

1. GENERAL

The marking of the Cable Gland shall include the following:

Ex db I Mb

Ex eb I Mb

Ex db IIC Gb

Ex eb IIC Gb

Ex nR IIC Gc

Ex ta IIIC Da

Ta= -60°C to +130°C (standard seal) / -20°C to +200°C (high temperature seal)

The E** series Type ranges of cable glands consist of a male-threaded front entry component containing an elastomeric sealing ring and a Nylon 6 skid washer which effect flameproof sealing onto the cable inner sheath and is intended to screw into an entry point of its associated enclosure in accordance with relevant codes of practice. The flameproof seal is actuated by an adjoining coupling component. The coupling component is attached to a main body. Their mating thread may be fitted with an optional 'O' ring seal to provide increased ingress protection. Clamping of the armoured or braided cable is affected by a combination of the coupling component, main body and the different optional armour cone and armour sleeve combinations being fastened together. An outer seal nut, containing an elastomeric sealing ring and a Nylon 6 ferrule, threads onto the main body and effects environmental sealing onto the cable outer sheath.

Design Options

- The option for metric threaded cable entry spigots of all cable gland model series to be manufactured with a thread pitch between 0.7mm and 2.0mm.
- The front entry component may be manufactured with a profiled groove to captivate an 'O' ring seal which locates on the mating face with the associated enclosure. This option having the gland type designation prefixed with the letter R, e.g. 25RE1FW.
- Materials of manufacture:
 - Brass to EN12168:1998 Grade CuZn39Pb (CW614N)
 - Mild steel to BS EN 10088-3:2005 Grade 220M07Pb
 - Stainless steel to BS EN 10088-3:2005 Grade 316S11, 316S13, 316S31 or 316S33
 - Aluminium alloy not inferior to grade 6082 to EN755,1-3:1996 or LM25 to BS EN 1676:2010 (Not Group I)
- Alternative entry component thread forms:
 - Metric ISO 965-1, ISO965-3 medium fit (6g) for external threads
 - ET(Conduit) BS 31:1940 (1979), Table A
 - PG DIN 40430:1971
 - BSPP BS 2779:1973 class A full form for external threads
 - BSPT BS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A
 - ISO ISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads
 - NPT ANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads
 - NPSM ANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads
- The option to manufacture glands with entry threads that are one size up from the nominal quoted gland size.
- The use of alternative armour clamping components specified by the cable gland type designation.
- The various arrangements vary the cable gland suitability for differing armour or braided type cables.
- The use of a component having an alternative profile allowing an integral earthing facility. The type designation identifying the cable gland being fitted with this option.
- The use of metallic continuity diaphragm component specified by the cable gland type designation for use when terminating lead sheathed cables.

- The use of an earthing device component specified by the cable gland type designation for use with variable speed drive (VSD) / variable frequency drive (VFD) cables.
- Alternative material of manufacture of the ferrule to be the same as the gland material.
- The use of seals suitable for flat form cables.
- The use of an O ring seal between the body and the entry item to provide a deluge seal.
- Alternative outer seal arrangement to allow the glands to be fitted to flexible conduit.
- The option to fit a blanking disc between the outer seal and the main body to maintain a minimum IP66 rating. The disc is to be marked 'Ex e only' to indicate that the gland is not suitable for Ex d applications when the disc is fitted.

The gland and seal sizes are determined by the entry thread and cable range take sizes:

Gland Size	Entry Thread	Entry Thread "B" version	Inner Seal sheath range Ø (mm)		SWA, STA, strip armour, pliable wire armour & wire braid (mm)		SWA (mm)		Outer seal sheath range Ø (mm)	
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
16	M16 x 1.5	-	3.1	8.6	0	0.8	0.8	1.25	6.1	13.2
20S/16	M20 x 1.5	M25 x 1.5	3.1	8.6	0	0.8	0.8	1.25	6.1	13.2
20S16/20S	M20 x 1.5	M25 x 1.5	3.1	8.6	0	0.8	0.8	1.25	9.5	15.9
20S	M20 x 1.5	M25 x 1.5	6.1	11.6	0	0.8	0.8	1.25	9.5	15.9
20S/20	M20 x 1.5	M25 x 1.5	6.1	11.6	0	0.8	0.8	1.25	12.5	20.9
20	M20 x 1.5	M25 x 1.5	6.5	13.9	0	0.8	0.8	1.25	12.5	20.9
20/25S	M20 x 1.5	M25 x 1.5	6.5	13.9	0	1.1	1.25	1.6	14.0	22.0
20/25	M20 x 1.5	M25 x 1.5	6.5	13.9	0	1.1	1.25	1.6	18.2	26.2
25S	M25 x 1.5	M32 x 1.5	11.1	19.9	0	1.1	1.25	1.6	14.0	22.0
25	M25 x 1.5	M32 x 1.5	11.1	19.9	0	1.1	1.25	1.6	18.2	26.2
25/32	M25 x 1.5	M32 x 1.5	11.1	19.9	0	1.2	1.6	2.0	23.7	33.9
32	M32 x 1.5	M40 x 1.5	17.0	26.2	0	1.2	1.6	2.0	23.7	33.9
32/40	M32 x 1.5	M40 x 1.5	17.0	26.2	0	1.2	1.6	2.0	27.9	40.4
40	M40 x 1.5	M50 x 1.5	22.0	32.1	0	1.2	1.6	2.0	27.9	40.4
40/50S	M40 x 1.5	M50 x 1.5	22.0	32.1	0	1.5	2.0	2.5	35.2	46.7
50S	M50 x 1.5	M63 x 1.5	29.5	38.1	0	1.5	2.0	2.5	35.2	46.7
50S/50	M50 x 1.5	M63 x 1.5	29.5	38.1	0	1.5	2.0	2.5	40.4	53.1
50	M50 x 1.5	M63 x 1.5	35.6	44.0	0	1.5	2.0	2.5	40.4	53.1
50/63S	M50 x 1.5	M63 x 1.5	35.6	44.0	0	1.5	2.0	2.5	45.6	59.4
63S	M63 x 1.5	M75 x 1.5	40.1	49.9	0	1.5	2.0	2.5	45.6	59.4
63S/63	M63 x 1.5	M75 x 1.5	40.1	49.9	0	1.5	2.0	2.5	54.6	65.6
63	M63 x 1.5	M75 x 1.5	47.2	55.9	0	1.5	2.0	2.5	54.6	65.9
63/75S	M63 x 1.5	M75 x 1.5	47.2	55.9	0	1.5	2.0	2.5	59.0	72.1
75S	M75 x 1.5	M90 x 2.0	52.8	61.9	0	1.5	2.0	2.5	59.0	72.1
75S/75	M75 x 1.5	M90 x 2.0	52.8	61.9	0	1.5	2.5	3.0	66.7	78.5
75	M75 x 1.5	M90 x 2.0	59.1	67.9	0	1.5	2.5	3.0	66.7	78.5
75/90	M75 x 1.5	M90 x 2.0	59.1	67.9	0	1.6	3.0	3.5	76.2	90.4
90	M90 x 2.0	M100 x 2.0	66.6	79.9	0	1.6	3.0	3.5	76.2	90.4
90/100	M90 x 2.0	M100 x 2.0	66.6	79.9	0	1.6	3.15	4.0	86.1	101.5
100	M100 x 2.0	M115 x 2.0	76.0	90.9	0	1.6	3.15	4.0	86.1	101.5
100/115	M100 x 2.0	M115 x 2.0	76.0	90.9	0	1.6	3.15	4.0	101.5	110.3
115	M115 x 2.0	M130 x 2.0	86.0	97.9	0	1.6	3.15	4.0	101.5	110.3
115/130	M115 x 2.0	M130 x 2.0	86.0	97.9	0	1.6	3.15	4.0	110.2	123.3
130	M130 x 2.0	N/A	97.0	114.9	0	1.6	3.15	4.0	110.2	123.3

E*-FF in these sizes only:

Gland size	Entry thread	Entry thread 'B' version	Cable inner seal sheath range (mm)		Cable outer seal sheath range (mm)	
			Min.	Max.	Min	Max
20s	M20 x1.5	M25 x1.5	4.0 x 6.2	6.8 x 11.7	4.4 x 7.8	6.8 x 11.7
20	M20 x1.5	M25 x1.5	5.7 x 8.0	8.7 x 13.5	4.4 x 10.9	8.7 x 16.0

