



E1FU & E1FU-HT

INSTALLATION NOTES

1. Installation shall only be performed by a competent person using the correct tools. Spanners should be used for tightening. Inspection & maintenance shall be done by a competent person.
2. Metric entry threads comply with a 6g for male thread & 6H for female threads tolerance as required by NPT Threads accordance standard metric thread pitch is 1.5mm for threads up to M75, and 2.0 mm from M90 and above. Other thread pitches from 0.70 mm to 2.00 mm available upon request.
3. The interface between a cable entry device & its enclosure will require additional sealing to achieve Ingress Protection (IP) ratings higher than IP54. For Explosive Gas Atmospheres - Min IP54 and For Explosive Dust Atmospheres - Min IP6X. Parallel threads and tapered threads when using a non-threaded entry required a sealing washer or Integral O-ring face seal to maintain IP66, IP67, IP68 when applicable. It is the installer's responsibility to ensure the IP rating is maintained at the interface.
4. Note: When fitted to a threaded entry, all tapered threads will automatically provide an ingress protection of IP66. For IP 67 & IP 68 thread seal or thread grease shall be applied on threads.
5. Cable Glands are not intended to be repaired as they do not have any serviceable parts.
6. For inspection if cable gland is dismantled, shall be re-assembled again as per instruction given and this inspection must be done by competent person.
7. Cable glands can only be supplied with Metric or NPT entry threads.
8. The enclosure surface finish must be flat & smooth & any draft angles from the casting/moulding process shall have a perpendicular flat spot machined to facilitate sealing with an entry thread sealing washer or O-ring for required IP rating. The enclosure shall be enough strong to support the cable and cable gland assembly. The enclosure entries must be perpendicular.
9. When enclosure having through hole it is recommended hole must be circular, free of burrs and diameter shall not be larger than 0.7mm above the maximum minor diameter of cable gland and lock nut shall be used to secure the cable gland.



Technical Specifications.

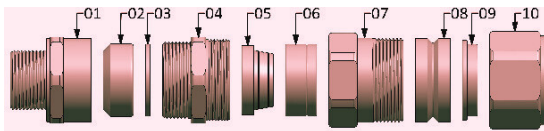
Type	E1FU & E1FU-HT Cable Gland.
Size	20MM TO 90MM
Applications	Provide Mechanical Cable Retention & Electrical continuity via Armoured Wire termination In indoor area. It is Easy to Install.
Operating Temp	-60°C To +180°C.
Material	Brass (BS EN 12164/ Grade CuZn39Pb3).
Seal Material	Thermoset Elastomer.
Standard Thread	ISO Metric.
Cable Type	Unarmoured & Braided.
Sealing Technique	Inner Displacement Seal.
Sealing Area	Cable Outer Sheath.
Optional Gland Material.	Brass Nickel Plated
Optional Accessories	Adaptor, Reducer, Earth Tag, Lock Nut, Serrated Washer, Shroud.
Cable Gland Kit	1 Cable Gland, 1 Lock Nut 1 Earth Tag, 1 PVC Shroud

E1FU Ex & E1FU-HT Ex CABLE GLAND SELECTION TABLE

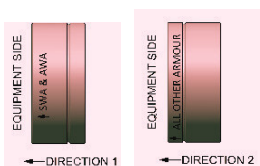
GLAND DIMENSIONS										CABLE DIMENSIONS						
CABLE	ENTRY THREAD E			Minimum		MAXIMU M	ACROSS	ACROSS	CABLE		OVERALL CABLE		ARMOUR RANGE			
GLAND				Thread		LENGTH	FLATS	CORNES	BEDDING		DIAMETER					
SIZE				Length					DIAMETER				Direction 1		Direction 2	
	STANDARD		OPTION	L1		L	AF	AC	B		A					
	METRIC	NPT*	NPT*	METRIC	NPT	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
20S/16	M20	1/2*	3/4*	15	20	52.25	24	26.4	3.1	8.7	6.1	11.6	0.8	1.25	0.1	1
20S	M20	1/2*	3/4*	15	20	52.5	24	26.4	7	11.7	9.5	16	0.8	1.25	0.1	1
20	M20	1/2*	3/4*	15	20	52.5	30.5	33.5	10	14	12.5	21.2	0.8	1.25	0.1	1
25S	M25	3/4*	1*	15	20.5	64	41.25	41.25	11	16	14.1	22	1.25	1.6	0.1	1
25	M25	3/4*	1*	15	20.5	64	41.25	41.25	14.5	20	18.5	26.3	1.25	1.6	0.1	1
32	M32	1*	1-1/4*	15	25.5	65.5	50.6	50.6	18.5	26.4	24	34	1.6	2	0.1	1
40	M40	1-1/4*	1-1/2*	15	26	65.5	60.5	60.5	25	32.3	28	40.6	1.6	2	0.1	1
50S	M50	1-1/2*	2*	15	26.5	72.5	66	66	31.5	38.5	35.5	46.7	2	2.5	0.1	1
50	M50	2*	2-1/2*	15	27	73	77	77	36.5	44	40.8	53.2	2	2.5	0.1	1
63S	M63	2*	2-1/2*	15	27	73.5	82.5	82.5	42.4	50	45.7	59.4	2	2.5	0.1	1
63	M63	2-1/2*	3*	15	40	73.5	88	88	48.5	56.2	54.8	66.1	2	2.5	0.1	1
75S	M75	2-1/2*	3*	15	40	82.5	99	99	55	62	59.5	72.2	2	2.5	0.1	1
75	M75	3*	3-1/2*	15	42	88.5	100	110	61.5	68	67	79.5	2.5	3.15	0.1	1
90	M90	3-1/2*	4*	20	43	95.5	114	125.4	65	80	75	90.5	2.75	3.5	0.1	1

All Dimensions are in millimetres (Except where dimensions are in inches)*

CABLE GLAND COMPONENTS



- 01 Entry Component (Sub-Assembly A)
- 02 Entry Thermoset Seal (Sub-Assembly A)
- 03 Entry Skid Washer (Sub-Assembly A)
- 04 Compression Body (Sub-Assembly A)
- 05 Detachable Armour Cone
- 06 Universal Armour Clamping Ring
- 07 Middle Body (Sub-Assembly B)
- 08 Thermoset Seal (Sub-Assembly B)
- 09 Skid Washer (Sub-Assembly B)
- 10 Compression Cap (Sub-Assembly B)

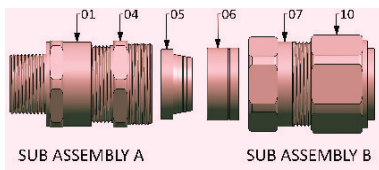


Universal Armour Clamping Ring
Direction 1: For SWA & AWA
Direction 2: For all other Armour

READ ALL INSTRUCTION CAREFULLY BEFORE INSTALLATION

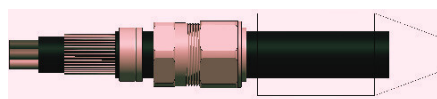
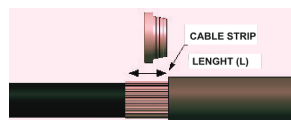
Step 1:

If required fit the Shroud over the cable outer sheath. Separate components 01 to 04 (Sub-Assembly A) from 07 to 10 (Sub-Assembly B). Now pass the Sub Assembly B (All 4 components 07, 08, 09, 10 are not separated) & Universal Armour Clamping Ring-06 over the cable. Use appropriate Direction mark (Mentioned on Universal Armour Clamping Ring) towards the equipment side as per required Cable Wire Armours.



Step 2:

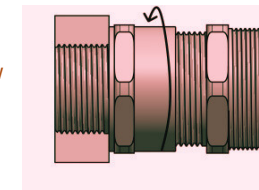
Now remove the cable outer sheath & prepare armour/braid to suit the geometry of the equipment. Remove a further outer sheath to expose the armour as per below table:



Cable Gland Size	20S/16, 20S,20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90
Cable Strip Length	12 mm	15 mm	18 mm	20 mm

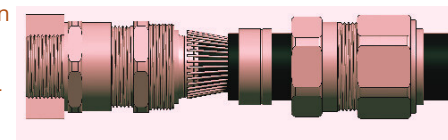
Step 3:

Ensure that Entry Thermoset Seal (02) is relaxed by loosening the Compression Body-04 (Sub-Assembly A). Now fit Sub-Assembly A into the threaded equipment by screwing the Entry Component-01 or by securing it in a clearance hole using a lock nut as applicable.



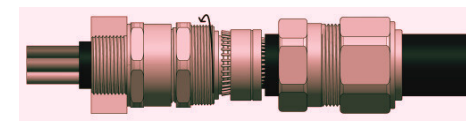
Step 4:

Insert the Detachable Armour Cone-05 in the Compression Body-04. Pass the cable through Sub-Assembly A until the armour engaged with the Detachable Armour Cone-05. Spread the armour evenly around the Detachable Armour Cone-05.



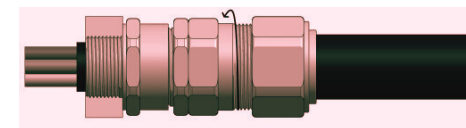
Step 5 :

Gently push the cable forward to maintain contact between the braid/armour and Detachable Armour Cone-05, tighten the Compression Body-04 until the Entry Thermoset Seal seal makes contact with the cable inner sheath till heavier resistance is felt. Tighten as per below mentioned table tightening torque.



Step 6 :

Hold the Compression Body-04 with one spanner and tighten Sub-Assembly B onto Sub-Assembly A using second spanner as per below mentioned table tightening torque.



Tightening Torque Value in Nm: Metric / NPT (For E1FU & E1FU-HT)														
Gland Size	20S/16	20S	20	25S	25	32	40	50S	50	63S	63	75S	75	90
Torque	40	40	40	40	40	40	70	85	90	105	105	180	210	405

Step 7 :

Tighten the outer seal Comprssion Cap-10 with hand untill the seal is formed around the cable. Now hold Middle Body-07 with one Spanner and tighten Compression Cap-10 one & half further turn with second Spanner.

