

Series



- › Operating voltages up to 12 kVDC
- › New type for voltages up to 30 kVDC
- › Operating current 30 A
- › Up to 9 HV contacts
- › Configurations with LV contacts available
- › Versions available with contacts in lead for safety interlock circles

S Series

100 Series

VP Series

MCS Series

MC Series

M Series

MOD Series

- 1** *Series-M connectors already include contacts.*
- 2** *We offer two types of cable mount connectors:*
 - 1) with symmetric cable gland included*
 - 2) with an open connecting thread for individual use such as screwed cable glands (not included) et al.*
- 3** *Suitable screwed cable glands and adapters on page 138 / 139. You can also use own cable glands.*

Housing	
Locking system	threaded coupling
Mounting type (panel mount connector)	4-hole flange
Housing material	aluminium (Al)
Surface plating	nickel (Ni)
Protection class (mated connector)	IP54
Operating temperature	-30°C to +80°C

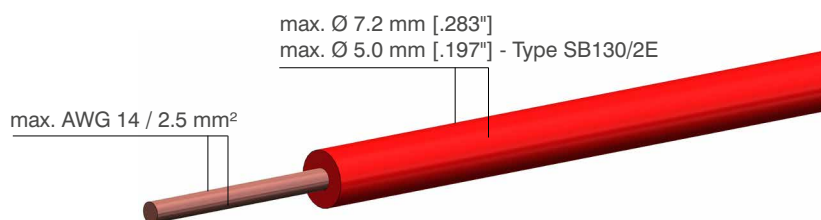
HV-Contact 2.7 mm	
Termination method	solder
Rated current	30 A
Max. operating current	40 A
Pulse current	3000 A
Contact resistance	300 $\mu\Omega$
Contact diameter	2.7 mm [.106"]
Wire size (AWG / cross section)	AWG 14 / 2.5 mm ²
Contact material	brass (CuZn)
Contact plating	silver (Ag)
Insertion / Withdrawal force	5.5 N / 4.0 N
Mating cycles	$\geq 100,000$
Rated temperature	+120°C

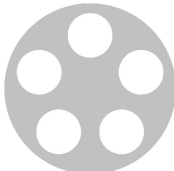
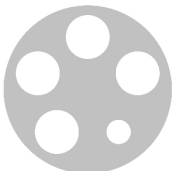
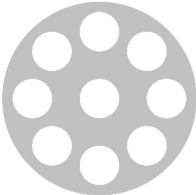
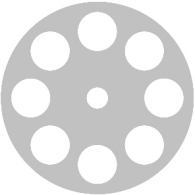
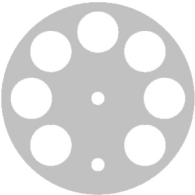
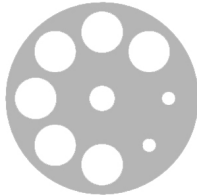
I-Contact (LV) 1.5 mm	
Termination method	löten
Rated current	25 A
Max. operating current	35 A
Pulse current	1500 A
Contact resistance	500 $\mu\Omega$
Contact diameter	1.5 mm [.059"]
Wire size (AWG / cross section)	AWG 16 / 1.5 mm ²
Contact material	brass (CuZn)
Contact plating	silver (Ag)
Insertion / Withdrawal force	2 N / 1.5 N
Mating cycles	$\geq 100,000$
Rated temperature	+120°C

E-Contact (LV) 2.5 mm and HV-Contact 2.5 mm for Type SB130/2E	
E-Contact (LV) 2.5 mm	solder
Rated current	30 A
Max. operating current	40 A
Pulse current	3000 A
Contact resistance	300 $\mu\Omega$
Contact diameter	2.5 mm [.098"]
Wire size (AWG / cross section)	AWG 14 / 2.5 mm ²
Contact material	brass (CuZn)
Contact plating	silver (Ag)
Insertion / Withdrawal force	5.5 N / 4.0 N
Mating cycles	$\geq 100,000$
Rated temperature	+120°C

Insulation inserts	
Number of HV-contacts	2, 3, 5, 7, 9
Number of LV-contacts 1.5mm (optional)	0, 1, 2
Number of Earthing contacts (optional)	0, 1
Insulation material	PTFE / POM
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)

Suitable cable dimensions (single wire)



Housing size	Contact arrangements
M2	 M130/2E Page 117
M3	   M215 Page 118 M215/1E Page 119 M215/2I/1E Page 120    M315 Page 121 M315/2E Page 122 M315/2I Page 123
M5	  M515 Page 125 M515/1E Page 126
M7	   M715 Page 128 M715/1E Page 129 M715/1I/1E Page 130
M9	    M915 Page 132 M915/1E Page 133 M915/2I Page 134 M915/2I/1E Page 135

Overview sizes M2/M3

Size M2

P/N	Type / Description	Plug	Receptacle	Cable Mount		Panel mount	Insulation material		Number of contacts		
				Standard housing connecting thread M20	Symmetric cable gland		POM	PTFE	HV 2.7 mm	LV 1.5 mm	LV 2.5 mm
7743005	S130/2E POM	•		•			•		1		2
7743010	B130/2E M20 POM 5-10 mm		•			•	•		1		2

Size M3

P/N	Type / Description	Plug	Receptacle	Cable Mount		Panel mount	Insulation material		Number of contacts		
				Standard housing connecting thread M20	Symmetric cable gland		POM	PTFE	HV 2.7 mm	LV 1.5 mm	LV 2.5 mm
7743051	GB 215 POM		•			•	•		2		
7743041	GS 215 POM	•				•	•		2		
7743038	KB 215 POM Sym KV		•		•		•		2		
7743072	KB 215/M20 POM		•	•			•		2		
7743021	KS 215 POM Sym KV	•			•		•		2		
7743023	KS 215/M20 POM	•		•			•		2		
7743071	GB 215 PTFE		•			•		•	2		
7743077	GS 215 PTFE	•				•		•	2		
7743078	KB 215 PTFE Sym KV		•		•			•	2		
7743079	KB 215/M20 PTFE		•	•				•	2		
7743022	KS 215 PTFE Sym KV	•			•			•	2		
7743069	KS 215/M20 PTFE	•		•				•	2		
7743053	GB 215/1E POM		•			•	•		2		1
7743055	GS 215/1E POM	•				•	•		2		1
7743056	KB 215/1E POM Sym KV		•		•		•		2		1
7743076	KB 215/1E/M20 POM		•	•			•		2		1
7743054	KS 215/1E POM Sym KV	•			•		•		2		1
7743073	KS 215/1E/M20 POM	•		•			•		2		1
7743094	GB 215/1E PTFE		•			•		•	2		1
7743048	GS 215/1E PTFE	•				•		•	2		1
7743095	KB 215/1E PTFE Sym KV		•		•			•	2		1
7743096	KB 215/1E/M20 PTFE		•	•				•	2		1
7743097	KS 215/1E PTFE Sym KV	•			•			•	2		1
7743064	KS 215/1E/M20PTFE	•		•				•	2		1
7743052	GB 215/2I/1E POM		•			•	•		2	2	1
7743057	GS 215/2I/1E POM	•				•	•		2	2	1
7743098	KB 215/2I/1E POM Sym KV		•		•		•		2	2	1
7743058	KB 215/2I/1E/M20 POM		•	•			•		2	2	1
7743099	KS 215/2I/1E POM Sym KV	•			•		•		2	2	1
7743059	KS 215/2I/1E/M20 POM	•		•			•		2	2	1
7743070	GB 215/2I/1E PTFE		•			•		•	2	2	1
7743075	GS 215/2I/1E PTFE	•				•		•	2	2	1
7743101	KB 215/2I/1E PTFE Sym KV		•		•			•	2	2	1
7743080	KB 215/2I/1E/M20 PTFE		•	•				•	2	2	1
7743100	KS 215/2I/1E PTFE Sym KV	•			•			•	2	2	1
7743085	KS 215/2I/1E/M20 PTFE	•		•				•	2	2	1

Overview size M3

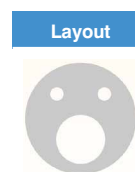
P/N	Type / Description	Plug	Receptacle	Cable Mount		Panel mount	Insulation material		Number of contacts		
				Standard housing connecting thread M20	Symmetric cable gland		POM	PTFE	HV 2.7 mm	LV 1.5 mm	LV 2.5 mm
7430100	GB 315 POM		•			•	•		3		
7430200	GS 315 POM	•				•	•		3		
7430310	KB 315/M20 POM		•	•			•		3		
7430400	KS 315 POM Sym KV	•			•		•		3		
7430410	KS 315/M20 POM	•		•			•		3		
7430600	GB 315 PTFE		•			•		•	3		
7430700	GS 315 PTFE	•				•		•	3		
7430810	KB 315/M20 PTFE		•	•				•	3		
7430900	KS 315 PTFE Sym KV	•			•			•	3		
7430910	KS 315/M20 PTFE	•		•				•	3		
7743060	GB 315/2E POM		•			•	•		3		2
7743061	GS 315/2E POM	•				•	•		3		2
7743033	KB 315/2E/M20 POM		•	•			•		3		2
7743034	KS 315/2E POM Sym KV	•			•		•		3		2
7743102	KS 315/2E/M20 POM	•		•			•		3		2
7743036	GB 315/2I POM		•			•	•		3	2	
7743043	GS 315/2I POM	•				•	•		3	2	
7743042	KB 315/2I/M20 POM		•	•			•		3	2	
7743035	KS 315/2I POM Sym KV	•			•		•		3	2	
7743103	KS 315/2I/M20 POM	•		•			•		3	2	

*HV = High Voltage

*LV = Low Voltage

Electrical values	
Operating voltage (DC)	30 kV
Test voltage (DC)	45 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	1
Number of pins E-contact 2.5 mm (LV)	2
Insulation material	POM



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount female contacts included GB 130/2E/POM Part no. 7743010		front view
Type: plug, cable mount male contacts included KS 130/2E/M20/POM Part no. 7743006		front view

→ *Contacts, cable glands and accessories on pages 136-139*
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	2
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	POM or PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 215/POM Part no. 7743051 Version: GB 215 PTFE Part no. 7743071		front view
Type: plug, panel mount Version: GS 215/POM Part no. 7743041 Version: GS 215/PTFE Part no. 7743077		front view
Type: receptacle, cable mount, with symmetric cable gland Version: KB 215 POM/Sym KV Part no. 7743038 Version: KB 215 PTFE/Sym KV Part no. 7743078		front view
Type: receptacle, cable mount, connecting thread M20 Version: KB 215/M20/POM Part no. 7743072 Version: KB 215/M20/PTFE Part no. 7743079 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 215/POM/Sym KV Part no. 7743021 Version: KS 215/PTFE/Sym KV Part no. 7743022		front view
Type: plug, cable mount, connecting thread M20 Version: KS 215/M20/POM Part no. 7743023 Version: KS 215/M20/PTFE Part no. 7743069 <i>(for cable glands see page 127)</i>		connecting thread

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Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	2
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	POM or PTFE

Layout


Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 215/1E/POM Part no. 7743053 Version: GB 215/1E/PTFE Part no. 7743094		
Type: plug, panel mount Version: GS 215/1E/POM Part no. 7743055 Version: GS 215/1E/PTFE Part no. 7743048		
Type: receptacle, cable mount, with symmetric cable gland Version: KB 215/1E/POM/Sym KV Part no. 7743056 Version: KB 215/1E/PTFE/Sym KV Part no. 7743095		
Type: receptacle, cable mount, connecting thread M20 Version: KB 215/1E/M20/POM Part no. 7743076 Version: KB 215/1E/M20/PTFE Part no. 7743096 <i>(for cable glands see page 127)</i>		
Type: plug, cable mount, with symmetric cable gland Version: KS 215/1E/POM/Sym KV Part no. 7743054 Version: KS 215/1E/PTFE/Sym KV Part no. 7743097		
Type: plug, cable mount, connecting thread M20 Version: KS 215/1E/M20/POM Part no. 7743073 Version: KS 215/1E/M20/PTFE Part no. 7743064 <i>(for cable glands see page 127)</i>		



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drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	2
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	2
Insulation material	POM or PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 215/2I/1E/POM Part no. 7743052 Version: GB 215/2I/1E/PTFE Part no. 7743070		front view
Type: plug, panel mount Version: GS 215/2I/1E/POM Part no. 7743057 Version: GS 215/2I/1E/PTFE Part no. 7743075		front view
Type: receptacle, cable mount, with symmetric cable gland Version: KB 215/2I/1E/POM/Sym KV Part no. 7743098 Version: KB 215/2I/1E/PTFE/Sym KV Part no. 7743101		front view
Type: receptacle, cable mount, connecting thread M20 Version: KB 215/2I/1E/M20/POM Part no. 7743058 Version: KB 215/2I/1E/M20/PTFE Part no. 7743080 (for cable glands see page 127)		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 215/2I/1E/POM/Sym KV Part no. 7743099 Version: KS 215/2I/1E/PTFE/Sym KV Part no. 7743100		front view
Type: plug, cable mount, connecting thread M20 Version: KS 215/2I/1E/M20/POM Part no. 7743059 Version: KS 215/2I/1E/M20/PTFE Part no. 7743085 (for cable glands see page 127)		connecting thread



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drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	3
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	POM or PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 315/POM Part no. 7430100 Version: GB 315/PTFE Part no. 7430600		front view
Type: plug, panel mount Version: GS 315/POM Part no. 7430200 Version: GS 315/PTFE Part no. 7430700		front view
Type: receptacle, cable mount, connecting thread M20 Version: KB 315/M20/POM Part no. 7430310 Version: KB 315/M20/PTFE Part no. 7430810 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 315/POM/Sym KV Part no. 7430400 Version: KS 315/PTFE/Sym KV Part no. 7430900		front view
Type: plug, cable mount, connecting thread M20 Version: KS 315/M20/POM Part no. 7430410 Version: KS 315/M20/PTFE Part no. 7430910 <i>(for cable glands see page 127)</i>		connecting thread

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drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	3
Number of pins E-contact 2.5 mm (LV)	2
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	POM

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 315/2E/POM Part no. 7743060		front view
Type: plug, panel mount Version: GS 315/2E/POM Part no. 7743061		front view
Type: receptacle, cable mount, connecting thread M20 Version: KB 315/2E/M20/POM Part no. 7743033 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 315/2E/POM/Sym KV Part no. 7743034		front view
Type: plug, cable mount, connecting thread M20 Version: KS 315/2E/M20 /POM Part no. 7743102 <i>(for cable glands see page 127)</i>		connecting thread



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drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	3
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	2
Insulation material	POM



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 315/2I/POM Part no. 7743036		front view
Type: plug, panel mount Version: GS 315/2I/POM Part no. 7743043		front view
Type: receptacle, cable mount, connecting thread M20 Version: KB 315/2I/M20/POM Part no. 7743042 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 315/2I/POM/Sym KV Part no. 7743035		Frontansicht
Type: plug, cable mount, connecting thread M20 Version: KS 315/2I/M20 /POM Part no. 7743103 <i>(for cable glands see page 127)</i>		connecting thread

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Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Overview size M5

P/N	Type / Description	Plug	Receptacle	Cable Mount			Panel mount	Insulation material		Number of contacts		
				Standard housing connecting thread M25	Standard housing connecting thread M32	Symmetric cable gland		POM	PTFE	HV Standard 2.7 mm	HV interlock 2.7 mm	LV 2.5 mm
7450100	GB 515 POM		•				•	•		5		
7450200	GS 515 POM	•					•	•		5		
7450312	KB 515/M25 POM		•	•				•		5		
7450313	KB 515/M32 POM		•		•			•		5		
7450400	KS 515 POM Sym KV	•				•		•		5		
7450419	KS 515/M25 POM	•		•				•		5		
7450414	KS 515/M32 POM	•			•			•		5		
7450600	GB 515 PTFE		•				•		•	5		
7450700	GS 515 PTFE	•					•		•	5		
7450821	KB 515/M25 PTFE		•	•					•	5		
7450819	KB 515/M32 PTFE		•		•				•	5		
7450900	KS 515 PTFE Sym KV	•				•			•	5		
7450914	KS 515/M25 PTFE	•		•					•	5		
7450916	KS 515/M32 PTFE	•			•				•	5		
7745010	GS 515/1E PTFE interlock	•					•		•	2	2	1
7745011	GB 515/1E PTFE		•				•		•	4		1
7745027	KB 515/1E/M25 PTFE		•	•					•	4		1
7745028	KB 515/1E/M32 PTFE		•		•				•	4		1
7745025	KS 515/1E PTFE Sym KV interlock	•				•			•	2	2	1
7745029	KS 515/1E/M25 PTFE interlock	•		•					•	2	2	1
7745032	KS 515/1E/M32 PTFE interlock	•			•				•	2	2	1

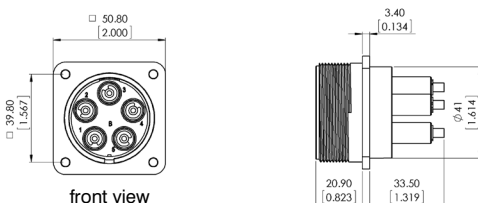
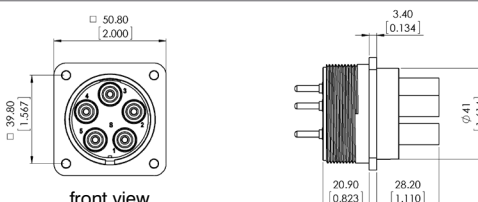
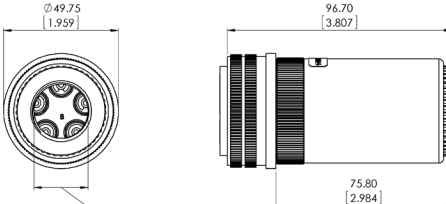
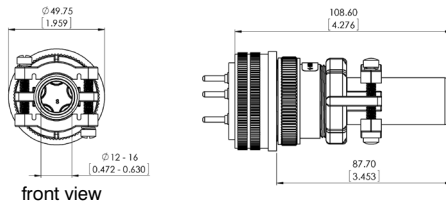
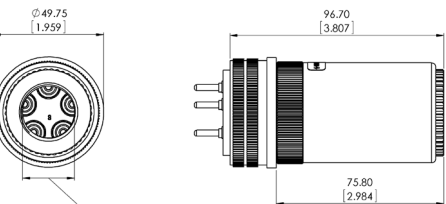
*HV = High Voltage
*LV = Low Voltage

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	5
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	POM or PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 515/POM Part no. 7450100 Version: GB 515/PTFE Part no. 7450600	  front view	
Type: plug, panel mount Version: GS 515/POM Part no. 7450200 Version: GS 515/PTFE Part no. 7450700	  front view	
Type: receptacle, cable mount, connecting thread M25 Version: KB 515/M25/POM Part no. 7450312 Version: KB 515/M32/POM Part no. 7450313 Version: KB 515/M25/PTFE Part no. 7450821 Version: KB 515/M32/PTFE Part no. 7450819 <i>(for cable glands see page 127)</i>	  front view	
Type: plug, cable mount, with symmetric cable gland Version: KS 515/POM/Sym KV Part no. 7450400 Version: KS 515/PTFE/Sym KV Part no. 7450900	  front view	
Type: plug, cable mount, connecting thread M25 Version: KS 515/M25/POM Part no. 7450419 Version: KS 515/M32/POM Part no. 7450414 Version: KS 515/M25/PTFE Part no. 7450914 Version: KS 515/M32/PTFE Part no. 7450916 <i>(for cable glands see page 127)</i>	  connecting thread	



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drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	4
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 515/1E/PTFE Part no. 7745011		front view
Type: plug, panel mount Version: GS 515/1E/PTFE interlock Part no. 7745010		front view
Type: receptacle, cable mount, connecting thread M25 Version: KB 515/1E/M25/PTFE Part no. 7745027 Version: KB 515/1E/M32/PTFE Part no. 7745028 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 515/1E/PTFE/ Sym KV interlock Part no. 7745025		front view
Type: plug, cable mount, connecting thread M25 Version: KS 515/1E/M25/ PTFE interlock - Part no. 7745029 Version: KS 515/1E/M32/ PTFE interlock - Part no. 7745032 <i>(for cable glands see page 127)</i>		connecting thread

→ **Contacts, cable glands and accessories on pages 136-139**
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Overview size M7

Part no.	Type / Description	Plug	Receptacle	Cable Mount		Panel mount	Insulation material	Number of contacts		
				Standard housing connecting thread M25	Symmetric cable gland			HV 2.7 mm	LV 1.5 mm	LV 2.5 mm
7470411	KS 715 PTFE Sym KV	•			•		•	7		
7470414	KS 715/M25 PTFE	•		•			•	7		
7470812	KB 715/M25 PTFE		•	•			•	7		
7470600	GB 715 PTFE		•			•	•	7		
7470200	GS 715 PTFE	•				•	•	7		
7470416	KS 715/1E/M25 PTFE	•			•		•	6		1
7470417	KS 715/1E PTFE Sym KV	•		•			•	6		1
7747022	KB 715/1E/M25 PTFE		•	•			•	6		1
7747011	GB 715/1E PTFE		•			•	•	6		1
7470701	GS 715/1E PTFE	•				•	•	6		1
7470706	KS 715/2I/1E PTFE Sym KV	•			•		•	4	2	1
7470704	KS 715/2I/1E/M25 PTFE	•		•			•	4	2	1
7470705	KB 715/2I/1E/M25 PTFE		•	•			•	4	2	1
7470707	GB 715/2I/1E PTFE		•			•	•	4	2	1
7470702	GS 715/2I/1E PTFE	•				•	•	4	2	1

*HV = High Voltage
*LV = Low Voltage

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	7
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 715/PTFE Part no. 7470600		front view
Type: plug, panel mount Version: GS 715/PTFE Part no. 7470200		front view
Type: receptacle, cable mount, connecting thread M25 Version: KB 715/M25/PTFE Part no. 7470812 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 715/PTFE/Sym KV Part no. 7470411		front view
Type: plug, cable mount, connecting thread M25 Version: KS 715/M25/PTFE Part no. 7470414 <i>(for cable glands see page 127)</i>		connecting thread

→ **Contacts, cable glands and accessories on pages 136-139**
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	6
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 715/1E/PTFE Part no. 7747011		front view
Type: plug, panel mount Version: GS 715/1E/PTFE Part no. 7470701		front view
Type: receptacle, cable mount, connecting thread M25 Version: KB 715/1E/M25/PTFE Part no. 7747022 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 715/1E/PTFE/Sym KV Part no. 7470417		front view
Type: plug, cable mount, connecting thread M25 Version: KS 715/1E/M25/PTFE Part no. 7470416 <i>(for cable glands see page 127)</i>		connecting thread



Contacts, cable glands and accessories on pages 136-139
 Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	4
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	2
Insulation material	PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 715/2I/1E/PTFE Part no. 7470707		front view
Type: plug, panel mount Version: GS 715/2I/1E/PTFE Part no. 7470702		front view
Type: receptacle, cable mount, connecting thread M25 Version: KB 715/2I/1E/M25/PTFE Part no. 7470705 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 715/2I/1E/PTFE/Sym KV Part no. 7470706		front view
Type: plug, cable mount, connecting thread M25 Version: KS 715/2I/1E/M25/PTFE Part no. 7470704 <i>(for cable glands see page 127)</i>		connecting thread



Contacts, cable glands and accessories on pages 136-139
 Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Overview size M9

Part no.	Type / Description	Plug	Receptacle	Cable Mount		Panel mount	Number of contacts		
				Standard housing M32	Symmetric cable gland		HV 2.7 mm	LV 1.5 mm	LV 2.5 mm
7490600	GB 915 PTFE		•			•	9	-	-
7490200	GS 915 PTFE	•				•	9	-	-
7490811	KB 915/M32 PTFE		•	•			9	-	-
7490400	KS 915 PTFE Sym KV	•			•		9	-	-
7490416	KS 915/M32 PTFE	•		•			9	-	-
7749011	GB 915/1E PTFE		•			•	8	-	1
7749010	GS 915/1E PTFE interlock	•				•	8	-	1
7749023	KB 915/1E/M32 PTFE		•	•			8	-	1
7490417	KS 915/1E PTFE Sym KV	•			•		8	-	1
7490415	KS 915/1E/M32 PTFE	•		•			8	-	1
7749088	GB 915/2I PTFE		•			•	7	2	-
7749082	GS 915/2I PTFE	•				•	7	2	-
7749057	KB 915/2I/M32 PTFE		•	•			7	2	-
7749053	KS 915/2I PTFE Sym KV	•			•		7	2	-
7749058	KS 915/2I/M32 PTFE	•		•			7	2	-
7749070	GB 915/2I/1E PTFE		•			•	6	2	1
7749080	GS 915/2I/1E PTFE	•				•	6	2	1
7749059	KB 915/2I/1E/M32 PTFE		•	•			6	2	1
7749087	KS 915/2I/1E PTFE Sym KV	•			•		6	2	1
7749090	KS 915/2I/1E/M32 PTFE	•		•			6	2	1

*HV = High Voltage
*LV = Low Voltage

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	9
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	PTFE



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 915/PTFE Part no. 7490600		front view
Type: plug, panel mount Version: GS 915/PTFE Part no. 7490200		front view
Type: receptacle, cable mount, connecting thread M32 Version: KB 915/M32/PTFE Part no. 7490811 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 915/PTFE/Sym KV Part no. 7490400		front view
Type: plug, cable mount, connecting thread M32 Version: KS 915/M32/PTFE Part no. 7490416 <i>(for cable glands see page 127)</i>		connecting thread

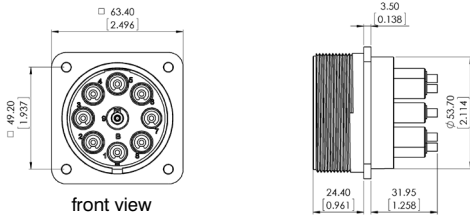
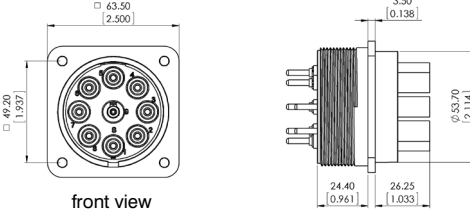
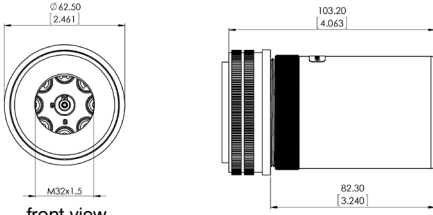
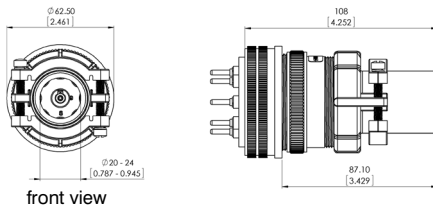
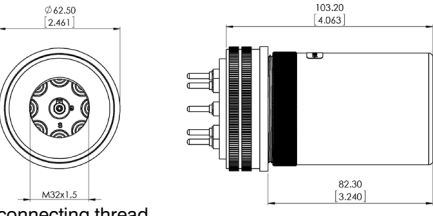
→ **Contacts, cable glands and accessories on pages 136-139**
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	8
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	-
Insulation material	PTFE



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 915/1E/PTFE Part no. 7749011	  front view	
Type: plug, panel mount Version: GS 915/1E/PTFE interlock Part no. 7749010	  front view	
Type: receptacle, cable mount, connecting thread M32 Version: KB 915/1E/M32/PTFE Part no. 7749023 <i>(for cable glands see page 127)</i>	  front view	
Type: plug, cable mount, with symmetric cable gland Version: KS 915/1E/PTFE/Sym KV Part no. 7490417	  front view	
Type: plug, cable mount, connecting thread M32 Version: KS 915/1E/M32/PTFE Part no. 7490415 <i>(for cable glands see page 127)</i>	  connecting thread	



Contacts, cable glands and accessories on pages 136-139
 Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	7
Number of pins E-contact 2.5 mm (LV)	-
Number of pins I-contact 1.5 mm (LV)	2
Insulation material	PTFE

Layout



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 915/2I/PTFE Part no. 7749088		front view
Type: plug, panel mount Version: GS 915/2I/PTFE Part no. 7749082		front view
Type: receptacle, cable mount, connecting thread M32 Version: KB 915/2I/M32/PTFE Part no. 7749057 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 915/2I/PTFE/Sym KV Part no. 7749053		front view
Type: plug, cable mount, connecting thread M32 Version: KS 915/2I/M32/PTFE Part no. 7749058 <i>(for cable glands see page 127)</i>		connecting thread

→ *Contacts, cable glands and accessories on pages 136-139*
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Electrical values	
Operating voltage (DC)	12 kV
Test voltage (DC)	18 kV
Rated current	30 A

Characteristics	
Number of pins high voltage (HV)	6
Number of pins E-contact 2.5 mm (LV)	1
Number of pins I-contact 1.5 mm (LV)	2
Insulation material	PTFE



Type / Version / Part number	Picture / Drawing	
Type: receptacle, panel mount Version: GB 915/2I/1E/PTFE Part no. 7749070		front view
Type: plug, panel mount Version: GS 915/2I/1E/PTFE Part no. 7749080		front view
Type: receptacle, cable mount, connecting thread M32 Version: KB 915/2I/1E/M32/PTFE Part no. 7749059 <i>(for cable glands see page 127)</i>		front view
Type: plug, cable mount, with symmetric cable gland Version: KS 915/2I/1E/PTFE/Sym KV Part no. 7749087		front view
Type: plug, cable mount, connecting thread M32 Version: KS 915/2I/1E/M32/PTFE Part no. 7749090 <i>(for cable glands see page 127)</i>		connecting thread

→ **Contacts, cable glands and accessories on pages 136-139**
Mounting instructions on pages 140-145

drawing - dimensions in mm [inch]

Contacts

Part no.	Description	Drawing	Picture
6574015	LV male contact 3/5 (E) 2.5 mm nickel plated for connector size M3 / M5		
6572005	LV female contact 3/5 (E) 2.5 mm nickel plated for connector size M3 / M5		
6574020	LV male contact 3/5 (I) 1.5 mm nickel plated for connector size M3 / M5		
6574002	LV female contact 3/5 (I) 1.5 mm nickel plated for connector size M3 / M5		
6571012	HV male contact 2.7 mm standard for connector size M7 / M9, silver plated		
6571013	HV standard male contact 2.7 mm for connectorsSize M3 / M5, male interlock contact for size M9 silver plated		
6571014	HV male interlock contact 2.7 mm for connectors Size M5, silver plated		
6571002	HV female contact 2.7 mm standard for connectors Size M3 / M5 / M7 / M9, silver plated		

drawing - dimensions in mm [inch]

Gaskets

Part no.	Description	Drawing
6572050	flat gasket Size M3	
6572051	flat gasket Size M5	
6572052	flat gasket Size M7	
6572053	flat gasket Size M9	

drawing - dimensions in mm [inch]

Single parts / Screwed cable glands

Part no.	Description	Clamping range (D) in mm	Drawing
1674111	screwed cable gland M20 x 1.5, 7-12 mm	7-12	
1674110	screwed cable gland M20 x 1.5, 10-14 mm	10-14	
1674119	screwed cable gland M25 x 1.5, 9-16 mm	9-16	
1674117	screwed cable gland M25 x 1.5, 13-18 mm	13-18	
1674082	screwed cable gland M32 x 1.5, 13-20 mm	13-20	
1674078	screwed cable gland M32 x 1.5, 18-25 mm	18-25	

drawing - dimensions in mm [inch]

Thread reductions

Part no.	Description
1674045	Reduction PG29 to PG21
1674046	Reduction PG29 to PG16
1674047	Reduction M25 to M20
1674063	Reduction M25 to M16
1674057	Reduction M32 to M25
1674084	Reduction M32 to M20

Thread extensions

Part no.	Description
1674062	Extension PG21 to PG29
1674106	Extension M20 to M25
1674108	Extension M25 to M32

Assembly Instructions Series M (receptacle, panel mount)

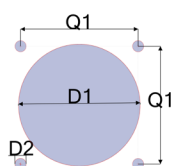
M Series

1.



Part as supplied.

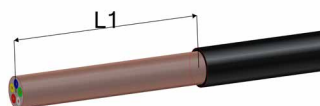
2.



Panel cut out

Connector size	Q1 mm [inch]	D1 mm [inch]	D2 mm [inch]
M3	34.90 [1.374"]	35.90 [1.413"]	3.75 [.148"]
M5	39.65 [1.561"]	42.20 [1.661"]	3.75 [.148"]
M7	44.45 [1.750"]	49.30 [1.941"]	4.40 [.173"]
M9	49.25 [1.939"]	54.90 [2.161"]	4.40 [.173"]

3.



Carefully remove cable jacket
(L1 = min. 65mm).

⚠ Do not damage metal shield braid.

4.



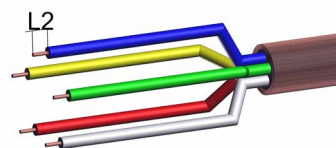
Fold back shield braid.

5.



Remove any filling elements from cable.

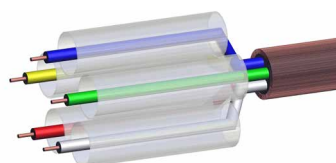
6.



Remove dielectric insulation of single wires
(L2 = 5 mm [.197"]).

⚠ Do not damage conductors

7.



Slide one shrinking tube on each single wire.

8.



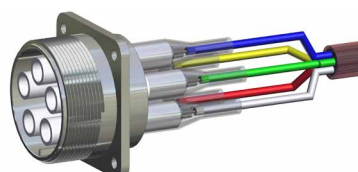
Solder one conductor on each female contact.

9.



Slide shrinking tubes on insulation parts and
shrink tubes - shrinking temperature 100°C

10.



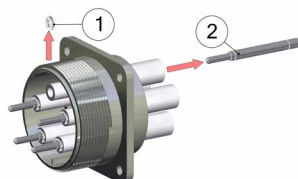
Assembly finished.

1.



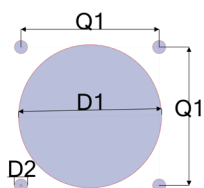
Part as supplied.

2.



Remove snap rings (1) and take out male contacts (2).

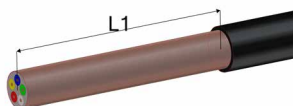
3.



Panel cut out

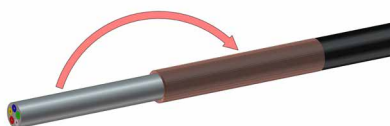
Connector size	Q1 mm [inch]	D1 mm [inch]	D2 mm [inch]
M3	34.90 [1.374"]	35.90 [1.413"]	3.75 [.148"]
M5	39.65 [1.561"]	42.20 [1.661"]	3.75 [.148"]
M7	44.45 [1.750"]	49.30 [1.941"]	4.40 [.173"]
M9	49.25 [1.939"]	54.90 [2.161"]	4.40 [.173"]

4.



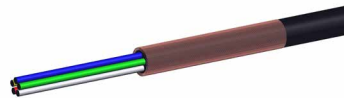
Carefully remove cable jacket (L1 = min. 65 mm).
⚠ Do not damage metal shield braid.

5.



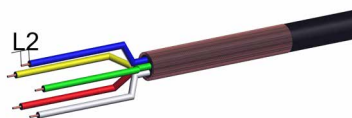
Fold back shield braid.

6.



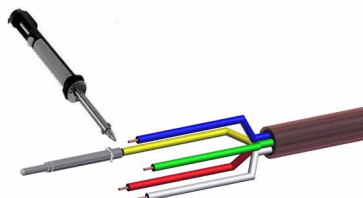
Remove any filling elements from cable.

7.



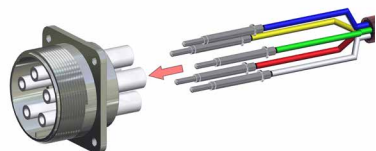
Remove dielectric insulation of single wires (L2 = 5 mm [.197"]).
⚠ Do not damage conductors.

8.



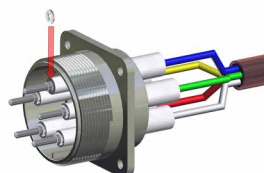
Solder one male contact (2) on each conductor.

9.



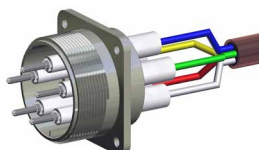
Slide single wires completely into insulation tubes.

10.



Fix male contacts (2) with snap rings (1).

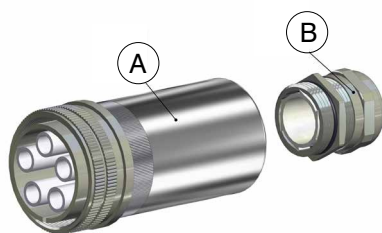
11.



Assembly finished.

Assembly Instructions Series M (receptacle, cable mount)

1.

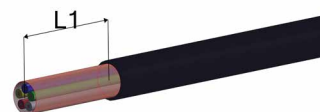


Part as supplied.

Connector housing (A)

Optional: Screwed cable gland (B)

5.

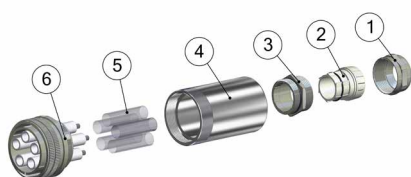


Remove cable jacket.

⚠ Do not damage shield braid.

Connector size	L1 mm [inch]
M3 / M5 / M7	45 [1.772"]
M9	60 [2.362"]

2.

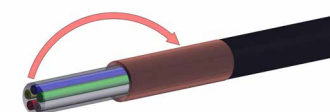


Components

Screwed cable gland (B): cap (1), sealing insert (2), cable gland basis (3)

Connector housing (A): housing adapter (4), shrinking tubes (5), housing basis (6)

6.



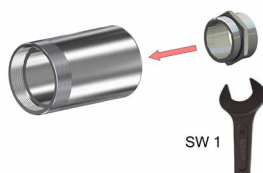
Fold back shield braid over jacket.

7.



Fix shield braid with tape.

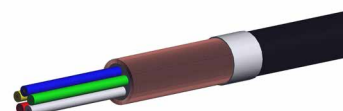
3.



Screw cable gland basis (3) to housing adapter (4).

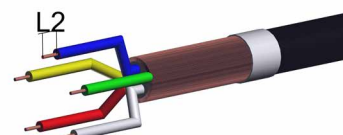
Screwed cable gland size	Wrench size (SW 1)	Tightening torque [Nm]
M16	20	6
M20	24	10
M25	30	14
M32	40	24

8.



Remove any filling elements from cable.

9.



Remove dielectric insulation (L2 = min. 5 mm [.197"]).

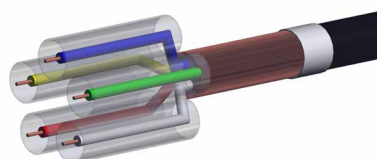
4.



Place cap (1), sealing insert (2) and housing adapter (4) on cable.

⚠ Respect correct order of parts (see picture)

10.



Place shrinking tubes on single wires.

11.



Solder one conductor each on a female contact.
 ⚠ Tin-solder should not remain on contact surface.
 Do not damage shrinking tubes.

16.



Completely slide seal insert (2) under shield braid into cable gland basis (3).

12.



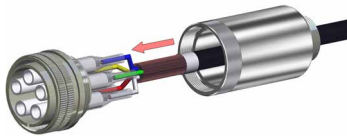
Place shrinking tubes on insulators. Tubes shall cover both insulators and wires. Then shrink tubes. Shrinking temperature 100°C.

17.



Cut overlapping shield braid.
 ⚠ Carefully remove shield strands. Loose strands can cause electrical break down.

13.



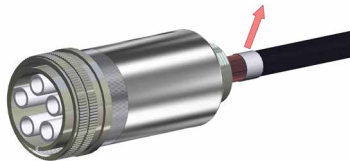
Screw adapter (4) to housing basis (6).

18.



Screw cable gland cap (1) to cable gland basis (3).

14.



Remove tape.

Screwed cable gland size	Wrench size (SW)	Tightening torque [Nm]
M16	20	5
M20	24	8
M25	30	12
M32	40	20

15.



Completely widen shield braid.

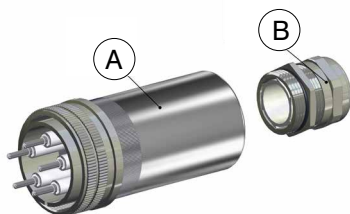
19.



Assembly finished.

Assembly Instructions Series M (plug, cable mount)

1.



Part as supplied.
Connector housing (A)
Optional: Screwed cable gland (B)

5.



Place cap (1), sealing insert (2) and housing adapter (4) on cable.
⚠ Respect correct order of parts (see picture).

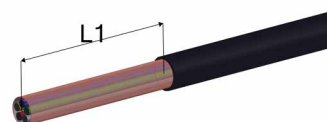
2.



Components
Screwed cable gland (B): cap (1),
sealing insert (2), cable gland basis (3)

Connector housing (A): housing adapter (4),
housing basis (5)

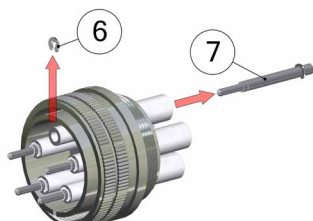
6.



Fold back shield braid over jacket.
⚠ Do not damage shield braid.

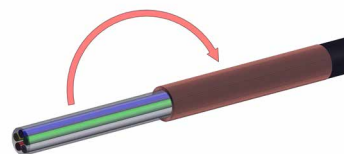
Connector size	L1 [mm]
M3 / M5 / M7	70 [2.756"]
M9	85 [3.346"]

3.



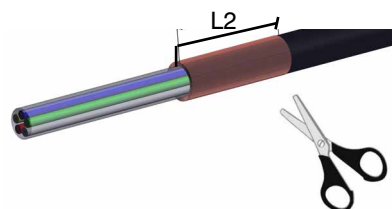
Remove contacts if supplied mounted.
Remove snap rings (6) and take out male contacts (7).

7.



Fold back shield braid over jacket.

8.



Shorten shield braid to length L2 = 40 mm.

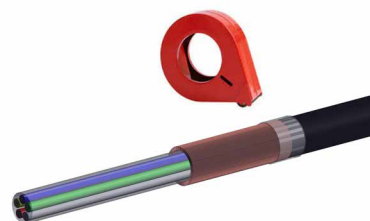
4.



Screw cable gland basis (3) to housing adapter (4).

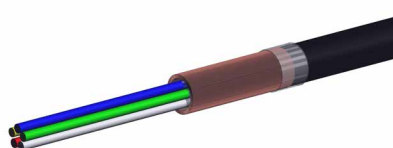
Screwed cable gland size	Wrench size (SW 1)	Tightening torque [Nm]
M16	20	5
M20	24	8
M25	30	12
M32	40	20

9.



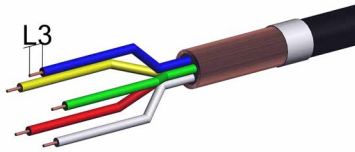
Fix shield braid with tape.

10.



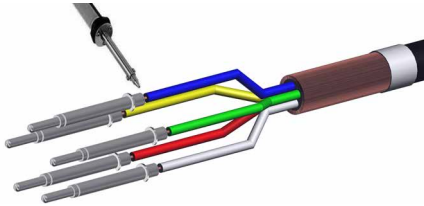
Remove any filling elements from cable.

11.



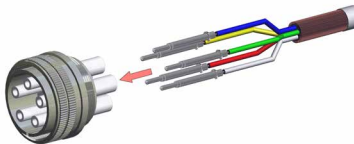
Remove dielectric insulation
(L3 = min. 5 mm [.197"]).

12.



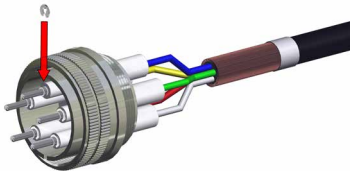
Solder male contacts (7) on conductor.
⚠ Tin-solder must not remain on contact surface.

13.



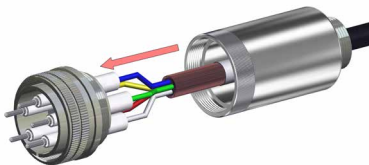
Slide contacts (7) completely into insulation
tubes (5).

14.



Fix contacts (7) with snap rings (6).

15.



Screw adapter (4) to housing basis (5).

16.



Remove tape.

17.



Completely widen shield braid.

18.



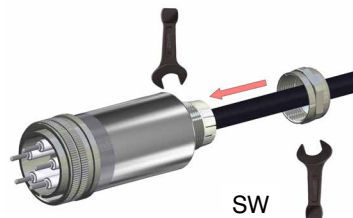
Completely slide seal insert (2) under shield braid
into cable gland basis (3).

19.



Cut overlapping shield braid.
⚠ Carefully remove shield strands. Loose strands
can cause electrical break down.

20.



Screw cable gland cap (1) to cable gland basis (3).

Screwed cable gland size	Wrench size (SW)	Tightening torque [Nm]
M16	20	5
M20	24	8
M25	30	12
M32	40	20

21.



Assembly finished.