V	300	300
Rated current	A	20	20
AWG conductor	AWG	-	5
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm	1.0 x 1.0	
Solder eyelet Ø = D	mm	1.3	
Solder eyelet Ø tolerance	mm	+ 0,1	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BLZ/SL KO OR	1573010000
BLZ/SL KO SW	1545710000

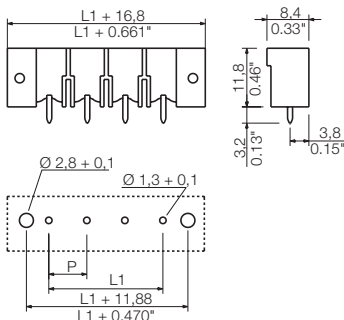
Ordering data

Solder pin length		3.2 mm		
Colour		black		
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1122550000
3	15.24	0.600	100	1122570000
4	22.86	0.900	100	1122580000
5	30.48	1.200	50	1048980000
6	38.10	1.500	50	1048990000
7	45.72	1.800	50	1122590000
8	53.34	2.100	50	1049000000
9	60.96	2.400	50	1122600000
10	68.58	2.700	50	1122610000
11	76.20	3.000	50	1122640000
12	83.82	3.300	50	1122650000

SL 7.62HP/./180F



Dimensioned drawing



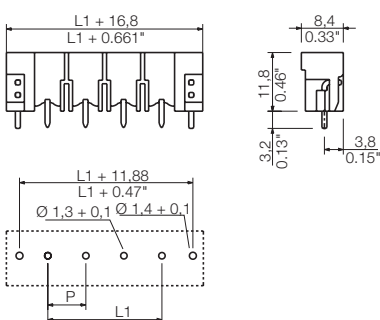
Ordering data

Solder pin length		3.2 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1	(inch)	Qty. Order No.
2	7.62	0.300	100 1140870000
3	15.24	0.600	100 1140880000
4	22.86	0.900	100 1140890000
5	30.48	1.200	50 1140900000
6	38.10	1.500	50 1140910000
7	45.72	1.800	50 1140920000
8	53.34	2.100	50 1140930000
9	60.96	2.400	50 1140940000
10	68.58	2.700	50 1140950000
11	76.20	3.000	50 1140960000
12	83.82	3.300	50 1140970000

SL 7.62HP/./180LF



Dimensioned drawing

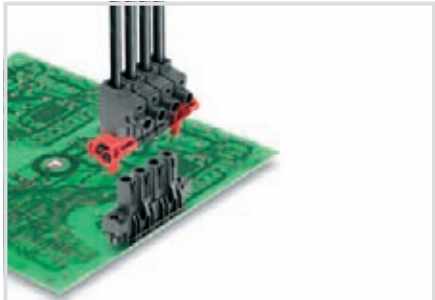


Ordering data

Solder pin length		3.2 mm	
Colour		black	
Pitch		7.62 mm	
Pol.	L1	(inch)	Qty. Order No.
2	7.62	0.300	100 1141090000
3	15.24	0.600	100 1141100000
4	22.86	0.900	100 1141110000
5	30.48	1.200	50 1141120000
6	38.10	1.500	50 1141130000
7	45.72	1.800	50 1141140000
8	53.34	2.100	50 1141150000
9	60.96	2.400	50 1141160000
10	68.58	2.700	50 1141170000
11	76.20	3.000	50 1141180000
12	83.82	3.300	50 1141190000

Connectors in 7.62 mm pitch
Series BL/SL 7.62 – connects up to 4 mm²

SLZ 7.62HP/./180



Male plug with clamping-yoke screw connection in 180° outlet direction. Also perfect for finger-safe solutions involving inverse voltages. Complies with UL1059 600 V Use Group C and IEC 61800-5-1 requirements for 3 mm of finger safety on 400 V TNC(S) systems.

- Available with screw flange (F) and lock and release-levers (LR).

Product data

IEC: 1000 V / 20 A / 0.5 - 2.5 mm²
UL: 600 V / 16 A / AWG 20 - 12

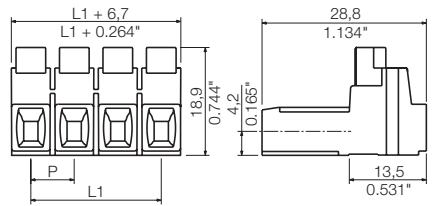
For additional articles and information, refer to catalog.weidmueller.com

- Note:**
- Additional colours on request
 - Gold-plated contact surfaces on request
 - Rated current related to rated cross-section and min. No. of poles.
 - Wire end ferrule without plastic collar to DIN 46228/1
 - Wire end ferrule with plastic collar to DIN 46228/4
 - P on drg. = 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.

SLZ 7.62HP/./180G




Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984			
Clamping range, max.	mm ²	0.08...2.5	
Solid core H05(07) V-U	mm²	0.5...2.5	
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²	0.5...2.5	
Flexible with ferrule	mm ²	0.5...2.5	
Ferrule with plastic collar	mm ²	0.5...1.5	
Stripping length	mm	8	
Screwdriver blade	mm	0.6 x 3.5	
According to norm		DIN 5264	
Tightening torque range	Nm	0.4...0.5	
Rated current, max.	A	20	17.5
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²	2.5	
Overvoltage category		III	II
Pollution severity		3	2
Rated voltage	V	630	1000
Rated impulse voltage	kV	6	6
UL / CUL (Use Group)		B	C
Rated voltage	V	600	600
Rated current	A	16	5
AWG conductor	AWG	20-12	
CSA (Use Group)		B	C
Rated voltage	V	600	600
Rated current	A	16	5
AWG conductor	AWG	20-12	
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm		
Solder eyelet Ø = D	mm		
Solder eyelet Ø tolerance	mm		

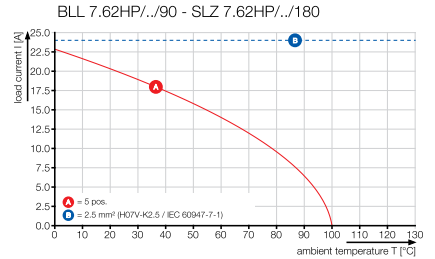
Accessories

Note: Refer to the Accessories chapter for additional accessories.		
Screwdriver		Order No.
	SD 0,6x3,5x100	9008330000
	SDI 0,6x3,5x100	9008390000

Ordering data

Solder pin length				
Colour				black
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	126	1043350000
3	15.24	0.600	84	1043360000
4	22.86	0.900	60	1043370000
5	30.48	1.200	48	1043380000

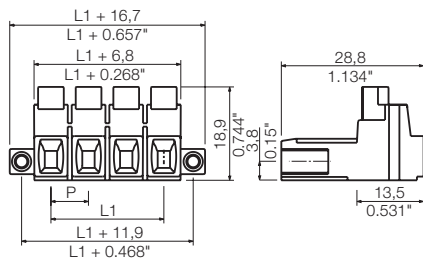
Representative derating curve



SLZ 7.62HP/./180F



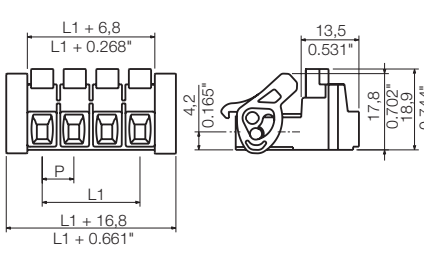
Dimensioned drawing



SLZ 7.62HP/./180LR



Dimensioned drawing



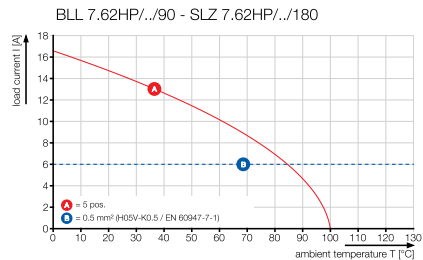
Ordering data

Solder pin length				
Colour			black	
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043430000
3	15.24	0.600	54	1043440000
4	22.86	0.900	42	1043450000
5	30.48	1.200	36	1043460000

Ordering data

Solder pin length				
Colour			black	
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043510000
3	15.24	0.600	54	1043520000
4	22.86	0.900	42	1043530000
5	30.48	1.200	36	1043540000

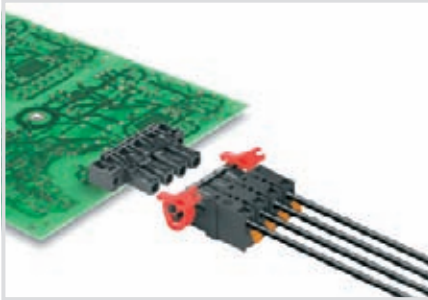
Additional derating curves



Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

SLF 7.62HP/./180



Female plug with PUSH IN spring connection in 180° outlet direction. Also perfect for finger-safe solutions involving inverse voltages. Complies with UL1059 600 V Use Group C and IEC 61800-5-1 requirements for 3 mm of finger safety on 400 V TNC systems.

- Available with screw flange (F) and lock and release-levers (LR).

Product data

IEC: 1000 V / 24 A / 0.5 - 2.5 mm²
UL: 600 V / 16 A / AWG 20 - 12

For additional articles and information, refer to catalog.weidmueller.com

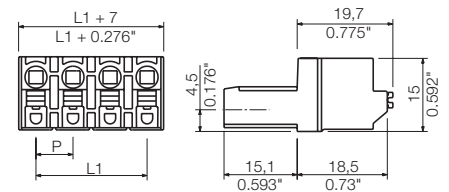
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

SLF 7.62HP/./180G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984			
Clamping range, max.	mm ²	0.08...2.5	
Solid core H05(07) V-U	mm²	0.5...2.5	
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²	0.5...2.5	
Flexible with ferrule	mm ²	0.5...1.5	
Ferrule with plastic collar	mm ²	0.5...1.5	
Stripping length	mm	10	
Screwdriver blade	mm	0.6 x 3.5	
According to norm		DIN 5264	
Tightening torque range	Nm		
Rated current, max.	A	24	23.8
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²	2.5	
Overvoltage category		III	III II
Pollution severity		3	2 2
Rated voltage	V	630	1000 1000
Rated impulse voltage	kV	6	8 6
UL / CUL (Use Group)		B	C D
Rated voltage	V	600	600 600
Rated current	A	16	16 5
AWG conductor	AWG	20-12	
CSA (Use Group)		B	C D
Rated voltage	V	600	600 600
Rated current	A	16	16 5
AWG conductor	AWG	20-12	
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm		
Solder eyelet Ø = D	mm		
Solder eyelet Ø tolerance	mm		

Accessories

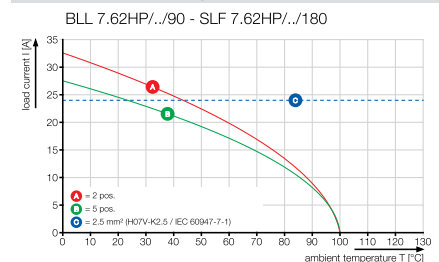
Note: Refer to the Accessories chapter for additional accessories.

Screwdriver	Order No.
SD 0,6x3,5x100	9008330000
SDI 0,6x3,5x100	9008390000

Ordering data

Solder pin length				
Colour	black			
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	126	1043590000
3	15.24	0.600	84	1043600000
4	22.86	0.900	60	1043610000
5	30.48	1.200	48	1043620000

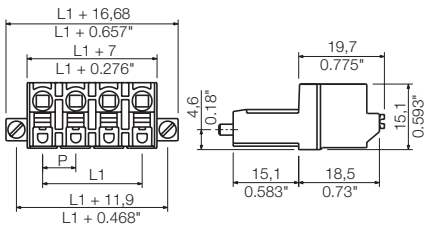
Representative derating curve



SLF 7.62HP/./180F



Dimensioned drawing



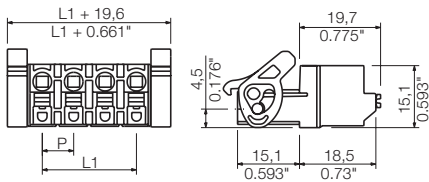
Ordering data

Solder pin length				
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043670000
3	15.24	0.600	54	1043680000
4	22.86	0.900	42	1043690000
5	30.48	1.200	36	1043700000

SLF 7.62HP/./180LR



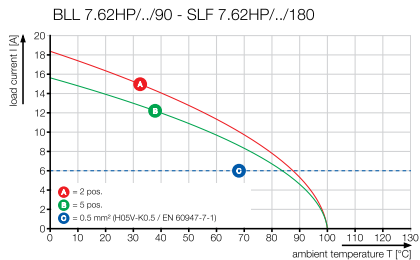
Dimensioned drawing



Ordering data

Solder pin length				
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043750000
3	15.24	0.600	54	1043760000
4	22.86	0.900	42	1043770000
5	30.48	1.200	36	1043780000

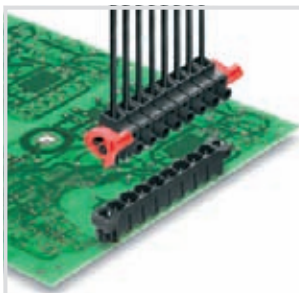
Additional derating curves



Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

BLZ 7.62HP../180



Female plug with clamping-yoke screw connection in 180° outlet direction. Complies with UL1059 600 V Use Group C and IEC 61800-5-1 requirements for 3 mm of finger safety on 400 V TNC(S) systems.

- Available with lock and release-levers (LR) and screw flange on request.

Product data

IEC: 630 V / 29 A / 0.08 - 4 mm²
UL: 600 V / 20 A / AWG 28 - 12

For additional articles and information, refer to catalog.weidmueller.com

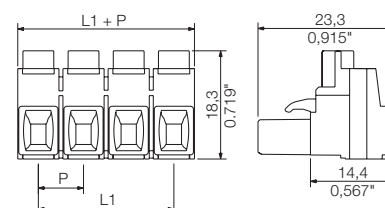
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

BLZ 7.62HP../180



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²	0.08...4
Solid core H05(07) V-U	mm ²	0.08...4
Stranded H07 V-R		
Flexible H05(07) V-K	mm ²	0.08...4
Flexible with ferrule	mm ²	0.2...2.5
Ferrule with plastic collar	mm ²	0.2...2.5
Stripping length	mm	7
Screwdriver blade	mm	0.6 x 3.5
According to norm		DIN 5264
Tightening torque range	Nm	0.4...0.5
Rated current, max.	A	29 25
At ambient temperature	20°C	40°C
For conductor cross-section	mm ²	2.5
Overvoltage category	III	III II
Pollution severity	3	2 2
Rated voltage	V	400 500 630
Rated impulse voltage	kV	6 6 4
UL / CUL (Use Group)	B C D	
Rated voltage	V	600 600 600
Rated current	A	20 20 5
AWG conductor	AWG	28-12
CSA (Use Group)	B C D	
Rated voltage	V	600 600 600
Rated current	A	18.5 18.5 5
AWG conductor	AWG	28-12
General data		
Type of insulation material		PBT
Flammability class UL 94		V-0
Contact base material		Copper alloy
Material of contact surface		tinned
Pin dimensions = d	mm	
Solder eyelet Ø = D	mm	
Solder eyelet Ø tolerance	mm	

Accessories

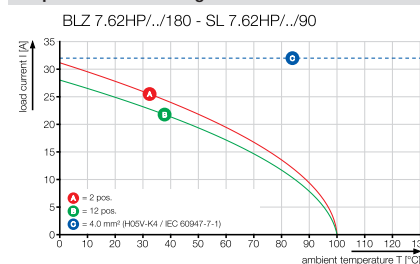
Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BLZ/SL KO OR	1573010000
BLZ/SL KO SW	1545710000
Screwdriver	
SD 0,6x3,5x100	9008330000
SDI 0,6x3,5x100	9008390000

Ordering data

Solder pin length				
Colour	black			
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1059580000
3	15.24	0.600	100	1059590000
4	22.86	0.900	100	1059600000
5	30.48	1.200	50	1049010000
6	38.10	1.500	50	1049020000
7	45.72	1.800	50	1059610000
8	53.34	2.100	50	1049030000
9	60.96	2.400	50	1059620000
10	68.58	2.700	50	1059630000
11	76.20	3.000	50	1059640000
12	83.82	3.300	50	1059670000

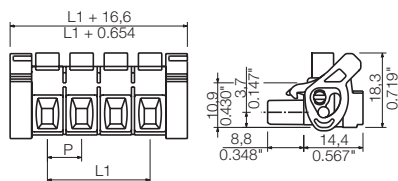
Representative derating curve



BLZ 7.62HP/./180LR



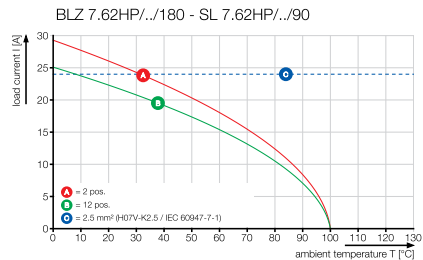
Dimensioned drawing



Ordering data

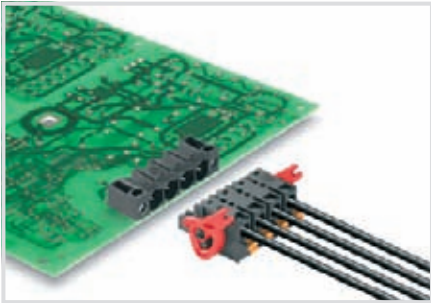
Solder pin length				
Colour			black	
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	60	1093430000
3	15.24	0.600	45	1093440000
4	22.86	0.900	35	1093450000
5	30.48	1.200	30	1093460000
6	38.10	1.500	25	1164960000
7	45.72	1.800	20	1164970000
8	53.34	2.100	20	1164980000
9	60.96	2.400	15	1164990000
10	68.58	2.700	15	1165000000
11	76.20	3.000	15	1165010000
12	83.82	3.300	15	1165020000

Additional derating curves



Connectors in 7.62 mm pitch
Series BL/SL 7.62 – connects up to 4 mm²

BLF 7.62HP/./180



Female plug with PUSH IN spring connection in 180 ° outlet direction. Complies with UL1059 600 V Use Group C and IEC 61800-5-1 requirements for 3 mm of finger safety on 400 V TNC(S) systems.

- Available with screw flange (F) and lock and release-levers (LR).

Product data

IEC: 1000 V / 24 A / 0.5 - 2.5 mm²
UL: 600 V / 16 A / AWG 20 - 12

For additional articles and information, refer to catalog.weidmueller.com

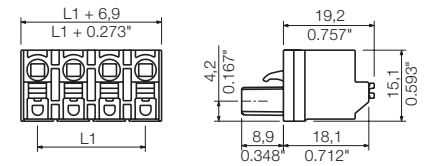
- Note:**
- Additional colours on request
 - Gold-plated contact surfaces on request
 - Rated current related to rated cross-section and min. No. of poles.
 - Wire end ferrule without plastic collar to DIN 46228/1
 - Wire end ferrule with plastic collar to DIN 46228/4
 - P on drg. = pitch
 - Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.

BLF 7.62HP/./180

with test point



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984			
Clamping range, max.	mm²	0.08...2.5	
Solid core H05(07) V-U	mm²	0.5...2.5	
Stranded H07 V-R			
Flexible H05(07) V-K	mm²	0.5...2.5	
Flexible with ferrule	mm²	0.5...1.5	
Ferrule with plastic collar	mm²	0.5...1.5	
Stripping length	mm	10	
Screwdriver blade	mm	0.6 x 3.5	
According to norm		DIN 5264	
Tightening torque range	Nm		
Rated current, max.	A	24	23.8
At ambient temperature		20°C	40°C
For conductor cross-section	mm²	2.5	
Overvoltage category		III	III II
Pollution severity		3	2 2
Rated voltage	V	630	1000 1000
Rated impulse voltage	kV	6	8 6
UL / CUL (Use Group)		B	C D
Rated voltage	V	600	600
Rated current	A	16	16
AWG conductor	AWG	20-12	
CSA (Use Group)		B	C D
Rated voltage	V	600	600
Rated current	A	16	16
AWG conductor	AWG	20-12	
General data			
Type of insulation material		PBT	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm		
Solder eyelet Ø = D	mm		
Solder eyelet Ø tolerance	mm		

Accessories

Note: Refer to the Accessories chapter for additional accessories.		
Screwdriver		Order No.
	SD 0,5x3,0x80	9008320000
	SDI 0,5x3,0x100	9008380000
Crimping tool		
	PZ 6/5	9011460000

Ordering data

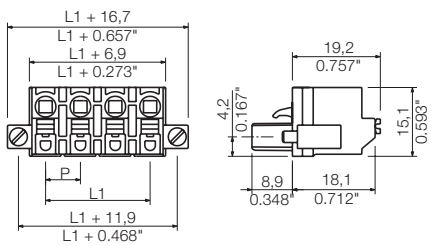
Solder pin length					
Colour					black
Pitch 7.62 mm					
Pol.	L1	(inch)	Qty.	Order No.	
2	7.62	0.300	126	1043830000	
3	15.24	0.600	84	1043840000	
4	22.86	0.900	60	1043850000	
5	30.48	1.200	48	1043860000	

BLF 7.62HP/././180F

with test point



Dimensioned drawing

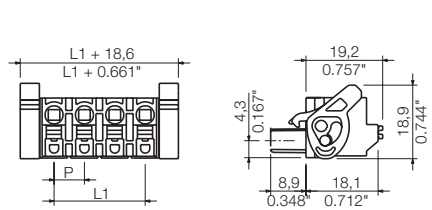


BLF 7.62HP/././180LR

with test point



Dimensioned drawing



Ordering data

Solder pin length				
Colour			black	
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043910000
3	15.24	0.600	54	1043920000
4	22.86	0.900	42	1043930000
5	30.48	1.200	36	1043940000

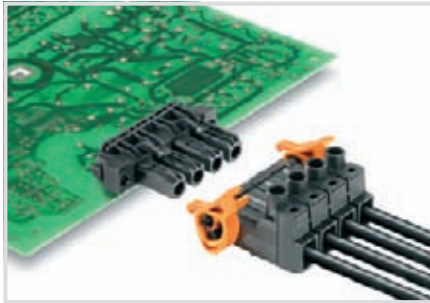
Ordering data

Solder pin length				
Colour			black	
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043990000
3	15.24	0.600	54	1044000000
4	22.86	0.900	42	1044010000
5	30.48	1.200	36	1044020000

Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

BLL 7.62HP/./90



Touch-safe female header in 90° outlet direction. Meets the requirements of IEC 61800-5-1 and allows UL approval in accordance with UL508 / UL840 for 600 V. An ideal touch-safe solution for power output and DC link applications. According to IEC 61800-5-1, the mating profile ensures more than 3 mm of touch safety.

- Available with screw flange (F) and solder flange (LF).

Product data

IEC: 630 V / 24 A
UL: 300 V / 15 A

For additional articles and information, refer to catalog.weidmueller.com

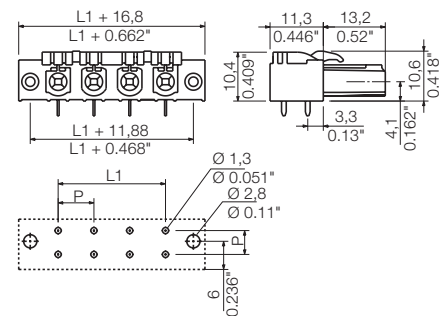
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Spacing between rows: see hole layout
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

BLL 7.62HP/./90G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²	
Solid core H05(07) V-U	mm²	
Stranded H07 V-R		
Flexible H05(07) V-K	mm ²	
Flexible with ferrule	mm ²	
Ferrule with plastic collar	mm ²	
Stripping length	mm	
Screwdriver blade	mm	
According to norm		
Tightening torque range	Nm	
Rated current, max.	A	24 24
At ambient temperature	20°C	40°C
For conductor cross-section	mm ²	
Overvoltage category		III III II
Pollution severity		3 2 2
Rated voltage	V	400 630 630
Rated impulse voltage	kV	6 6 4
UL / CUL (Use Group)	B C D	
Rated voltage	V	300 150 300
Rated current	A	15 15 10
AWG conductor	AWG	-
CSA (Use Group)	B C D	
Rated voltage	V	300 150 300
Rated current	A	15 15 10
AWG conductor	AWG	-
General data		
Type of insulation material		PA GF
Flammability class UL 94		V-0
Contact base material		Copper alloy
Material of contact surface		tinned
Pin dimensions = d	mm	0.4 x 1.00
Solder eyelet Ø = D	mm	1.3
Solder eyelet Ø tolerance	mm	+ 0,1

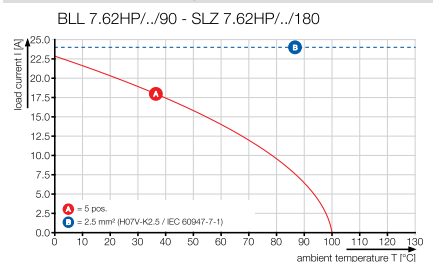
Accessories

Note: Refer to the Accessories chapter for additional accessories.

Ordering data

Solder pin length				3.2 mm	
Colour				black	
Pitch 7.62 mm					
Pol.	L1	(inch)	Qty.	Order No.	
2	7.62	0.300	126	1043230000	
3	15.24	0.600	84	1043240000	
4	22.86	0.900	60	1043250000	
5	30.48	1.200	48	1043260000	

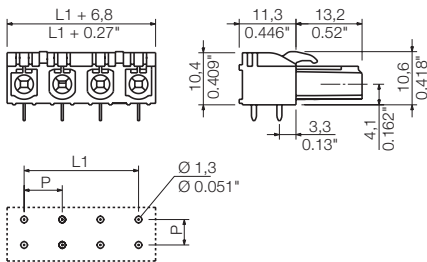
Representative derating curve



BLL 7.62HP/./90F



Dimensioned drawing



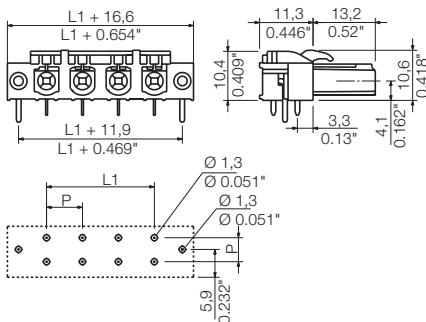
Ordering data

Solder pin length			3.2 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1043270000
3	15.24	0.600	54	1043280000
4	22.86	0.900	42	1043290000
5	30.48	1.200	36	1043300000

BLL 7.62HP/./90LF



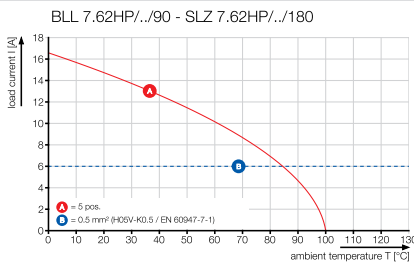
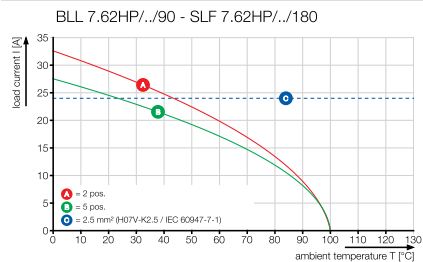
Dimensioned drawing



Ordering data

Solder pin length			3.2 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1095640000
3	15.24	0.600	54	1095650000
4	22.86	0.900	42	1095660000
5	30.48	1.200	36	1095670000

Additional derating curves



Connectors in 7.62 mm pitch

Series BL/SL 7.62 – connects up to 4 mm²

BLL 7.62HP/./180



Touch-safe female header in 180° outlet direction. Meets the requirements of IEC 61800-5-1 and allows UL approval in accordance with UL508 / UL840 for 600 V. An ideal touch-safe solution for power output and DC link applications. According to IEC 61800-5-1, the mating profile ensures more than 3 mm of touch safety.

- Available with screw flange (F) and solder flange (LF).

Product data

IEC: 630 V / 24 A
UL: 300 V / 15 A

For additional articles and information, refer to catalog.weidmueller.com

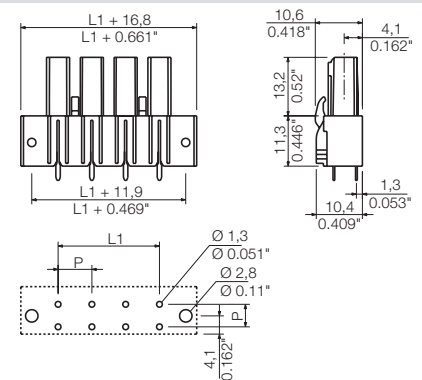
Note:

- Additional colours on request
- Gold-plated contact surfaces on request
- Spacing between rows: see hole layout
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

BLL 7.62HP/./180G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²		
Solid core H05(07) V-U	mm²		
Stranded H07 V-R			
Flexible H05(07) V-K	mm ²		
Flexible with ferrule	mm ²		
Ferrule with plastic collar	mm ²		
Stripping length	mm		
Screwdriver blade	mm		
According to norm			
Tightening torque range	Nm		
Rated current, max.	A	24	24
At ambient temperature		20°C	40°C
For conductor cross-section	mm ²		
Overvoltage category		III	III
Pollution severity		3	2
Rated voltage	V	400	630
Rated impulse voltage	kV	6	6
UL / CUL (Use Group)	B C D		
Rated voltage	V	300	150
Rated current	A	15	15
AWG conductor	AWG	-	10
CSA (Use Group)	B C D		
Rated voltage	V	300	150
Rated current	A	15	15
AWG conductor	AWG	-	10
General data			
Type of insulation material		PA GF	
Flammability class UL 94		V-0	
Contact base material		Copper alloy	
Material of contact surface		tinned	
Pin dimensions = d	mm	0.4 x 1.00	
Solder eyelet Ø = D	mm	1.3	
Solder eyelet Ø tolerance	mm	+ 0,1	

Accessories

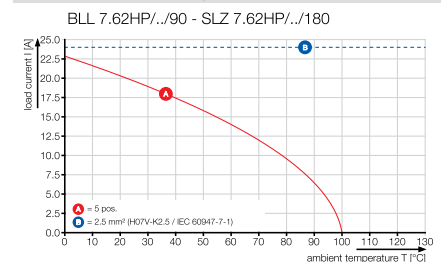
Note: Refer to the Accessories chapter for additional accessories.

Ordering data

Solder pin length			3.2 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	126	1122070000
3	15.24	0.600	84	1122080000
4	15.24	0.600	60	1122090000
5	30.48	1.200	48	1122100000

Order No.
1122070000
1122080000
1122090000
1122100000

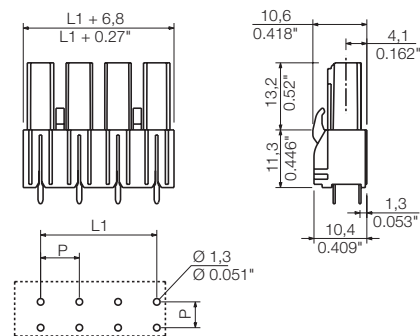
Representative derating curve



BLL 7.62HP/./180F



Dimensioned drawing



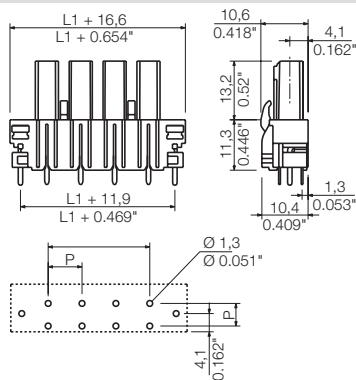
Ordering data

Solder pin length		3.2 mm		
Colour		black		
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1122110000
3	15.24	0.600	54	1122120000
4	22.86	0.900	42	1122130000
5	30.48	1.200	36	1122140000

BLL 7.62HP/./180LF



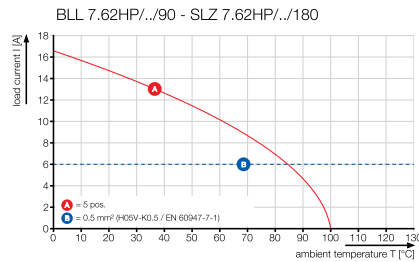
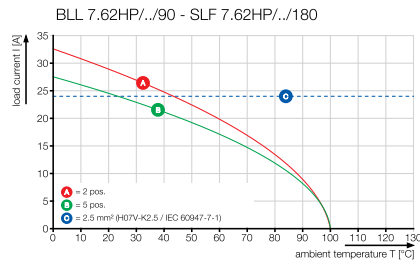
Dimensioned drawing



Ordering data

Solder pin length		3.2 mm		
Colour		black		
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	72	1134080000
3	15.24	0.600	54	1134090000
4	22.86	0.900	42	1134110000
5	30.48	1.200	36	1134120000

Additional derating curves



OMNIMATE Power BV / SV 7.62HP – the 28 kVA power class Custom-fit high-powered solutions



More power reserves for more load capacity: The OMNIMATE Power SV / BV 7.62HP mid-level class of power connection systems is the top performer of the HP series. It features a large clamping range, increased overload capacity and the widest selection of variants and accessories.

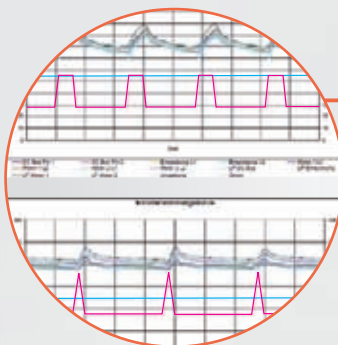
HP means High Performance – this performance covers a great deal: the full rated current up to 50 °C without derating, unlimited 600 V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

F



Maximum safety

Safe for both man and machine with bi-directional finger safety: also when not plugged in and covering inverse voltages from power electronics.



Maximum performance

Full current rating at 40 °C ambient temperature is a mandatory requirement in drive applications. What really makes the difference here is real-world, application-based overload and over-heating capacities.



Maximum user-friendliness

Quick, simple plug and release: with the one-handed safety flange – convenient for the user and safe for the application.

High system performance



An overview of the 28-kVA class of OMNIMATE Power: The HP system has been leading the way with its tool-free rapid interlock, installation-safe creepage and clearance distances, and application-based versioning scheme. This integrated strategy of system expansion includes a one-handed safety flange and wide range of innovative extras.

Individualised configuration



Standard + Services = custom design with simple configuration across the entire range of services: features include colour coding, application-oriented labelling and custom modifications or design. More information can be found in the "Services & Support" brochure.

PUSH IN

Maximum efficiency

Tool-free simplicity: quick PUSH IN connection mechanism and automatic, convenient snap-in with one-handed safety interlock.

OMNIMATE Power BV / SV 7.62HP Hybrid – for power, signals and EMC Three functions in one!



The OMNIMATE Power Hybrid connector provides developers and users with the perfect three-in-one solution.

The hybrid motor connector can simultaneously connect power, signals and a pluggable EMC shield. This allows you to save space on the circuit board, on the outside of the housing and in the electrical cabinet. The self-locking one-handed interlock mechanism requires only one plugging step and thus speeds up installation and maintenance procedures. It is easy to handle and interlocks automatically – even in difficult installation positions. The unique shielding shape with 30° cable entry enable a space savings of up to 10 cm between rows.

F



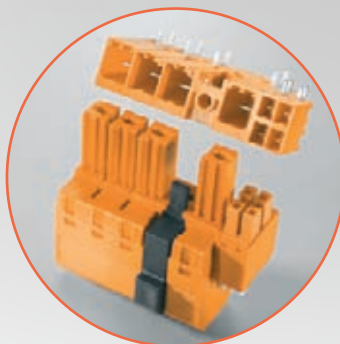
Unique safety

Safe, EMC-compliant shield connection for any application situation and with no risk of error.



Unique integration

Three-in-one solution: pluggable shield support, integrated signal contacts, and one-handed security flange.



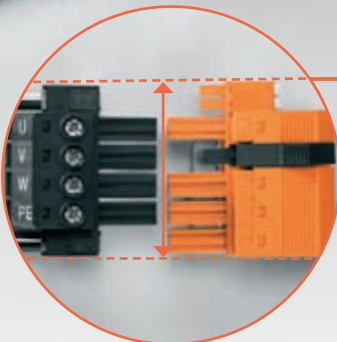
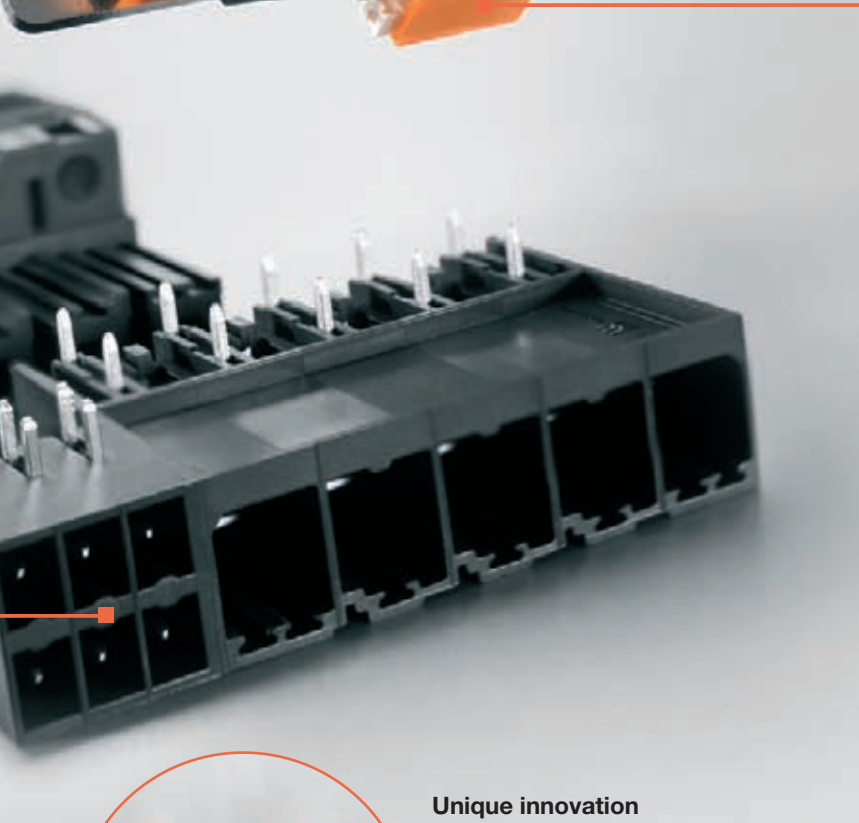
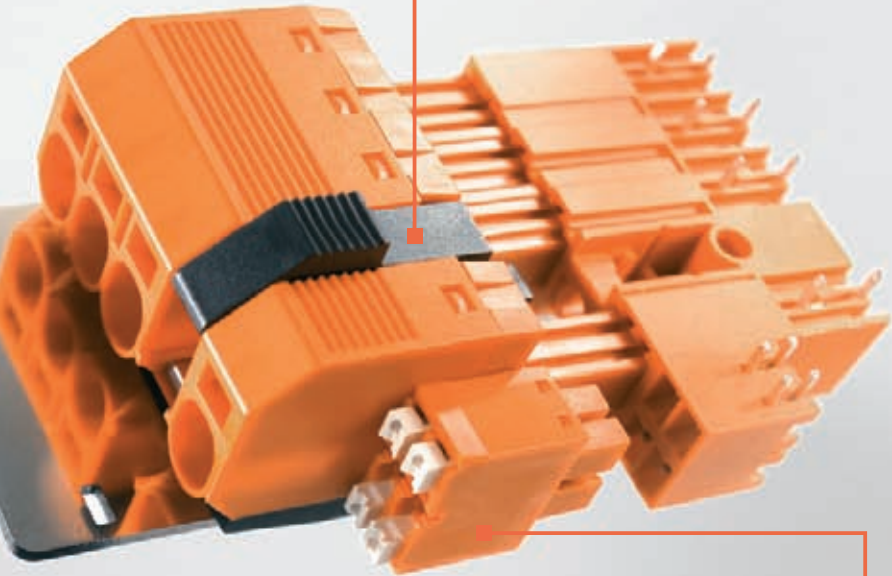
Unique component density

More space available on the PCB providing for denser component assemblies, and more space available on the housing wall because of true-to-pitch integration of the signal contacts – while maintaining the same width!



Unique interaction

Plug & Work with intuitive handling: featuring tool-free one-handed operation with automatic snap-in and also "blind" plugging of power, signals and shielding simultaneously.



Unique innovation

Integrating functions, optimising processes, and reducing complexity: The conventional 2 outer flanges have simply been replaced by 1 middle flange, 4 signal contacts and 1 pluggable shield support.

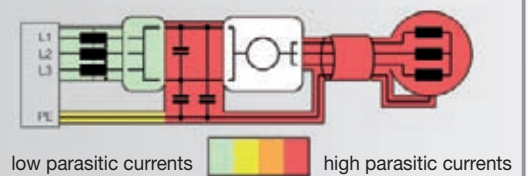
EMC in theory and in the real world



The motor feedback (signal feedback from temperature/encoder) in hybrid, shield-within-shield motor cables is usually made from over-sized power contacts or from disconnected I/O connectors. It also normally requires two separate shield connections. During installation and repairs (replacement), it is possible that the shield terminals could be incorrectly connected, left disconnected or lost. With conventional shielding, it can be quite difficult to tighten the flange screws when the connection is located at a difficult to reach location. So this step is often neglected in the real world.

Reliably avoiding interferences

Topology of parasitic currents



Source: Fraunhofer IZM

As a result, malfunctions can then be caused by the coupling of electromagnetic fields within the sensitive electronics. The pluggable, hybrid shield support features a special EMC spring-contact strip which ensures that the shield connection to the housing is permanent, vibration-proof and covers a large surface area. It allows the shielding braid from the power and signal wires to be connected separately – and enables this to be done automatically in one step so that it is not dependent on the user.


Connectors in 7.62 mm pitch - Series BV/SV 7.62 - connects up to 6 mm²
Quick selection

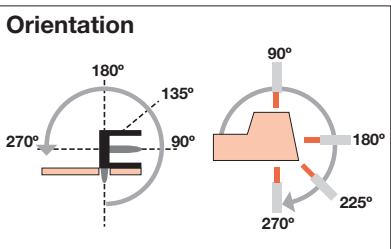
= Wire to board

= Board to board


= Wire to wire

= Board to wire

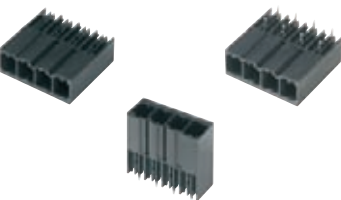




Male header



Solder connection






Type	SV	SV	SV
Orientation	90°	180°	270°
Flange options	G/F/SF/MF	G/F/SF/MF	G/F/SF/MF
Attaches with			
Page	F.50	F.52	F.56

F

Female plug	 <div>Screw Clamping yoke</div>		BVZ	180°	(G)/F/SF	Screw	F.80			
			BVZ	180°	FC/SFC	Nut	F.81			
			BVZ	180°	SH...	Screw	F.82			
			BVZ	180°	SH... C	Nut	F.84			
	 <div>Spring PUSH IN</div>		BVF	180°	(G)/F/SF/ MF/MSF	Screw	F.86			
			BVF & BC 3.81	180°	(G)/MF		F.102			
	 <div>Solder connection</div>		BVL	90°	(G)/FI/SFI	Nut	F.92			
			BVL	180°	(G)/FI/SFI	Nut	F.94			
			BVL	270°	(G)/FI/SFI	Nut	F.96			

Female plug and header:
(G) = Closed (without flange)
F = Flange with clasp
SF = Flange with clasp and additional screw
SF C = Flange for clasp with additional nut
FI = Inverted flange
SFI = Inverted flange with additional nut

FC = Flange with additional nut
SH... = Shielded flange with additional screw
SH... C = Shielded flange with additional nut
MF = Centre flange with clasp
MSF = Centre flange with clasp and additional screw

	Male plug				Hybrid male header	
	 Screw Clamping yoke				 Spring PUSH IN	
					 Solder connection	



	SVZ	SVZ	SVZ	SVZ	SVZ	SVZ	SVF	SVF	SVF	SV & SC 3.81
	180°	180°	180°	180°	180°	180°	180°	180°	180°	90°/270°
	(G)/F/SF	(G)/FC/SFC	(G)/FI/SFI	SH	SH	SH	(G)/F/SF	G/FI/SFI	MF/MSF	(G)/MF
	Always in front	Screw in front	Screw in back	Nut in front	Screw in front	Screw in back	Nut in front	Screw in back	Nut in front	
	F.60	F.62	F.64	F.66	F.68	F.70	F.72	F.74	F.76	F.98
	●			●	●		●			
		●			●					
	●			●			●			
		●								
	●			●	●		●		●	
										●
			●			●		●		
			●			●		●		
			●			●		●		

Male header and plug:
G = Closed (without flange)
F = Flange with clasp
SF = Flange with clasp and additional screw
FI = Inverted flange with clasp
SFI = Inverted flange with clasp and additional screw
FC = Flange with clasp

SFC = Flange with clasp and additional screw
SH... = Shielded flange with additional nut
SH... C = Shielded flange with additional screw
SH... I = Inverted shielded flange with additional screw
MF = Centre flange for clasp
MSF = Centre flange for clasp with additional nut

Connectors in 7.62 mm pitch
Series BV/SV 7.62 – connects up to 6 mm²

SV 7.62HP/./90



Male header in 90° outlet direction for 400 V TNC (S) systems. UL approved for 600 V in accordance with UL508 / UL840. The mating profile ensures touch-safety of more than 3 mm according to IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, unique coding capabitlity and additional fastening mechanism.

- Available with a flange (F), screw flange (SF) and middle screw flange (MF).

Technical data

In compliance with IEC 60664-1 / IEC 61984				
Clamping range, max.	mm²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm²			
Flexible with ferrule	mm²			
Ferrule with plastic collar	mm²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-		
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-		
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

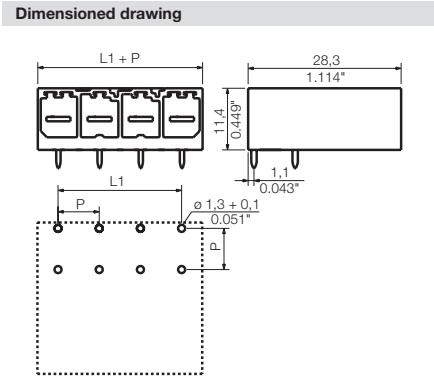
Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

- Note:**
- Additional colours on request
 - Rated current related to rated cross-section and min. No. of poles.
 - P on drg. = 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.

SV 7.62HP/./90G



Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000

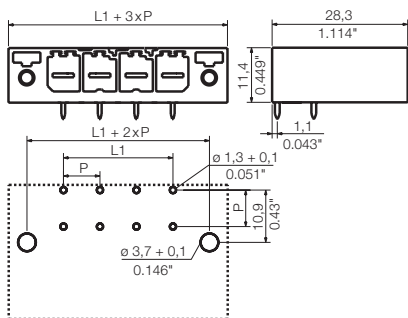
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1930270000
3	15.24	0.600	100	1930280000
4	22.86	0.900	100	1930290000
5	30.48	1.200	50	1930300000
6	38.10	1.500	50	1930310000
7	45.72	1.800	50	1930320000

SV 7.62HP/./90F



Dimensioned drawing



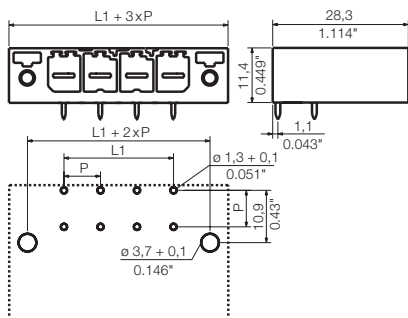
Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1 (inch)	Qty. Order No.
2	7.62 0.300	100 1930380000
3	15.24 0.600	100 1930390000
4	22.86 0.900	100 1930400000
5	30.48 1.200	50 1930410000
6	38.10 1.500	50 1930420000
7	45.72 1.800	50 1930430000

SV 7.62HP/./90SF



Dimensioned drawing



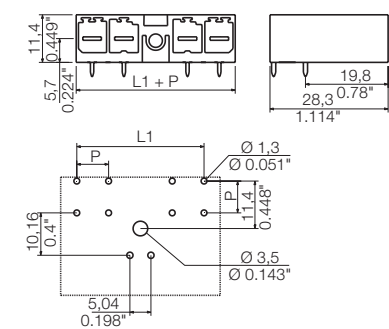
Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1 (inch)	Qty. Order No.
2	7.62 0.300	100 1930490000
3	15.24 0.600	100 1930500000
4	22.86 0.900	100 1930510000
5	30.48 1.200	50 1930520000
6	38.10 1.500	50 1930530000
7	45.72 1.800	50 1930540000

SV 7.62HP/./90MF



Dimensioned drawing



Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1 (inch)	Qty. Order No.
2	MF2 15.24 0.600	78 1048390000
3	MF2 22.86 0.900	60 1048500000
3	MF3 22.86 0.900	60 1048490000
4	MF3 30.48 1.200	48 1048570000
5	MF3 38.10 1.500	36 1048680000
5	MF4 38.10 1.500	36 1048690000
6	MF4 45.72 1.800	30 1048760000

Connectors in 7.62 mm pitch

Series BV/SV 7.62 – connects up to 6 mm²

SV 7.62HP/./180



Male header in 180° outlet direction for 400 V TNC (S) systems. UL approved for 600 V in accordance with UL508 / UL840. The mating profile ensures touch-safety of more than 3 mm according to IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, unique coding capability, additional fastening mechanism, and integrated positioning.

- Available with a flange (F), screw flange (SF) and middle screw flange (MF).

Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

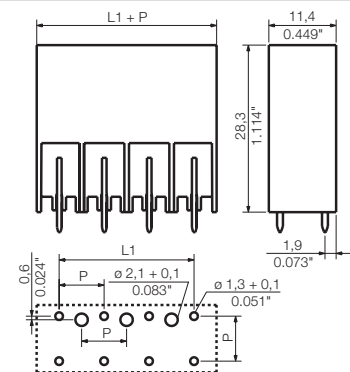
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SV 7.62HP/./180G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm ²			
Flexible with ferrule	mm ²			
Ferrule with plastic collar	mm ²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm ²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0.1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000
Protection against twisting	
VDS180 SV7.62	1853940000

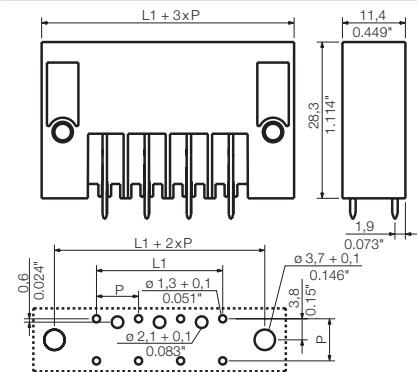
Ordering data

Solder pin length				3.5 mm
Colour			black	
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1930600000
3	15.24	0.600	100	1930610000
4	22.86	0.900	100	1930620000
5	30.48	1.200	50	1930630000
6	38.10	1.500	50	1930640000
7	45.72	1.800	50	1930650000

SV 7.62HP/./180F



Dimensioned drawing



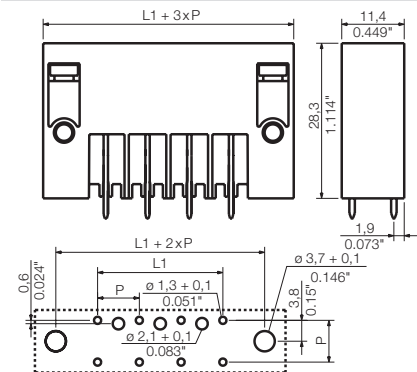
Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1 (inch)	Qty. Order No.
2	7.62 0.300	100 1930710000
3	15.24 0.600	100 1930720000
4	22.86 0.900	100 1930730000
5	30.48 1.200	50 1930740000
6	38.10 1.500	50 1930750000
7	45.72 1.800	50 1930760000

SV 7.62HP/./180SF



Dimensioned drawing



Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1 (inch)	Qty. Order No.
2	7.62 0.300	100 1930820000
3	15.24 0.600	100 1930830000
4	22.86 0.900	100 1930840000
5	30.48 1.200	50 1930850000
6	38.10 1.500	50 1930860000
7	45.72 1.800	50 1930870000

Connectors in 7.62 mm pitch
Series BV/SV 7.62 – connects up to 6 mm²

SV 7.62HP/./180MF



Male header in 180° outlet direction for 400 V TNC (S) systems. UL approved for 600 V in accordance with UL508 / UL840. The mating profile ensures touch-safety of more than 3 mm according to IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, unique coding capability, additional fastening mechanism, and integrated positioning.

- Middle flange available in positions 2, 3 and 4.

Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

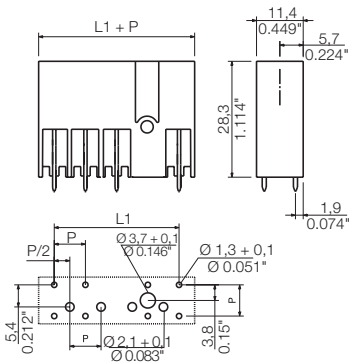
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SV 7.62HP/./180MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984				
Clamping range, max.	mm ²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm ²			
Flexible with ferrule	mm ²			
Ferrule with plastic collar	mm ²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm ²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-	-	-
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG	-	-	-
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.		
Coding		Order No.
	BV/SV 7.62HP KO	1937590000
Protection against twisting		
	VDS180 SV7.62	1853940000

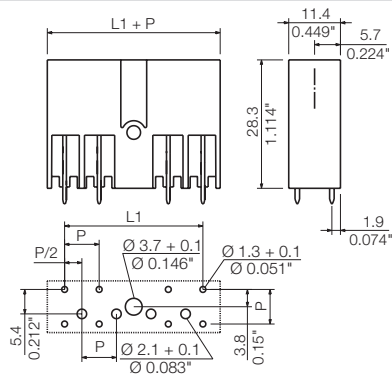
Ordering data

Solder pin length			3.5 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	15.24	0.600	78	1048350000
3	22.86	0.900	60	1048410000

SV 7.62HP/.. /180MF3



Dimensioned drawing



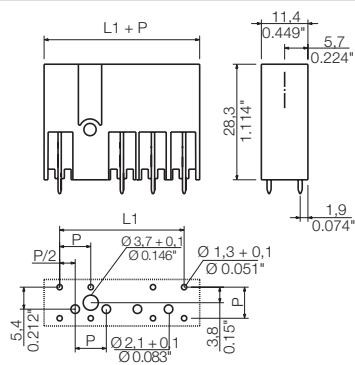
Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
3	22.86	0.900	60	1048420000
4	30.48	1.200	48	1048530000
5	38.10	1.500	36	1048590000

SV 7.62HP/.. /180MF4



Dimensioned drawing



Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
5	38.10	1.500	36	1048600000
6	45.72	1.800	30	1048720000

Connectors in 7.62 mm pitch

Series BV/SV 7.62 – connects up to 6 mm²

SV 7.62HP/./270



Male header in 270° outlet direction for 400 V TNC (S) systems. UL approved for 600 V in accordance with UL508 / UL840. The mating profile ensures touch-safety of more than 3 mm according to IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, unique coding capability and additional fastening mechanism.

- Available with a flange (F), screw flange (SF) and middle screw flange (MF).

Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

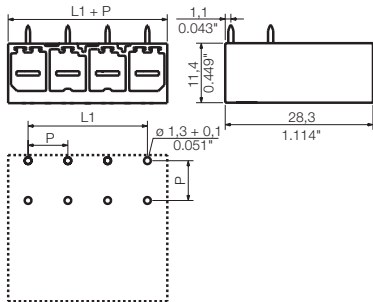
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SV 7.62HP/./270G



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984				
Clamping range, max.	mm²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm²			
Flexible with ferrule	mm²			
Ferrule with plastic collar	mm²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000

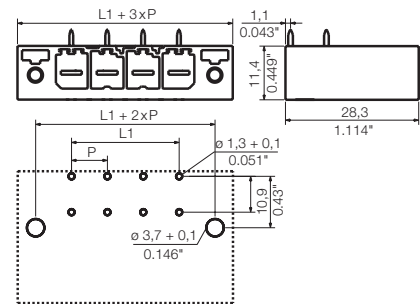
Ordering data

Solder pin length		3.5 mm		
Colour		black		
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1931260000
3	15.24	0.600	100	1931270000
4	22.86	0.900	100	1931280000
5	30.48	1.200	50	1931290000
6	38.10	1.500	50	1931300000
7	45.72	1.800	50	1931310000

SV 7.62HP/..../270F



Dimensioned drawing



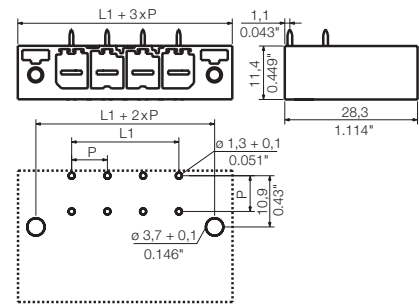
Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1	(inch)
2	7.62	0.300
3	15.24	0.600
4	22.86	0.900
5	30.48	1.200
6	38.10	1.500
7	45.72	1.800
Qty.	Order No.	
100	1931370000	
100	1931380000	
100	1931390000	
50	1931400000	
50	1931410000	
50	1931420000	

SV 7.62HP/..../270SF



Dimensioned drawing



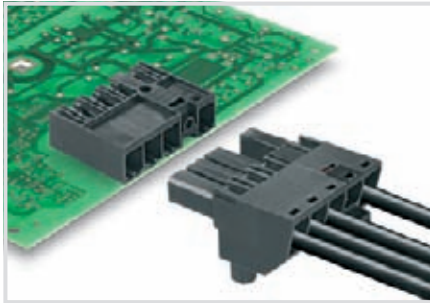
Ordering data

Solder pin length		3.5 mm
Colour		black
Pitch		7.62 mm
Pol.	L1	(inch)
2	7.62	0.300
3	15.24	0.600
4	22.86	0.900
5	30.48	1.200
6	38.10	1.500
7	45.72	1.800
Qty.	Order No.	
100	1931480000	
100	1931490000	
100	1931500000	
50	1931510000	
50	1931520000	
50	1931530000	

Connectors in 7.62 mm pitch

Series BV/SV 7.62 – connects up to 6 mm²

SV 7.62HP/./270MF



Male header in 180° outlet direction for 400 V TNC (S) systems. UL approved for 600 V in accordance with UL508 / UL840. The mating profile ensures touch-safety of more than 3 mm according to IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, unique coding capability and additional fastening mechanism.

- Middle flange available in positions 2, 3 and 4.

Product data

IEC: 1000 V / 41 A
UL: 300 V / 35 A

For additional articles and information, refer to catalog.weidmueller.com

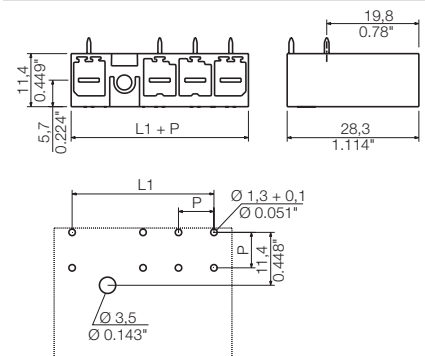
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- P on drg. = 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.

SV 7.62HP/./270MF2



Dimensioned drawing



Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²			
Solid core H05(07) V-U	mm²			
Stranded H07 V-R				
Flexible H05(07) V-K	mm ²			
Flexible with ferrule	mm ²			
Ferrule with plastic collar	mm ²			
Stripping length	mm			
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm			
Rated current, max.	A	41	41	
At ambient temperature		20°C	40°C	
For conductor cross-section	mm ²			
Overvoltage category		III	III	II
Pollution severity		3	2	2
Rated voltage	V	630	630	1000
Rated impulse voltage	kV	6	6	6
UL / CUL (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
CSA (Use Group)		B	C	D
Rated voltage	V	300	300	600
Rated current	A	35	35	5
AWG conductor	AWG		-	
General data				
Type of insulation material		PA GF		
Flammability class UL 94		V-0		
Contact base material		Copper alloy		
Material of contact surface		tinned		
Pin dimensions = d	mm	0.8 x 1.0		
Solder eyelet Ø = D	mm	1.3		
Solder eyelet Ø tolerance	mm	+ 0,1		

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000

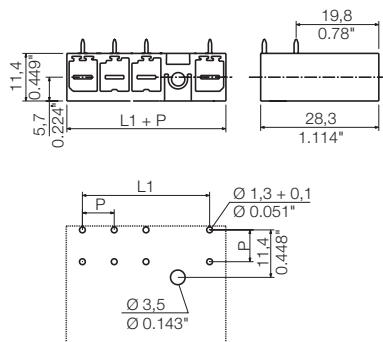
Ordering data

Solder pin length			3.5 mm	
Colour			black	
Pitch 7.62 mm				
Pol.	L1	(inch)	Qty.	Order No.
2	15.24	0.600	78	1048370000
3	22.86	0.900	60	1048450000

SV 7.62HP/.. /270MF4



Dimensioned drawing



Ordering data

Solder pin length				3.5 mm
Colour				black
Pitch		7.62 mm		
Pol.	L1	(inch)	Qty.	Order No.
5	38.10	1.500	36	1048650000
6	45.72	1.800	30	1048740000

Connectors in 7.62 mm pitch

Series BV/SV 7.62 – connects up to 6 mm²

SVZ 7.62HP/././180



Male plug in 180° outlet direction with clamping yoke screw connection for TNC (S) systems. Also perfect for finger-safe solutions involving inverse voltages. Meets the requirements of UL1059 for 600 V Use Group C. The mating profile ensures touch-safety of > 3 mm in accordance with IEC 61800-5-1.

Maximum operational reliability: with a derating up to 125°C, a mating profile that can only be plugged in correct, and unique coding capability.

- Available with a flange (F) and screw flange (SF).

Product data

IEC: 1000 V / 41 A / 0.2 - 6 mm²
UL: 600 V / 35 A / AWG 24 - 10

For additional articles and information, refer to catalog.weidmueller.com

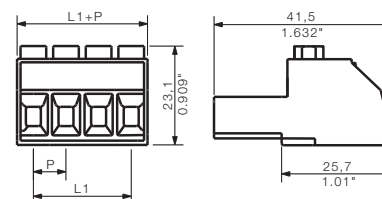
Note:

- Additional colours on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = 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.

SVZ 7.62HP/././180



Dimensioned drawing






Technical data

In compliance with IEC 60664-1 / IEC 61984

Clamping range, max.	mm ²	0.2...6
Solid core H05(07) V-U	mm²	0.2...6
Stranded H07 V-R		
Flexible H05(07) V-K	mm ²	0.5...6
Flexible with ferrule	mm ²	0.25...6
Ferrule with plastic collar	mm ²	0.25...6
Stripping length	mm	12
Screwdriver blade	mm	0.8 x 4.5
According to norm		DIN 5264-A
Tightening torque range	Nm	0.5...0.6
Rated current, max.	A	41 41
At ambient temperature	20°C	40°C
For conductor cross-section	mm ²	6
Overvoltage category	III	III II
Pollution severity	3	2 2
Rated voltage	V	800 1000 1000
Rated impulse voltage	kV	8 8 6
UL / CUL (Use Group)	B C D	
Rated voltage	V	600 600 600
Rated current	A	35 35 5
AWG conductor	AWG	24-10
CSA (Use Group)	B C D	
Rated voltage	V	600 600 600
Rated current	A	35 35 5
AWG conductor	AWG	24-10
General data		
Type of insulation material		PA GF
Flammability class UL 94		V-0
Contact base material		Copper alloy
Material of contact surface		tinned
Pin dimensions = d	mm	
Solder eyelet Ø = D	mm	
Solder eyelet Ø tolerance	mm	

Accessories

Note: Refer to the Accessories chapter for additional accessories.

Coding	Order No.
BV/SV 7.62HP KO	1937590000
	
Strain relief	
BV/SV 7.62HP/02 ZE GR	1937550000
BV/SV 7.62HP/04 ZE GR	1937560000
	
Screwdriver	
SD 0,8x4,5x125	9009020000
	
Crosshead screwdriver	
SDK PH1	9008480000

Ordering data

Solder pin length				
Colour	black			
Pitch	7.62 mm			
Pol.	L1	(inch)	Qty.	Order No.
2	7.62	0.300	100	1931620000
3	15.24	0.600	100	1931630000
4	22.86	0.900	100	1931640000
5	30.48	1.200	50	1931660000
6	38.10	1.500	50	1931670000
7	45.72	1.800	50	1931680000

Representative derating curve

