Date Printed:

SCAN FOR INSTALLATION VIDEOS

TECHNICAL DATA

CABLE GLAND TYPE : TE1FU / TE1FUPB
INGRESS PROTECTION : IP66, IP67, IP68, NEMA 4X, DELUGE TO DTS01-01
PROCESS CONTROL SYSTEM : BS EN ISO 9001
: ISO / IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No : SIRA13ATEX1073X, SIRA13ATEX4079X
ATEX CERTIFICATION CODE : Ex II 2G, II 1D, Ex d IIC Gb, Ex e IIC Gb, Ex ta IIIC Da, Ex II 3G Ex nR IIC Gc, Ex I M2, Ex d I Mb, Ex e I Mb
IECEx CERTIFICATION No : IECEx SIR.13.0028X
IECEx CERTIFICATION CODE : Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da, Ex d I Mb, Ex e I Mb
cCSAus CERTIFICATION No : 1310517
cCSAus CERTIFICATION CODE : Class I Div 2 Groups, A, B, C, D; Class II Div 2 Gp E, F, G; Class III; Enclosure Type 3, 4 and 4X, Ex d IIC, Exe IIC, Ex nR II, Class I, Zone 1, AEx e II, AEx nR II

INSTALLATION INSTRUCTIONS

Installation should only be performed by a competent person using the correct tools. Read all instructions before beginning installation.

SPECIAL CONDITIONS FOR SAFE USE

1. The glands ranges shall only be used on enclosures where the temperature, at the point of mounting, is in the range -60°C to +130°C.
2. When used with braided cable, the cable glands shall be used for fixed installations only. Cables must be effectively clamped to prevent twisting and pulling.
3. When used in Group I applications, the equipment must only be mounted where the risk of mechanical impact is low.

ACCESSORIES

The following accessories are available from CMP Products, as optional extras, to assist with fixing, sealing and earthing :- Locknut, Earth Tag, Serrated Washer, Entry Thread (I.P.) Sealing Washer, Shroud

Number of turns to tighten	Outer Seal Tightening Guide												
	GLAND SIZE												
	20S16	20S	20	25S	25	32	40	50S	50	63S	63	75S	75
	CABLE DIAMETER												
0.5	13.2	15.9	20.9	22.0	26.2	33.9							
1	12.5	15.3	20.0	21.2	25.4	32.9	40.4	46.7	52.8	59.2	65.9	72.1	78.5
1.5	11.9	14.7	19.0	20.4	24.6	31.9	39.0	45.4	51.4	57.7	64.6	70.6	77.2
2	11.2	14.2	18.1	19.6	23.8	30.8	37.6	44.1	50.0	56.2	63.4	69.2	75.9
2.5	10.5	13.6	17.2	18.8	23.0	29.8	36.2	42.9	48.7	54.7	62.1	67.7	74.6
3	9.8	13.0	16.2	18.0	22.2	28.8	34.8	41.6	47.3	53.2	60.9	66.3	73.3
3.5	9.2	12.4	15.3	17.2	21.4	27.8	33.5	40.3	45.9	51.6	59.6	64.8	71.9
4	8.5	11.8	14.4	16.4	20.6	26.8	32.1	39.0	44.5	50.1	58.4	63.4	70.6
4.5	7.8	11.2	13.4	15.6	19.8	25.7	30.7	37.8	43.2	48.6	57.1	61.9	69.3
5	7.1	10.7	12.5	14.8	19.0	24.7	29.3	36.5	41.8	47.1	55.9	60.5	68.0
5.5	6.5	10.1	12.0	14.0	18.2	23.7	27.9	35.2	40.4	45.6	54.6	59.0	66.7
6	5.8	9.5											

Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Cable Bedding Diameter		Overall Cable Diameter		Armour Range †				Across Flats	Across Corners	Protrusion Length	Combined Ordering Reference (Stainless Steel Metric)			Shroud	Cable Gland Weight (Kgs)
	Standard				Option					Grooved Cone (X)		Stepped Cone (W)					Size	Type	Ordering Suffix		
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Min	Max	Min	Max					Max	Max						
20S16	M20	15.0	1/2"	19.9	3/4"	3.1	8.6	6.1	13.1	0.3	1.0	0.8	1.25	24.0	26.4	57.3	20S16	TE1FU	1RA4	PVC04	0.15
20S	M20	15.0	1/2"	19.9	3/4"	6.1	11.6	9.5	15.9	0.3	1.0	0.8	1.25	24.0	26.4	57.3	20S	TE1FU	1RA4	PVC04	0.15
20	M20	15.0	1/2"	19.9	3/4"	6.5	13.9	12.5	20.9	0.4	1.0	0.8	1.25	30.5	33.6	61.2	20	TE1FU	1RA4	PVC06	0.23
25S	M25	15.0	3/4"	20.2	1"	11.1	19.9	14.0	22.0	0.4	1.2	1.25	1.6	37.5	41.3	74.0	25S	TE1FU	1RA4	PVC09	0.34
25	M25	15.0	3/4"	20.2	1"	11.1	19.9	18.2	26.2	0.4	1.2	1.25	1.6	37.5	41.3	74.0	25	TE1FU	1RA4	PVC09	0.34
32	M32	15.0	1"	25.0	1 1/4"	17.0	26.2	23.7	33.9	0.4	1.2	1.6	2.0	46.0	50.6	78.2	32	TE1FU	1RA4	PVC11	0.55
40	M40	15.0	1 1/4"	25.6	1 1/2"	22.0	32.1	27.9	40.4	0.4	1.6	1.6	2.0	55.0	60.5	81.6	40	TE1FU	1RA4	PVC15	0.79
50S	M50	15.0	1 1/2"	26.1	2"	29.5	38.1	35.2	46.7	0.4	1.6	2.0	2.5	60.0	66.0	88.1	50S	TE1FU	1RA4	PVC18	1.00
50	M50	15.0	2"	26.9	2 1/2"	35.6	44.0	40.4	53.0	0.6	1.6	2.0	2.5	70.1	77.1	91.2	50	TE1FU	1RA4	PVC21	1.37
63S	M63	15.0	2"	26.9	2 1/2"	40.1	49.9	45.6	59.4	0.6	1.6	2.0	2.5	75.0	82.4	90.5	63S	TE1FU	1RA4	PVC23	1.50
63	M63	15.0	2 1/2"	39.9	3"	47.2	55.9	54.6	65.8	0.6	1.6	2.0	2.5	80.0	88.0	90.3	63	TE1FU	1RA4	PVC25	1.56
75S	M75	15.0	2 1/2"	39.9	3"	52.8	61.9	59.0	72.0	0.6	1.6	2.0	2.5	90.0	99.0	104.7	75S	TE1FU	1RA4	PVC28	2.45
75	M75	15.0	3"	41.5	3 1/2"	59.1	67.9	66.7	78.4	0.6	1.6	2.5	3.0	100.0	110.0	110.8	75	TE1FU	1RA4	PVC30	3.15
90	M90	24.0	3 1/2"	42.8	4"	66.6	78.6	76.2	90.3	0.8	1.6	3.15	4.0	115.0	126.5	135.5	90	TE1FU	1RA4	PVC32	4.62
100	M100	24.0	4"	44.0	5"	76.0	90.9	86.1	101.4	0.8	1.6	3.15	4.0	127.0	139.7	126.8	100	TE1FU	1RA4	LSF33	4.95
115	M115	24.0	4"	44.0	5"	86.0	97.9	101.5	110.2	0.8	1.6	3.15	4.0	138.0	151.8	157.5	115	TE1FU	1RA4	LSF34	7.60
130	M130	24.0	5"	46.8	6"	97.0	114.9	110.2	123.2	0.8	1.6	3.15	4.0	157.0	172.7	164.5	130	TE1FU	1RA4	LSF35	8.73

For NPT options add the following digits to the material suffix; 1/2" = 31; 3/4" = 32; 1" = 33; 1 1/4" = 34; 1 1/2" = 35; 2" = 36; 2 1/2" = 37; 3" = 38; 3 1/2" = 39; 4" = 310 (Brass requires prefix '0')

Examples: 32TE1FU1RA434 = Stainless Steel 1-1/4" NPT, 50STE1FU1RA435 = 1-1/2" NPT, 25TE1FU1RA432 = Stainless Steel 3/4" NPT

Dimensions are displayed in millimetres unless otherwise stated

Cable Gland Selection Table

** Insert "PB" into the code for TE1FUPB glands e.g. 20TE1FUPB1RA4

***Please note that the overall maximum cable bedding diameter for "PB" variants should be reduced by 1mm to allow for the inner lead sheath.**

*Stepped cone is for single wire armour and grooved cone is for all other armours

CMP Products Limited on its sole responsibility declares that the equipment referred to herein conforms to the requirements of the ATEX Directive 2014/34/EU and the following standards: - EN60079-0:2012, EN60079-1:2007, EN60079-7:2007, EN60079-15:2010, EN60079-31:2009, BS6121:1989, EN62444:2013, EN61241-0:2004, EN61241-1:2004.

David Willcock – Certification Engineer (Authorised Person)
CMP Products Limited, Cramlington, NE23 1WH, UK
24th June 2015

CE 0518

Notified Body: Sira Certification Service, Unit 6 Hawarden Industrial Park, Hawarden, CH5 3US, UK

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES TE1FU & TE1FUPB

STAINLESS STEEL CABLE GLAND FOR USE WITH SINGLE WIRE ARMOUR (SWA), WIRE BRAID, STRIP, AND TAPE ARMOUR (TE1FUPB VERSION CAN ALSO BE USED ON CABLE WITH A LEAD SHEATH). FOR USE IN EXPLOSIVE ATMOSPHERES.

INCORPORATING EU DECLARATION OF CONFORMITY TO DIRECTIVE 2014/34/EU

CDS™ DELUGE PROOF CABLE GLAND FEATURING COMPENSATING DISPLACEMENT SEAL SYSTEM.

CABLE GLAND TYPE TE1FU & TE1FUPB

CMP

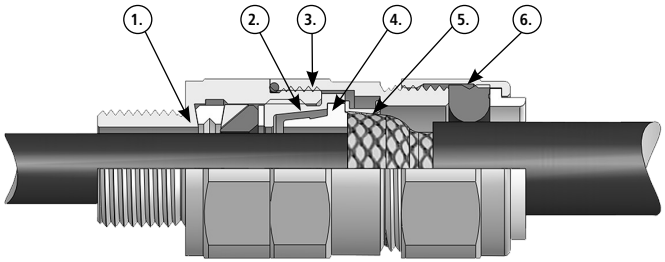
Logo's shown for illustration purposes only. Please check certification for details

CMP Document No. FI463 Issue 9 CSA Issue 6, IEC Issue 6

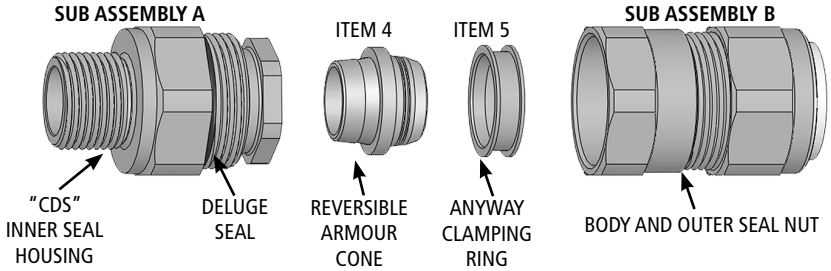
INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TE1FU & TE1FUPB

CABLE GLAND COMPONENTS

1. Entry Item
2. Compensating Sleeve
3. Body
4. Reversible Armour Cone
5. AnyWay Clamping Ring
6. Outer Seal Nut

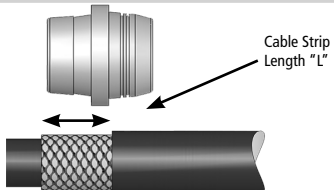


PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION



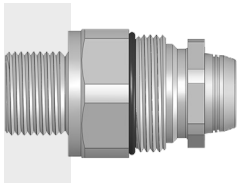
1. Separate the gland into two sub-assemblies, A and B, by unscrewing the body (3) from the entry item (1). Note that items (4) and (5) are loose items.

2. Prepare the cable by stripping back the cable outer sheath and armour to suit the equipment geometry. Expose the armour by stripping back the outer sheath further using the table below as a guide.

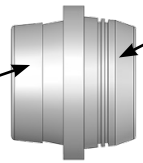


CABLE GLAND SIZE	20S/16, 20S, 20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90,100,115,130
CABLE STRIP LENGTH "L"	12 mm (0.472 inches)	15 mm (0.591 inches)	18 mm (0.709 inches)	20 mm (0.787inches)

3. Secure the entry components (sub-assembly A) into the equipment. **(Not for remote installation)**
Pass the sub-assembly B (outer seal first) and AnyWay clamping ring (5) over the cable.
Insert the reversible armour cone (4) in the sub-assembly A, orientation to suit cable (see below)



<u>Stepped</u> side of cone outwards - to terminate SWA cable.

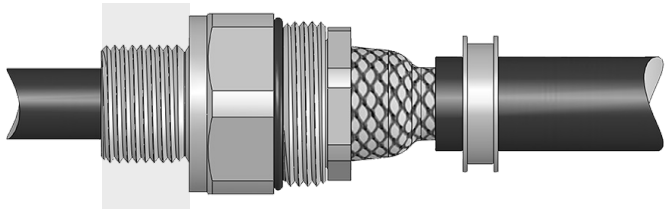


<u>Grooved</u> side of cone outwards - to terminate braid, strip armour, pliable wire or tape armour.

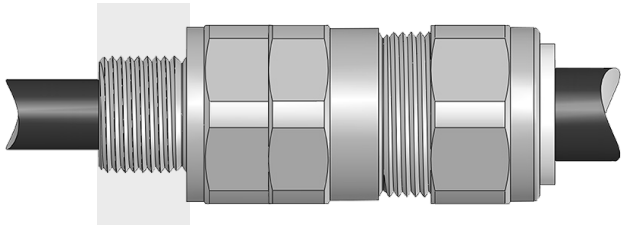
4. Pass the cable through sub-assembly A, spacing the armour or braid evenly around the cone. Whilst continuing to push the cable forward to keep the cable braid or armour in contact with the cone, tighten the compensating sleeve (2) into the entry item (1) until all the threads are used.

Note : The internal compensator will prevent the cable gland inner seal from being over-tightened onto the cable inner sheath.

The inner sheath of the TE1FUPB gland contains a device to automatically make an electrical contact with the lead sheath on the cable as the cable is installed.



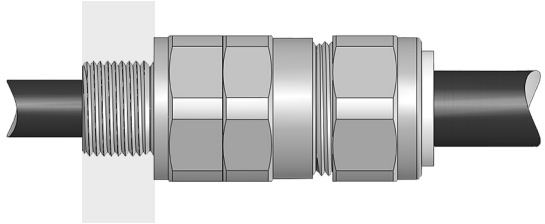
5. Terminate the cable by tightening the body (3) onto the entry item (1) using a spanner on each part. Tighten the body until the body and entry components are metal to metal and cannot be tightened further.



6. Only using finger pressure, tighten the outer seal nut assembly (8) until light resistance to tightening is met.

Then either use the outer seal tightening guide tape or table on the rear of the page to determine how much further to tighten the seal using a spanner (using the outer seal tightening guide is recomended).

Wrap the outer seal tightening guide tape around the cable to show the amount of spanner turns needed (as shown here). Make sure the correct side of the outer seal tightening guide tape is used depending on the cable gland size.



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