Date Printed:

SCAN FOR INSTALLATION VIDEOS

TECHNICAL DATA

CABLE GLAND TYPE	: E** Family of Glands
INGRESS PROTECTION	: IP66, IP67, IP68
PROCESS CONTROL SYSTEM	: BS EN ISO 9001
	: ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

GLAND	
ATEX CERTIFICATION No	: SIRA13ATEX1071X
ATEX CERTIFICATION CODE	: Ex IM2 Ex d I Mb, Ex e IMb
IECEx CERTIFICATION No	: IECEx SIR.13.0026X
IECEx CERTIFICATION CODE	: Ex d I Mb, Ex e I Mb
MA/FT	
ATEX CERTIFICATION No	: SIRA 09ATEX1034U
ATEX CERTIFICATION CODE	: Ex IM2 Ex d I Mb
IECEx CERTIFICATION No	: IECEx SIR.09.0024U
IECEx CERTIFICATION CODE	: Ex d I, Ex e I

INSTALLATION INSTRUCTIONS

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

SPECIAL CONDITIONS FOR SAFE USE

For ATEX & IECEx certification:

1. The glands shall not be used to terminate braided cables.

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 (*Brass Metric)			Shroud	Cable Gland Weight (Kgs)
	Standard				Option					Grooved Cone		Stepped Cone									
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Min	Max	Min	Max	Min	Max	Min	Max	Max	Max		Size	Type	Ordering Suffix		
20S/16	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	72.5	20S16	E1FU	1RA/M	PVC04	0.157
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	70.0	20S	E1FU	1RA/M	PVC04	0.157
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	73.0	20	E1FU	1RA/M	PVC06	0.206
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	89.0	25S	E1FU	1RA/M	PVC09	0.325
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	89.0	25	E1FU	1RA/M	PVC09	0.325
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	86.0	32	E1FU	1RA/M	PVC11	0.430
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	90.0	40	E1FU	1RA/M	PVC15	0.620
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	91.0	50S	E1FU	1RA/M	PVC18	0.750
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	95.0	50	E1FU	1RA/M	PVC21	0.950
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	82.5	102.0	63S	E1FU	1RA/M	PVC23	1.337
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	104.0	63	E1FU	1RA/M	PVC25	1.340
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	115.0	75S	E1FU	1RA/M	PVC28	2.110
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	117.0	75	E1FU	1RA/M	PVC30	2.420

Note : For material options please add the following suffix to change the Ordering Reference ; Brass (no suffix required), Nickel Plated Brass "5", 316 Grade Stainless Steel "4", Copper Free Aluminium "1"
For NPT options please 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 : 32E1FWM1RA534 = Nickel Plated Brass 1-1/4" NPT, 50SE1FWM1RA035 = Brass 1-1/2" NPT, 25E1FWM1RA432 = Stainless Steel 3/4" NPT, 20E1FWM1RA5 = Nickel Plated Brass M20
Dimensions are displayed in millimetres unless otherwise stated

Order codes shown are for E1FU/M glands
For e.g. E1FW/M glands substitue E1FW/M for E1FU/M - e.g. 20E1FW1RA/M, For flange mounted glands add "F" to the order code e.g. 20E1FW1RA/MF.

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:-
EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, BS 6121:1989, EN 62444:2013

David Willcock - Certification Engineer (Authorised Person)
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24th June 2015

CE 0518

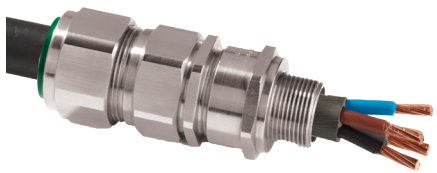
Notified Body: Sira Certification Service, Unit 6, Hawarde

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPE "E"

FOR TERMINATION OF CABLES WITH WIRE BRAID PLIABLE WIRE ARMOUR, TAPE ARMOUR (STA/DSTA), STRIP ARMOUR & SINGLE WIRE ARMOUR (SWA). FOR USE IN GROUP I HAZARDOUS LOCATIONS.

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

CABLE GLAND TYPES E1FW/M, E1FX/M, E1FU/M E1FW/MF, E1FX/MF, E1FU/MF



E1FW/M - SWA Armour
E1FW/MF - Flange mounted version of E1FW/M

E1FX/M - Flexible Wire, Tape, etc Armour
E1FX/MF - Flange mounted version of E1FX/M

E1FU/M - Universal Gland for all Armour Types
E1FU/MF - Flange mounted version of E1FU/M

CMP

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

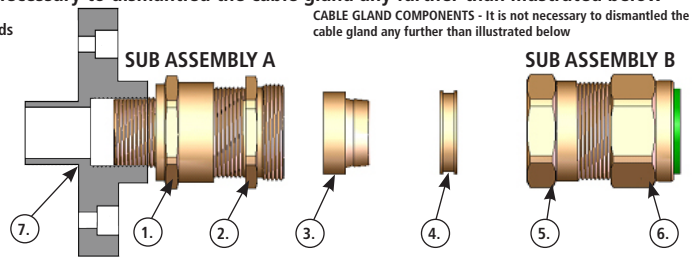
CMP Document No. FI419 Issue 11, CSA Issue 8, IEC Issue 8 09/14

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES "E"

CABLE GLAND COMPONENTS - It is not necessary to dismantled the cable gland any further than illustrated below

1. Entry Component
2. Main Item
3. Detachable Armour Cone
4. AnyWay Clamping Ring
5. Body
6. Outer Seal Nut

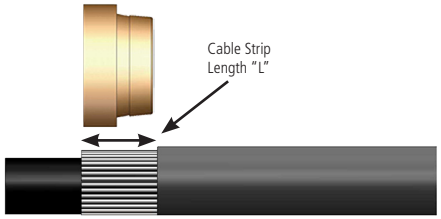
N.B. Flanged mounted glands are identical except that they are fitted with a CMP flange mount adaptor type MA/FT



PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. If required fit shroud over the cable outer sheath;

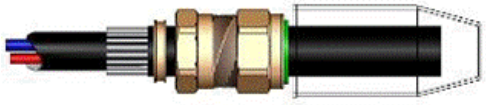
Prepare the cable by stripping back the cable outer sheath and armour to suit the equipment geometry.
Expose the armour by stripping back the outer sheath further using the table below as a guide.
If applicable remove any tapes or wrappings to expose cable inner sheath.



Tape armour should be further prepared by cutting the tape into strips as shown below:

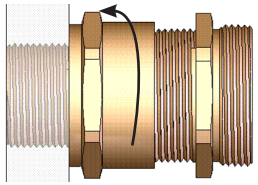
CABLE GLAND SIZE	20S/16, 20S, 20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90, 100, 115, 130
CABLE STRIP LENGTH "L"	12mm	15mm	18mm	20mm

2. Separate the gland into two sub-assemblies "A & B". Ensuring that the Outer Seal Nut (6) is relaxed, pass sub-assembly "B" over the cable outer sheath and armour followed by the "AnyWay" clamping ring (4).

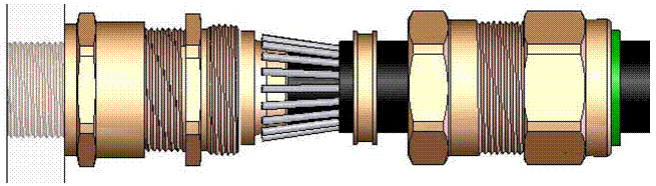


Note: On maximum size cables the clamping ring may only pass over the armour.

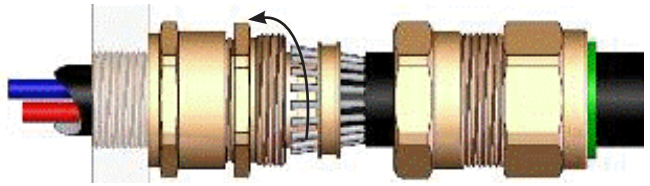
3. Ensure that the inner seal is relaxed by slackening the Main Item (2). Secure sub-assembly "A" into the equipment either by screwing the Entry Item (1) into a threaded hole or by securing it in a clearance hole using a locknut as applicable.



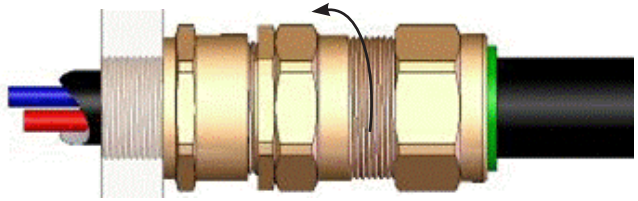
4. Locate the Armour Cone (3) into its recess in the Main Item (2). (N.B. For E1FU and E2FUvariants, make sure the correct side of the cone is outermost - grooved for braid/tape armour and stepped for SWA). Pass the cable through sub-assembly "A" until the armour engaged with the cone. Spread the armour evenly around the cone.



5. While continuing to push the cable forward to maintain contact between the armour and the cone, tighten the Main Item (2) until the inner seal makes contact with the cable inner sheath (heavier resistance is felt at this point). Tighten a further full turn.
NOTE: The earthing device on E2* type glands will automatically engage the lead sheath.



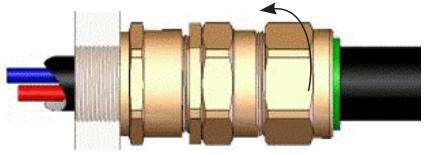
6. Hold the Main Item (2) with a spanner and tighten sub-assembly "B" onto sub-assembly "A" using a spanner until all available threads are used.

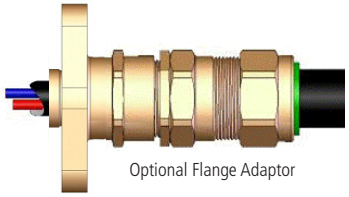


7. Only using finger pressure, tighten the outer seal nut assembly (6) until light resistance to tightening is met.

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.





Optional Flange Adaptor