


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

HAZARDOUS AREA CLASSIFICATION

ATEX CERTIFICATION No : SIRA 06ATEX1097X & SIRA 07ATEX4326X
ATEX CERTIFICATION CODE :  II 2 GD Ex d IIC / Ex e IIC / Ex nR II / Ex tD A21 IP66
IEC Ex CERTIFICATION No : IEC Ex SIR.06.0043X
IEC Ex CERTIFICATION CODE : Ex d IIC / Ex e IIC / Ex nR II / Ex tD A21 IP66
CSA CERTIFICATION No : 02.1310517
CSA CERTIFICATION CODE : Ex d IIC / Ex e II

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 & IEC Ex certification:

- 1. The E type glands shall only be used where temperatures at the point of entry is between -60°C and +130°C.
- 2. E type glands used for terminating braided cables are only suitable for fixed installations. Cables must be clamped to prevent pulling or twisting.
- 3. An entry thread seal may be need to maintain the IP rating of the enclosure to which the E type gland is attached.

FOR CSA Certification:

- 1. These glands are not suitable for use with flameproof enclosures installed in Group IIC atmospheres which have a volume greater than 2000 cc (2 Litre).
- 2. These glands are for use with Certified Marine Shipboard metal braided cables constructed in according to CSA Std. 245 and IEEE45/IEC600092-353 Standards, or Certified equivalent), for use on Shipboards and Offshore Rigs/Platfords only

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

Cable Gland Size	Available Entry Threads			Thread Length metric	Cable Bedding Diameter		Overall Cable Diameter		Armour Wire Diameter				Across Flats	Across Corners	Protrusion Length	Ordering Reference (Brass Metric)	PVC Shroud Ref
	Standard		Option		Min	Max	Min	Max *	Grooved Cone		Stepped Cone						
	Metric	NPT	NPT						Min	Max	Max	Max					
20S/16	M20	1/2"	3/4"	15.0	3.1	8.6	6.1	11.5	0.15	0.5	0.9	1.0	24.0	25.9	58.5	20S16E1FU1RA	PVC04
20S	M20	1/2"	3/4"	15.0	6.1	11.6	9.5	15.9	0.15	0.5	0.9	1.25	24.0	25.9	58.5	20SE1FU1RA	PVC04
20	M20	1/2"	3/4"	15.0	6.5	13.9	12.5	20.9	0.2	0.5	0.9	1.25	30.5	32.9	60.5	20E1FU1RA	PVC06
25S	M25	3/4"	1"	15.0	11.1	19.9	14.0	22.0	0.2	0.6	1.25	1.6	37.5	40.5	67.5	25SE1FU1RA	PVC09
25	M25	3/4"	1"	15.0	11.1	19.9	18.2	26.2	0.2	0.6	1.25	1.6	37.5	40.5	67.5	25E1FU1RA	PVC09
32	M32	1"	1-1/4"	15.0	17.0	26.2	23.7	33.9	0.2	0.6	1.6	2.0	46.0	49.7	69.5	32E1FU1RA	PVC11
40	M40	1-1/4"	1-1/2"	15.0	22.0	32.1	27.9	40.4	0.2	0.8	1.6	2.0	55.0	59.4	78.0	40E1FU1RA	PVC15
50S	M50	1-1/2"	2"	15.0	29.5	38.1	35.2	46.7	0.2	0.8	2.0	2.5	60.0	64.8	75.5	50SE1FU1RA	PVC18
50	M50	2"	2-1/2"	15.0	35.6	44.0	40.4	53.1	0.3	0.8	2.0	2.5	70.0	75.6	80.5	50E1FU1RA	PVC21
63S	M63	2"	2-1/2"	15.0	40.1	49.9	45.6	59.4	0.3	0.8	2.0	2.5	75.0	81.0	91.5	63SE1FU1RA	PVC23
63	M63	2-1/2"	3"	15.0	47.2	55.9	54.6	65.9	0.3	0.8	2.0	2.5	80.0	86.4	92.0	63E1FU1RA	PVC25
75S	M75	2-1/2"	3"	15.0	52.8	61.9	59.0	72.1	0.3	0.8	2.0	2.5	89.0	96.1	99.0	75SE1FU1RA	PVC28
75	M75	3"	3-1/2"	15.0	59.1	67.9	66.7	78.5	0.3	0.8	2.5	3.0	99.0	106.9	102.0	75E1FU1RA	PVC30
90	M90	3"	3-1/2"	24.0	66.6	79.9	76.2	90.4	0.4	0.8	3.0	3.5	114.0	123.1	120.0	90E1FU1RA	PVC32
100	M100	-	-	24.0	76.0	90.9	86.1	101.5	0.4	0.8	3.15	4.0	123.0	132.8	148.0	100E1FU1RA	LSF33
115	M115	-	-	24.0	86.0	97.9	101.5	110.3	0.4	0.8	3.15	4.0	133.4	144.1	169.0	115E1FU1RA	LSF34
130	M130	-	-	24.0	97.0	114.9	114.2	123.3	0.4	0.8	3.15	4.0	146.0	157.8	183.0	130E1FU1RA	LSF35
Dimensions are displayed in millimeters unless otherwise stated																	

Order codes shown are for E1FU glands
For e.g. E1FW glands substitute E1FW for E1FU - e.g. 20E1FW1RA

* Please note that the overall maximum cable bedding diameter for "E2" variants should be reduced by 1mm to allow for the inner lead sheath.

I, the undersigned, hereby declare that the equipment referred to herein conforms to the requirements of the ATEX Directive 94/9/EC and the following standards:-

EN60079-0:2009, EN60079-1:2007, EN60079-7:2007, BS 6121:1989, EN50262:1998 (Amd 2001), EN61241:0-2004, EN61241-1:2004



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INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPE "E"

FOR TERMINATION OF CABLES WITH WIRE BRAID, TAPE ARMOUR (STA/DSTA), STRIP ARMOUR & SINGLE WIRE ARMOUR (SWA) (WITH LEAD INNER SHEATH ON "E2" VARIANT). FOR USE IN HAZARDOUS LOCATIONS.

INCORPORATING EC DECLARATION OF CONFORMITY TO DIRECTIVE 94/9/EC

CABLE GLAND TYPES E1FW, E2FW, E1FX, E2FX, E1FU & E2FU



E1FW - SWA Armour

E2FW - SWA Armour for lead sheathed cable

E1FX - Braid, Tape, etc Armour

E2FX - Braid, Tape, etc Armour for lead sheathed cable

E1FU - Universal Gland for all Armour Types

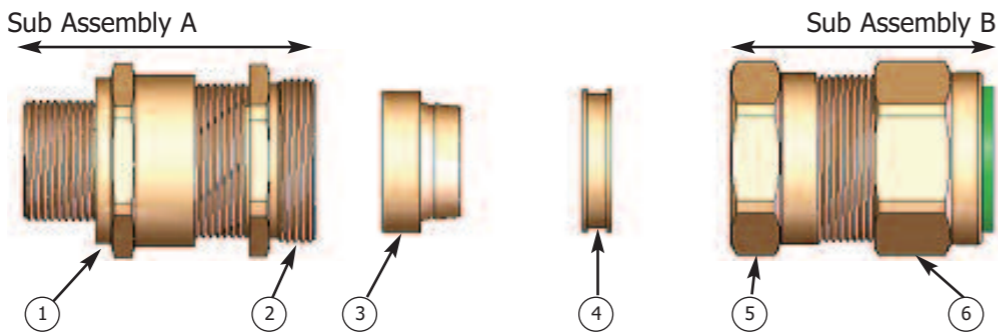
E2FU - Universal Gland for all Armour Types with lead sheathed cable



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



PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

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

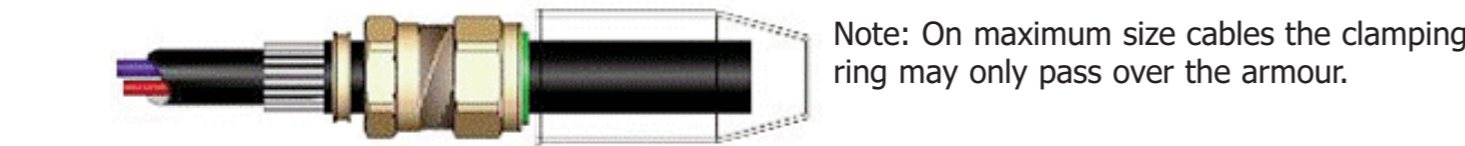
Prepare the cable by stripping back the cable outer sheath and armour to suit the equipment geometry. Expose the armour by stripping back the outer sheath further using the table below as a guide. If applicable remove any tapes or wrappings to expose cable inner sheath.

Cable Strip Length "L"

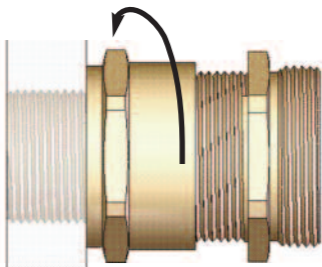
Tape armour should be further prepared by cutting the tape into strips as shown below:

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

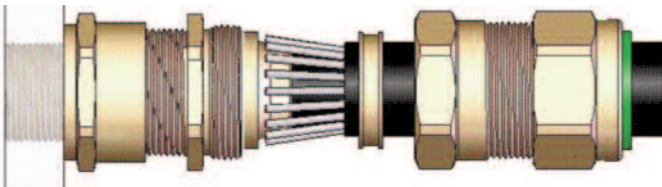
- 2. Separate the gland into two sub-assemblies "A & B". Ensuring that the Outer Seal Nut (6) is relaxed, pass sub-assembly "B" over the cable outer sheath and armour followed by the "AnyWay" clamping ring (4).



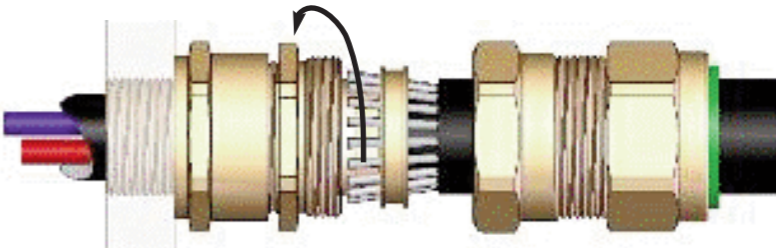
- 3. Ensure that the inner seal is relaxed by slackening the Main Item (2). Secure sub-assembly "A" into the equipment either by screwing the Entry Item (1) into a threaded hole or by securing it in a clearance hole using a locknut as applicable.



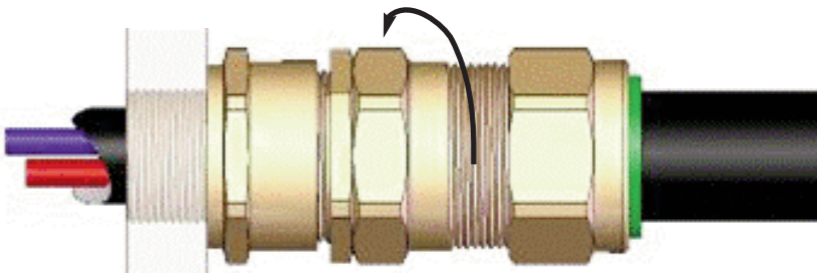
- 4. Locate the Armour Cone (3) into its recess in the Main Item (2). (N.B. For E1FU and E2FU variants, make sure the correct side of the cone is outermost - grooved for braid/tape armour and stepped for SWA). Pass the cable through sub-assembly "A" until the armour engaged with the cone. Spread the 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) by hand until heavy resistance is felt. (This is when the inner seal makes contact with the cable inner sheath). Tighten a further full turn using a spanner. 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. Tighten the Outer Seal Nut (6) until it comes to an effective stop. This will occur when:-
 - A) The Outer Seal Nut (6) has clearly engaged the cable and cannot be further tightened without the use of excessive force by the installer.
 - B) The Outer Seal Nut (6) is metal to metal with the body of the gland (5).

