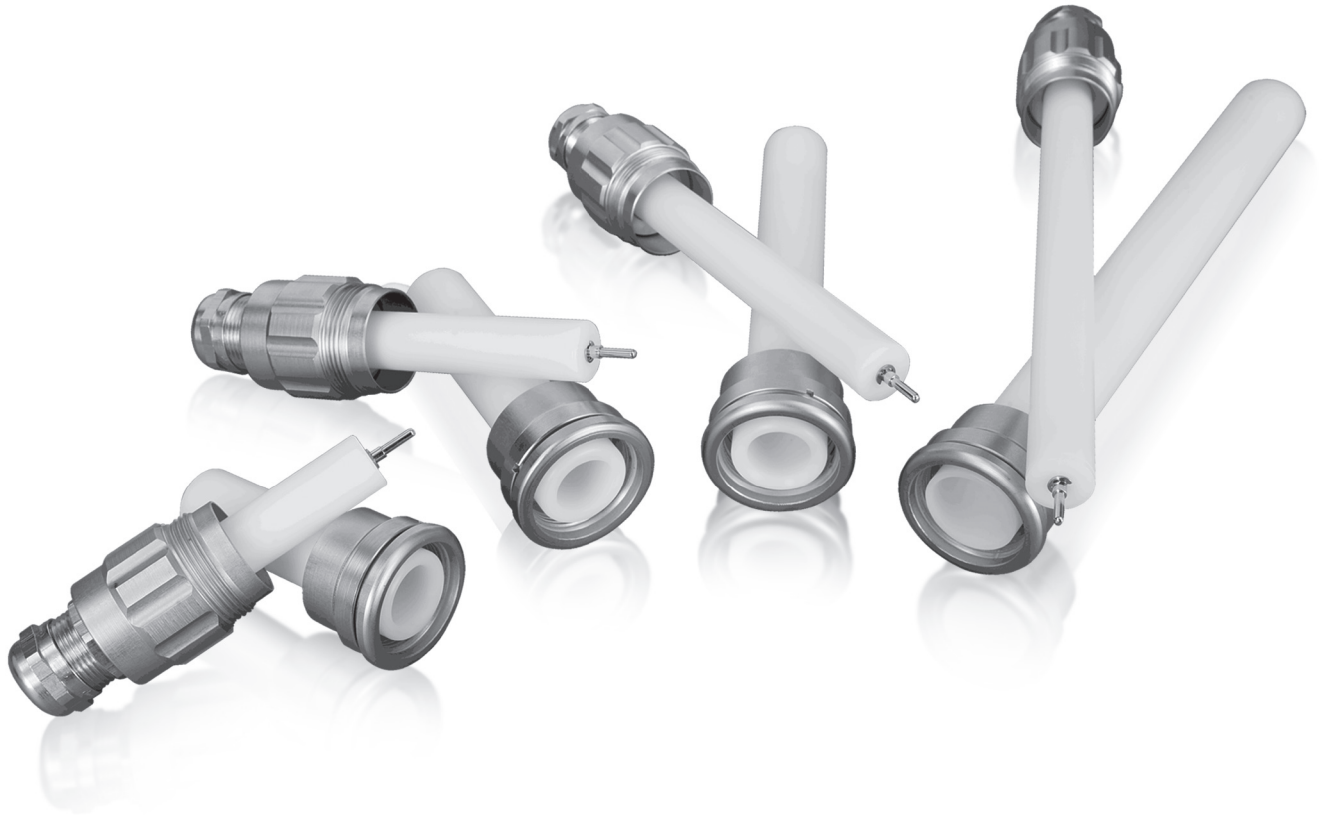


Series



- Operating voltages up to 100 kVDC**
- Operating current up to 80 Amps**
- Advanced technology for mating cycles up to 100k**
- Oil tight receptacles available**
- High performance insulation materials PTFE and POM**

Overview Single-Pin Connectors

Operating Voltages / Connector types

Series	Type	Page	10kVDC	20kVDC	30kVDC	40kVDC	50kVDC	60kVDC	100kVDC
Series-S	HSB10	9	•						
	HSB11	10	•						
	HSB20	11		•					
	HSB21	12		•					
	HSB30	13			•				
	HSB31	14			•				
	HSB40	15				•			
	Series-100	SB110	21	•					
SB115		22	•						
SB120		23		•					
SB125		24-25		•					
SB130		26			•				
SB135		27			•				
SB150		28				•	•		
SB155		29				•	•		
SB160		30						•	
SB165		31						•	
SB1100	32							•	

General characteristics and technical data Series 100

Housing	
Locking system	threaded coupling
Mounting type (panel mount connector)	round flange
Housing material	aluminium (Al)
Surface plating	nickel (Ni)
Protection class (mated connector)	IP50
Operating temperature	-30 °C to +80 °C

Contacts 2.5 mm (connector types SB1x0)	
Termination method	solder / screw
Rated current	30 A
Max. operating current	40 A
Pulse current	3000 A
Volume resistance	300 µΩ
Contact diameter	2.5 mm
Max. wire size	AWG 14 / 2.5 mm ²
Contact material	brass (CuZn)
Contact plating	silver (Ag) / gold (Au)
Insertion / Withdrawal force	5.5 N / 4.0 N
Mating cycles	100,000
Rated temperature	+120 °C

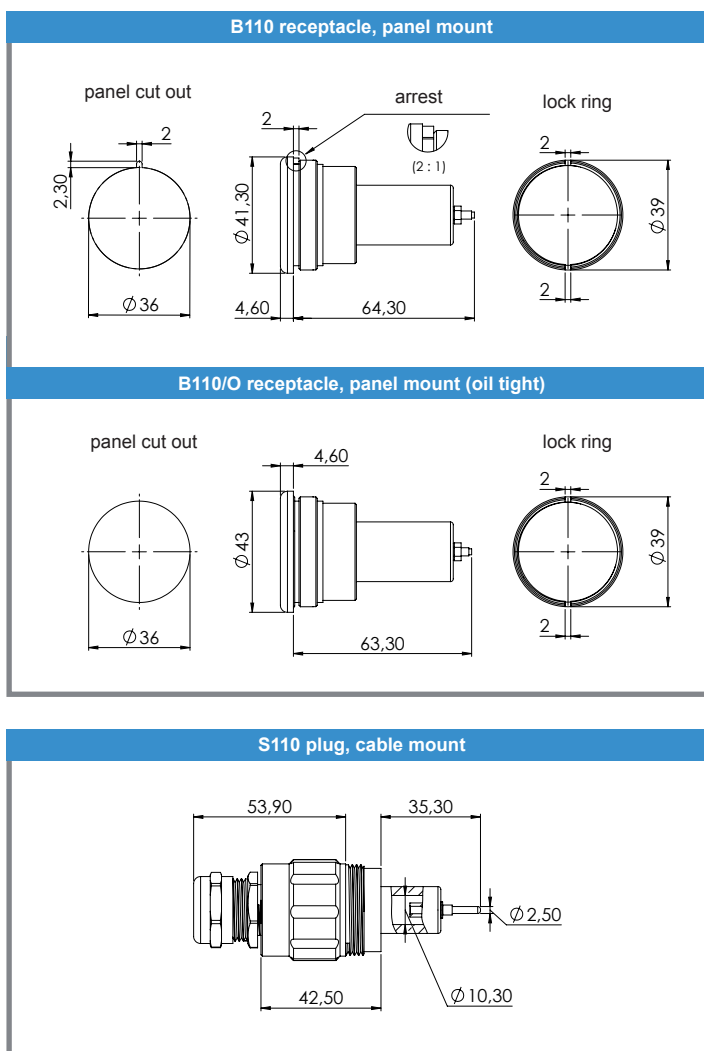
Contacts 5 mm (connector types SB1x5)	
Termination method	solder / screw
Rated current	80 A
Max. operating current	110 A
Pulse current	10000 A
Volume resistance	150 µΩ
Contact diameter	5 mm
Max. wire size	AWG 8 / 10 mm ²
Contact material	brass (CuZn)
Contact plating	silver (Ag)
Insertion / Withdrawal force	15 N / 10 N
Mating cycles	100,000
Rated temperature	+120 °C

Insulation inserts	
Number of contacts	1
Insulation material	PTFE / POM
CTI value	600
Flammability class PTFE	UL94 V-0
Flammability class POM	UL94 HB
Operating temperature PTFE	-50 °C to +200 °C
Operating temperature POM	-30 °C to +120 °C
Insulating material group PTFE / POM	I (DIN IEC 60664)



B110 receptacle, panel mount
S110 plug, cable mount

Electrical Values	
Operating Voltage (DC)	10 kV
Test voltage (DC)	15 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A
Characteristics	
Contact size	2.5 mm
Insulation material	PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



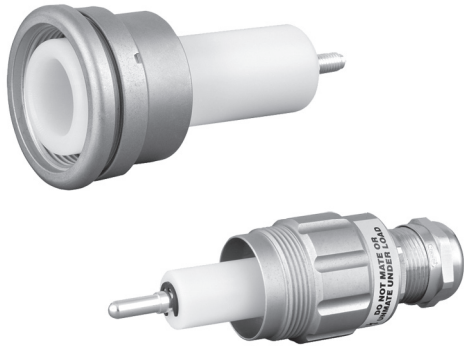
drawing - dimensions in mm

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7212000	S110/A PTFE	•			•		
7212001	S110/B PTFE	•				•	
7212004	S110/E PTFE	•		•			
7213000	B110 PTFE		•				
7213001	B110/O PTFE		•				•

*KV = screwed cable gland

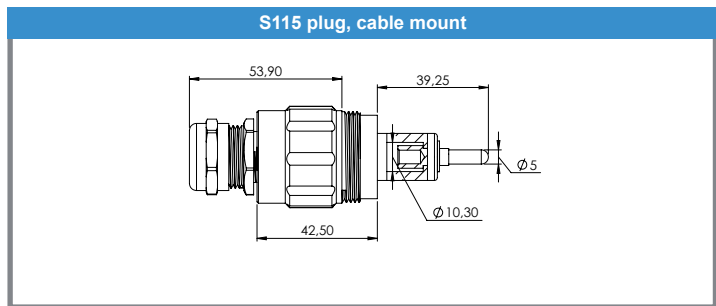
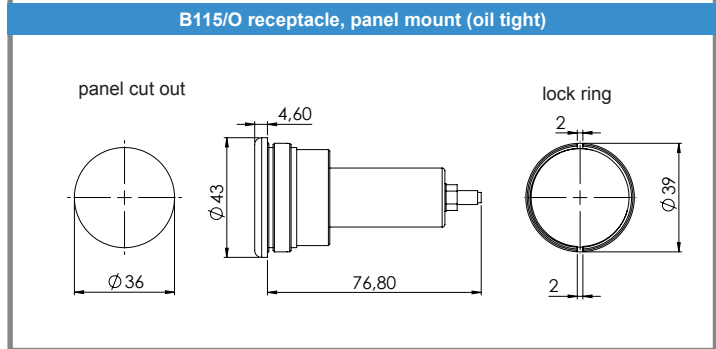
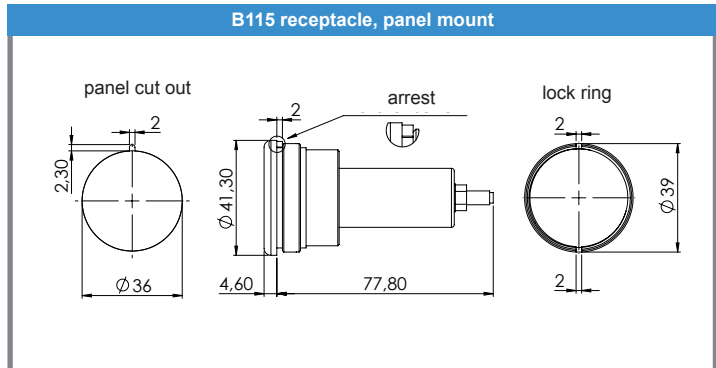


Accessories / Cables - page 33
Mounting instructions - page 34-35



B115 receptacle, panel mount
S115 plug, cable mount

Electrical Values	
Operating Voltage (DC)	10 kV
Test voltage (DC)	15 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A
Characteristics	
Contact size	5 mm
Insulation material	PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



drawing - dimensions in mm

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7215004	S115/C PTFE	•		•			
7217000	S115/A PTFE	•			•		
7217001	S115/B PTFE	•				•	
7218000	B115 PTFE		•				
7218001	B115/O PTFE		•				•

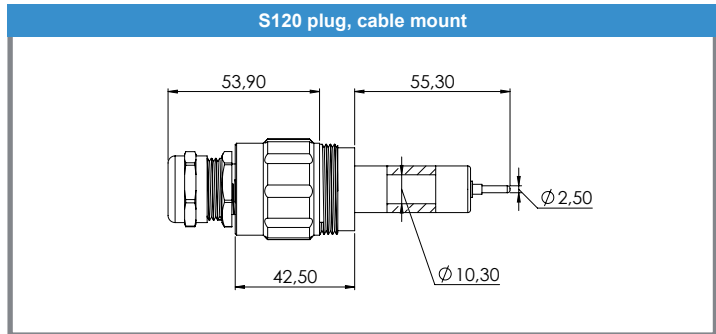
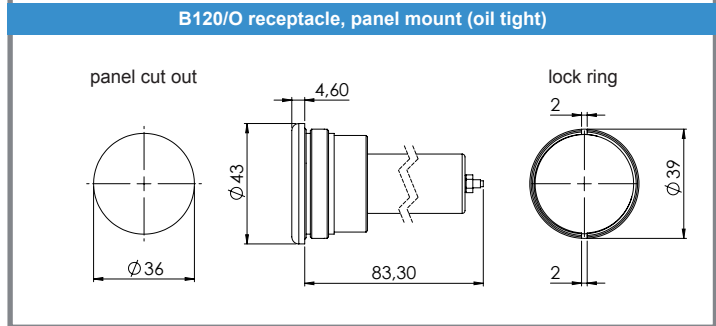
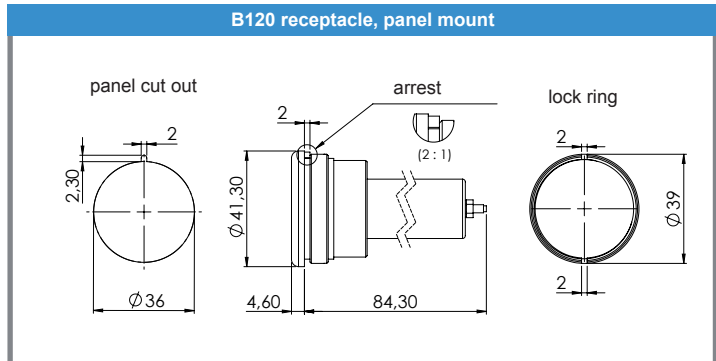
*KV = screwed cable gland

➔ Accessories / Cables - page 33
Mounting instructions - page 34-35



B120 receptacle, panel mount
S120 plug, cable mount

Electrical Values	
Operating Voltage (DC)	20 kV
Test voltage (DC)	30 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A
Characteristics	
Contact size	2.5 mm
Insulation material	PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)

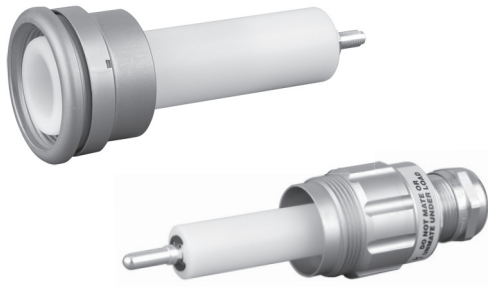


drawing - dimensions in mm

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7222000	S120/A PTFE	•			•		
7222002	S120/B PTFE	•				•	
7222003	S120/E PTFE	•		•			
7223000	B120 PTFE		•				
7223001	B120/O PTFE		•				•

*KV = screwed cable gland

➔ Accessories / Cables - page 33
Mounting instructions - page 34-35



B125 receptacle, panel mount
S125 plug, cable mount

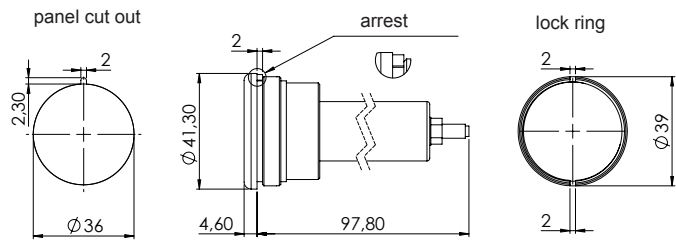
Electrical Values

Operating Voltage (DC)	20 kV
Test voltage (DC)	30 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A

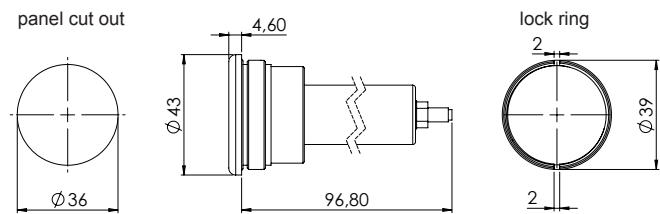
Characteristics

Contact size	5 mm
Insulation material	PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)

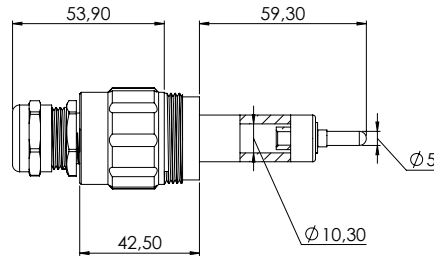
B125 receptacle, panel mount



B125/O receptacle, panel mount (oil tight)



S125 plug, cable mount



drawing - dimensions in mm

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7227000	S125/A PTFE	•			•		
7227001	S125/B PTFE	•				•	
7227002	S125/E PTFE	•		•			
7228000	B125 PTFE		•				
7228002	B125/O PTFE		•				•

*KV = screwed cable gland

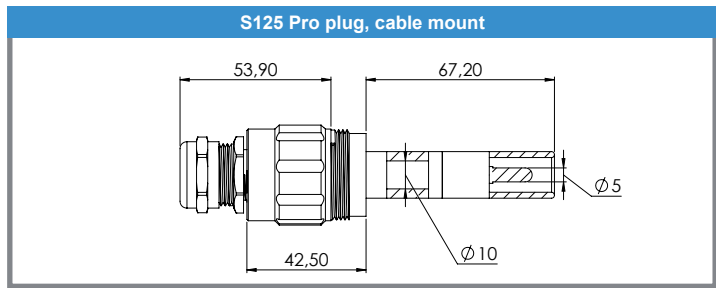
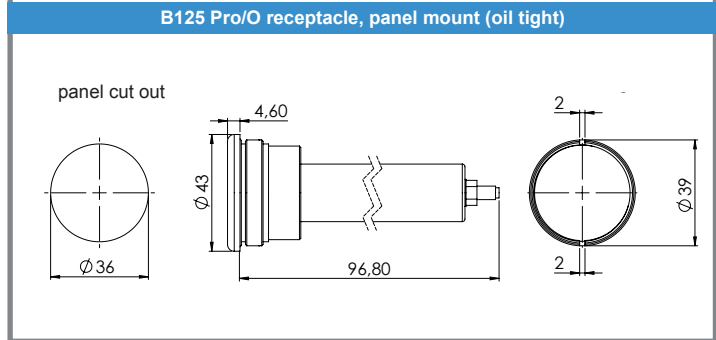
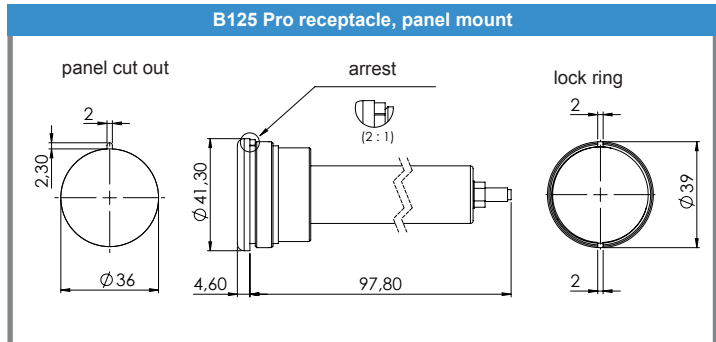


Accessories / Cables - page 33
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B125/pro receptacle, panel mount
S125/pro plug, cable mount

Electrical Values	
Operating Voltage (DC)	20 kV
Test voltage (DC)	30 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A
Characteristics	
Contact size	5 mm
Male contact (plug)	finger-proof
Insulation material	PTFE / POM
Mounting type receptacle	roundflange



drawing - dimensions in mm

Insulation material POM

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7225005	S125/A Pro POM	•			•		
7225006	S125/B Pro POM	•				•	
7225004	S125/E Pro POM	•		•			
7226001	B125 Pro POM		•				
7226002	B125/O Pro POM		•				•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7227005	S125/A Pro PTFE	•			•		
7227006	S125/B Pro PTFE	•				•	
7227004	S125/E Pro PTFE	•		•			
7228001	B125 Pro PTFE		•				
7228003	B125/O Pro PTFE		•				•

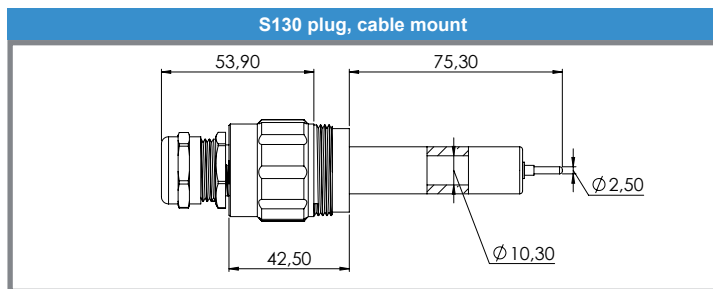
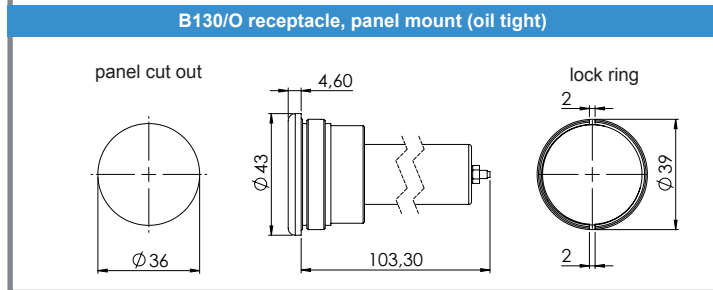
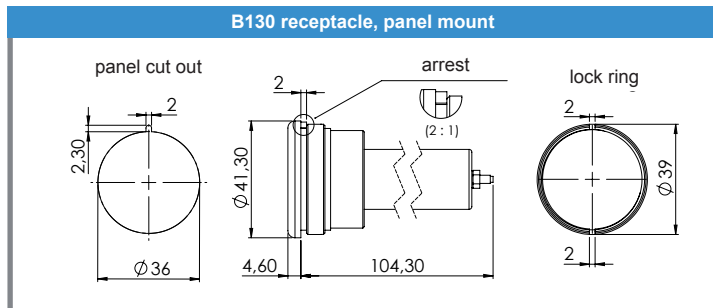
➔ Accessories / Cables - page 33
Mounting instructions - page 34-35

*KV = screwed cable gland



B130 receptacle, panel mount
S130 plug, cable mount

Electrical Values	
Operating Voltage (DC)	30 kV
Test voltage (DC)	45 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A
Characteristics	
Contact size	2.5 mm
Insulation material	POM / PTFE
Mounting type receptacle	roundflange
Contact plating	Silber (Ag)



drawing - dimensions in mm

Insulation material POM

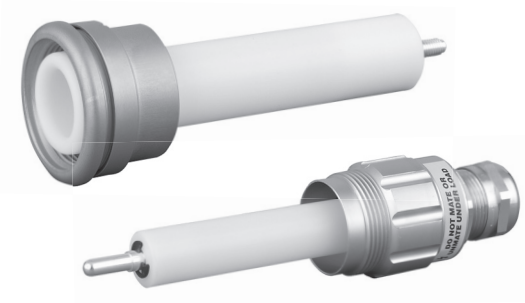
P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 -10 mm	KV* for cable O.D. 7 -12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7230000	S130/A POM	•			•		
7230001	S130/B POM	•				•	
7230004	S130/E POM	•		•			
7231000	B130 POM		•				
7231001	B130/O POM		•				•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 -10 mm	KV* for cable O.D. 7 -12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7232000	S130/A PTFE	•			•		
7232001	S130/B PTFE	•				•	
7232007	S130/E PTFE	•		•			
7233000	B130 PTFE		•				
7233002	B130/O PTFE		•				•

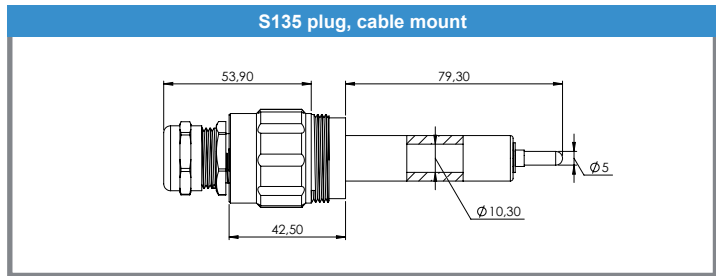
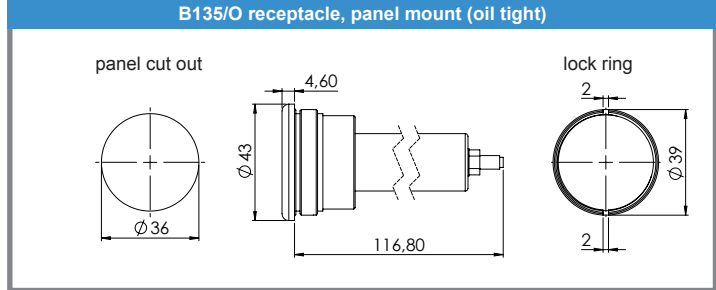
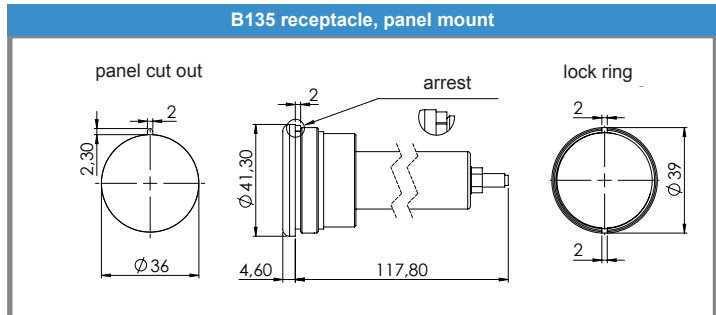
*KV = screwed cable gland

➔ Accessories / Cables - page 33
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B135 receptacle, panel mount
S135 plug, cable mount

Electrical Values	
Operating Voltage (DC)	30 kV
Test voltage (DC)	45 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A
Characteristics	
Contact size	5 mm
Insulation material	POM / PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



drawing - dimensions in mm

Insulation material POM

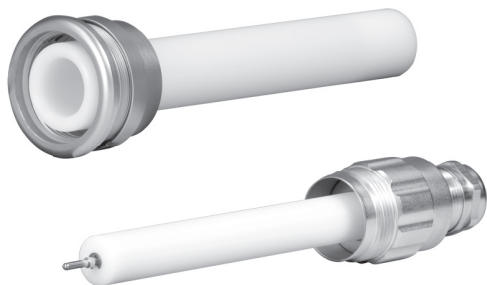
P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7235000	S135/A POM	•			•		
7235001	S135/B POM	•				•	
7236000	B135 POM		•				
7236001	B135/O POM		•				•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7237000	S135/A PTFE	•			•		
7237001	S135/B PTFE	•				•	
7238000	B135 PTFE		•				
7238001	B135/O PTFE		•				•

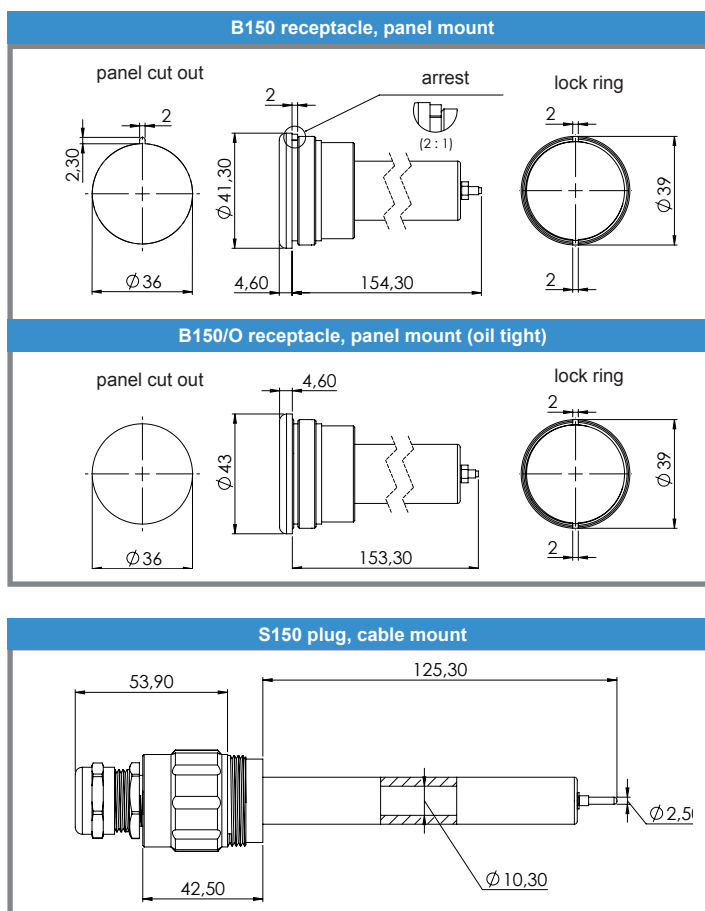
*KV = screwed cable gland

➔ Accessories / Cables - page 33
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B150 receptacle, panel mount
S150 plug, cable mount

Electrical Values	
Operating Voltage (DC)	50 kV
Test voltage (DC)	75 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A
Characteristics	
Contact size	2.5 mm
Insulation material	POM / PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



drawing - dimensions in mm

Insulation material POM

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7250000	S150/A POM	•			•		
7250001	S150/B POM	•				•	
7250004	S150/E POM	•		•			
7251000	B150 POM		•				
7251001	B150/O POM		•				•

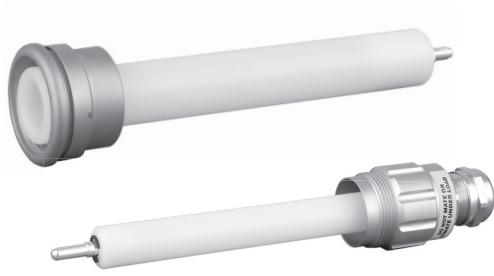
Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7252000	S150/A PTFE	•			•		
7252001	S150/B PTFE	•				•	
7252004	S150/E PTFE	•		•			
7253000	B150 PTFE		•				
7253001	B150/O PTFE		•				•

*KV = screwed cable gland

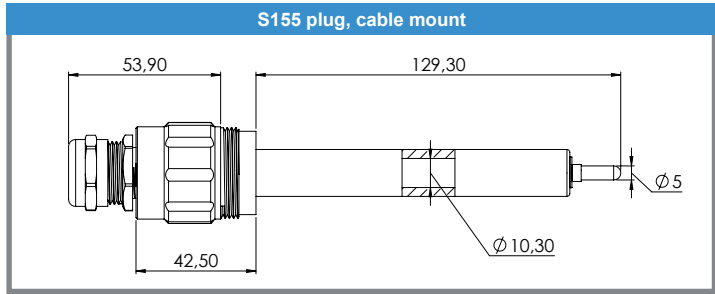
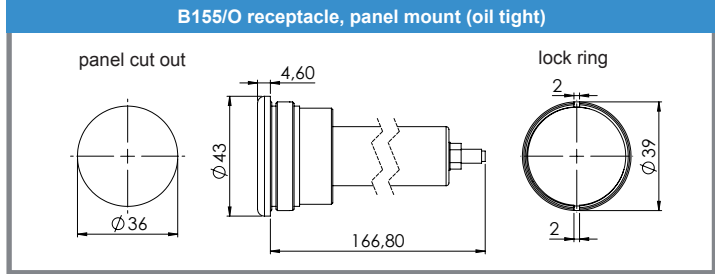
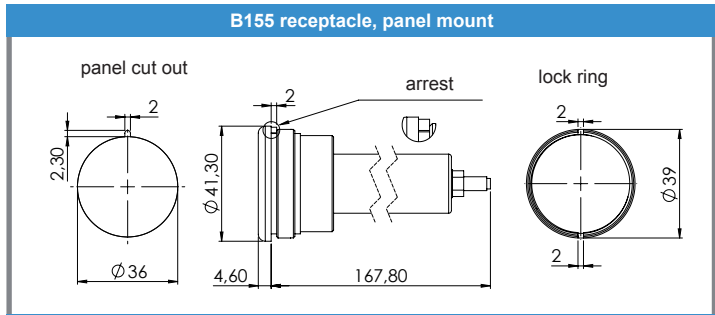


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B155 receptacle, panel mount
S155 plug, cable mount

Electrical Values	
Operating Voltage (DC)	50 kV
Test voltage (DC)	75 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A
Characteristics	
Contact size	5 mm
Insulation material	PTFE / POM
Mounting type receptacle	Rundflansch
Contact plating	silver (Ag)



drawing - dimensions in mm

Insulation material POM

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7255000	S155/A POM	•		•		
7255001	S155/B POM	•			•	
7256000	B155 POM		•			
7258002	B155/O POM		•			•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7257001	S155/A PTFE	•		•		
7257000	S155/B PTFE	•				
7258000	B155 PTFE		•		•	
7258001	B155/O PTFE		•			•

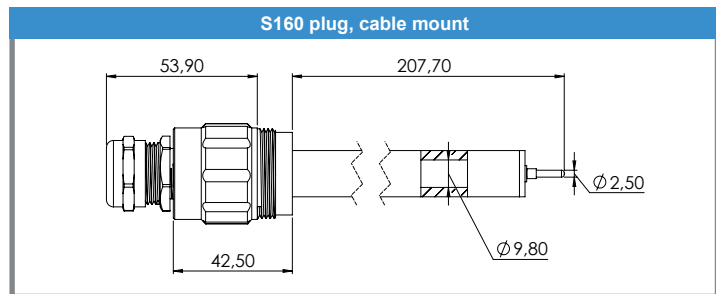
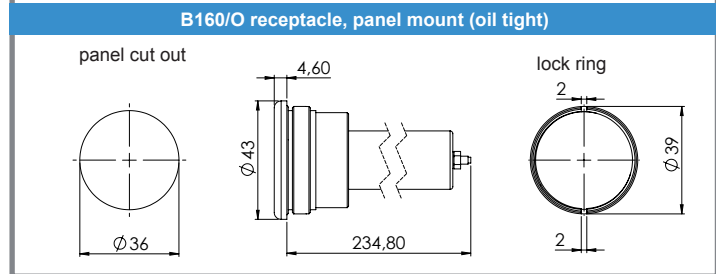
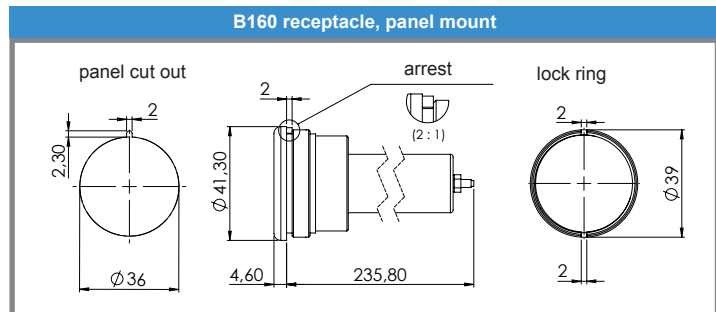
*KV = screwed cable gland

➔ *Accessories / Cables - page 33*
Mounting instructions - page 34-35



B160 receptacle, panel mount
S160 plug, cable mount

Electrical Values	
Operating Voltage (DC)	60 kV
Test voltage (DC)	90 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A
Characteristics	
Contact size	2.5 mm
Insulation material	POM / PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



drawing - dimensions in mm

Insulation material POM

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7280000	S160/A POM	•			•		
7280001	S160/B POM	•				•	
7280003	S160/E POM	•		•			
7280100	B160 POM		•				
7280150	B160/O POM		•				•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 5 - 10 mm	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7280200	S160/A PTFE	•			•		
7280201	S160/B PTFE	•				•	
7280300	B160 PTFE		•				
7280350	B160/O PTFE		•				•

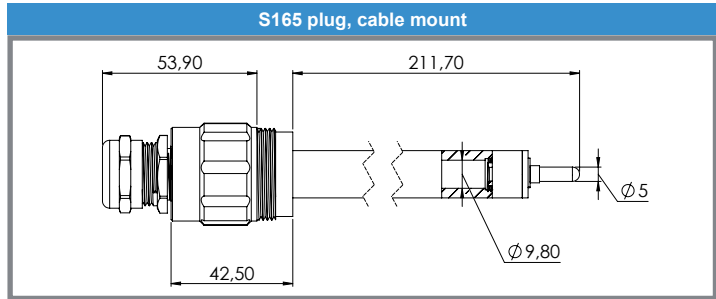
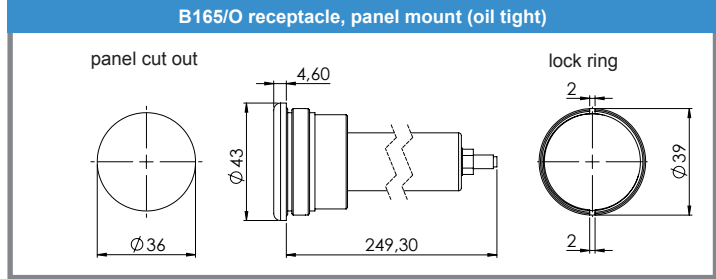
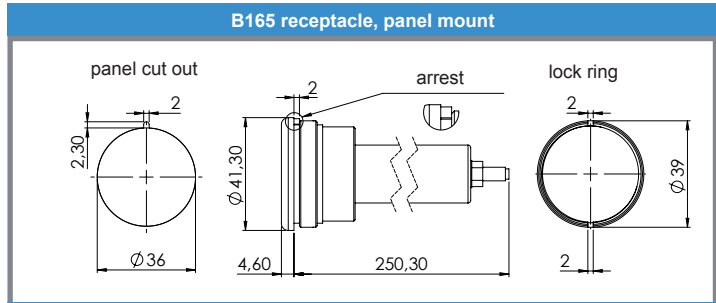
*KV = screwed cable gland

➔ Accessories / Cables - page 33
Mounting instructions - page 34-35



B165 receptacle, panel mount
S165 plug, cable mount

Electrical Values	
Operating Voltage (DC)	60 kV
Test voltage (DC)	90 kV
Rated current	80 A
Maximum operating current	110 A
Pulse current	10000 A
Characteristics	
Contact size	5 mm
Insulation material	POM / PTFE
Mounting type receptacle	roundflange
Contact plating	silver (Ag)



drawing - dimensions in mm

Insulation material POM

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7280410	S165/A POM	•		•		
7280411	S165/B POM	•			•	
7280460	B165 POM		•			
7280461	B165/O POM		•			•

Insulation material PTFE

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7280400	S165/A PTFE	•		•		
7280415	S165/B PTFE	•				
7280450	B165 PTFE		•		•	
7280462	B165/O PTFE		•			•

*KV = screwed cable gland

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B1100 receptacle, panel mount
S1100 plug, cable mount

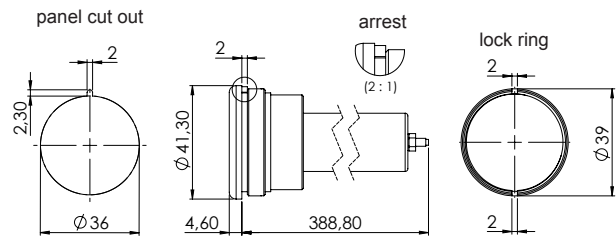
Electrical Values

Operating Voltage (DC)	100 kV
Test voltage (DC)	150 kV
Rated current	30 A
Maximum operating current	40 A
Pulse current	3000 A

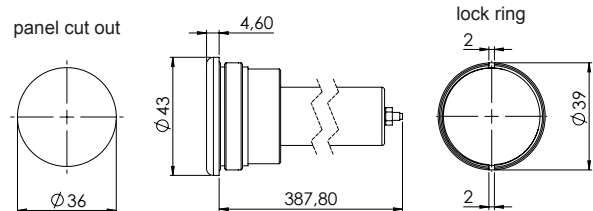
Characteristics

Contact size	2.5 mm
Insulation material	POM
Mounting type receptacle	roundflange
Contact plating	silver (Ag)

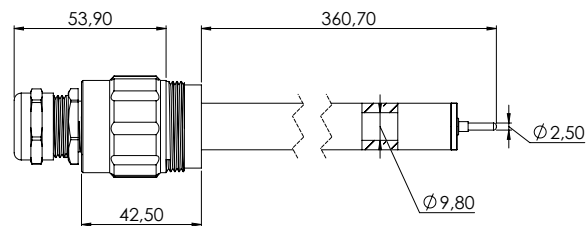
B1100 receptacle, panel mount



B1100/O receptacle, panel mount (oil tight)



S 1100 plug, cable mount



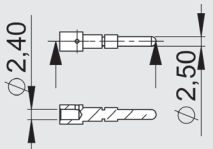
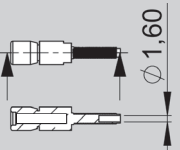
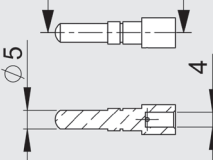
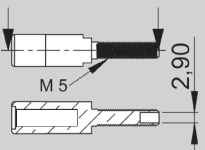
drawing - dimensions in mm

P/N	Description	Plug, cable mount	Receptacle, panel mount	KV* for cable O.D. 7 - 12 mm	KV* for cable O.D. 10 - 14 mm	oiltight version
7392000	S1100/A POM	•		•		
7392001	S1100/B POM	•			•	
7392003	B1100 POM		•			
7392004	B1100/O POM		•			•

*KV = screwed cable gland

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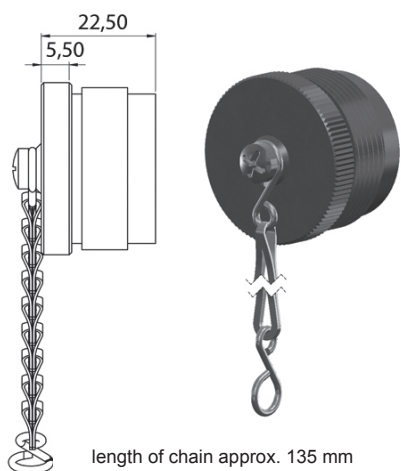
Contacts

P/N	Description	Mechanical drawing
6572001	male contact 2.5 mm silver plated (Ag)	
6572005	female contact 2.5 mm silver plated (Ag)	
6672050	male contact 5 mm silver plated (Ag)	
6572007	female contact 5 mm silver plated (Ag)	

Covering

P/N	Description
6671011	Covering with thread for receptacles Series 100, receptacle, panel mount with chain

Mechanical drawing



length of chain approx. 135 mm

drawing - dimensions in mm

HV cables

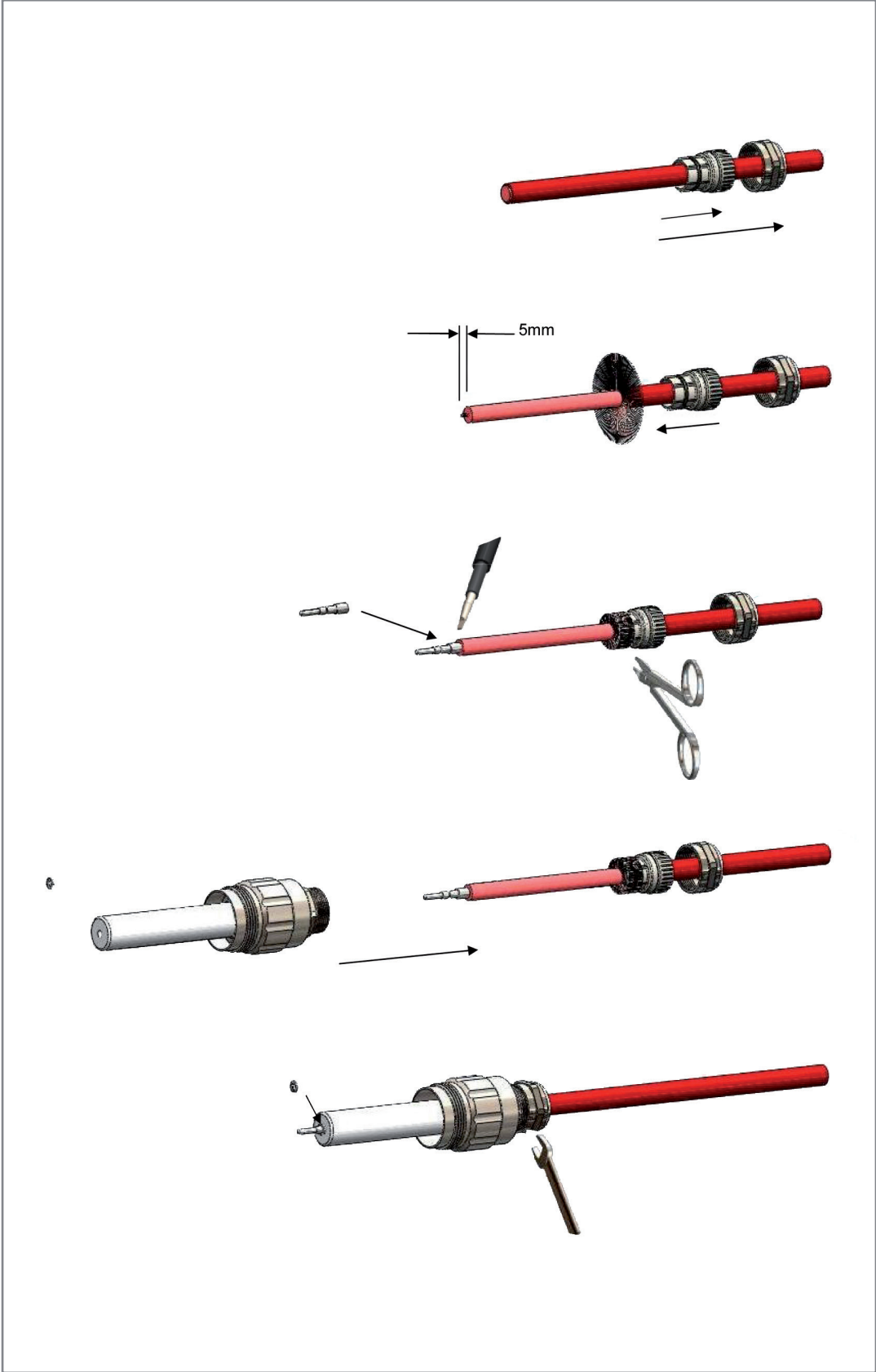
P/N	Description	Technical data	for connector types
3330005	HV cable, 50 kVDC, shielded, red	- Rated voltage 50 kVDC - Wire Size 0.34 mm ² / AWG22 - Diameter dielectric insulation 4.60 mm - Diameter cable jacket 7.00 mm	SB110 SB115 SB120 SB125 SB125/Pro SB130 SB135 SB150 SB155
3330049	HV cable, 100 kVDC / 30 kVAC, unshielded, transparent	- Rated voltage 100 kVDC / 30 kVAC - Wire Size 1.5 mm ² / AWG16 - Diameter dielectric insulation 9.40 mm	SB160 SB165 SB1100
3330050	HV cable, 100 kVDC, shielded, black	- Rated voltage 100 kVDC - Wire Size 1.5 mm ² / AWG16 - Diameter dielectric insulation 9.40 mm - Diameter cable jacket 11.22 mm	SB160 SB165 SB1100

Mounting instructions

Shielded cable

Series **100**

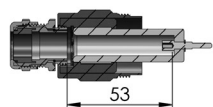
Series - 100



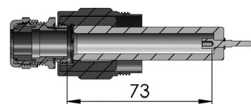
PLEASE NOTICE:

Stated stripping lengths are referring **ONLY** to jackets of shielded cables !!

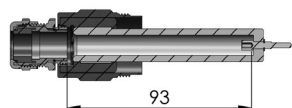
**S110
S115**



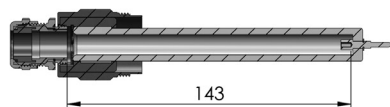
**S120
S125**



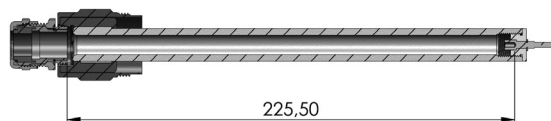
**S130
S135**



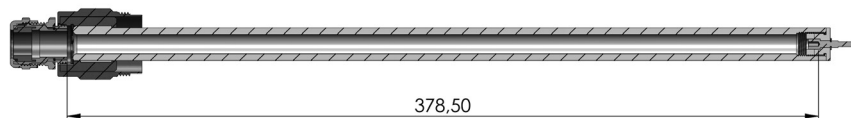
**S150
S155**



**S160
S165**



S1100



Type	"Screwed cable gland clamping range 5 - 10 mm"	"Screwed cable gland clamping range 7 - 12 mm"	"Screwed cable gland clamping range 10 - 14 mm"
Stripping length in mm			
S110	53	53	56.5
S115	53	53	56.5
S120	73	73	76.5
S125	73	73	76.5
S130	93	93	96.5
S135	93	93	96.5
S150	143	143	143.5
S155	143	143	143.5
S160	225.5	225.5	226
S165	225.5	225.5	226
S1100	378.5	378.5	382