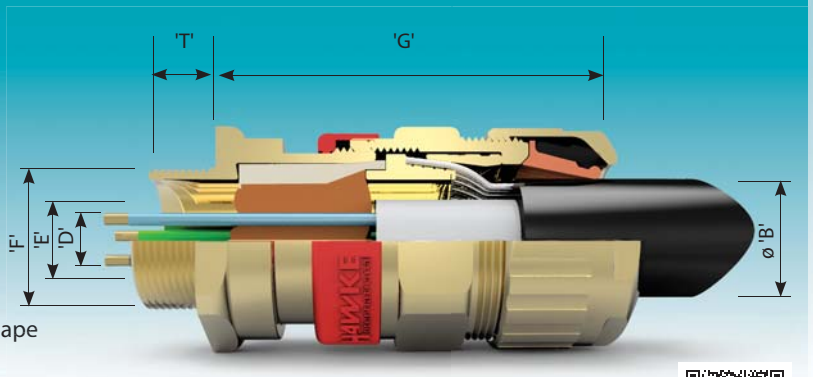
Group I Cable Glands - Mining

Flameproof, Increased Safety
Certified ATEX / IECEx



653/UNIV

Application

- Mining.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables.
- For particular use with:-
- Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
  - Cables that exhibit 'Cold Flow' characteristics.
  - Enclosures containing an ignition source.
- See technical section for installation rules and regulations.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size		Cable Acceptance Details							'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Inner Sheath / Cores			Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			Max. Over Cores 'D'	Max Inner Sheath 'E'	Max. No. of Cores	Min	Max	Orientation 1	Orientation 2			
Os	M20	½"	8.9	10.0	12	5.5	12.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
O	M20	½"	8.9	10.0	12	9.5	16.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
A	M20	¾" or ½"	11.0	12.5	15	12.5	20.5	0.8 / 1.25	0.0 / 0.8	67.0	30.0	32.5
B	M25	1" or ¾"	16.2	18.4	20	16.9	26.0	1.25 / 1.6	0.0 / 0.7	73.6	36.0	39.5
C	M32	1¼" or 1"	21.9	24.7	42	22.0	33.0	1.6 / 2.0	0.0 / 0.7	78.0	46.0	50.5
C2	M40	1½" or 1¼"	26.3	29.7	60	28.0	41.0	1.6 / 2.0	0.0 / 0.7	82.4	55.0	60.6
D	M50	2" or 1½"	37.1	41.7	80	36.0	52.6	1.8 / 2.5	0.0 / 1.0	88.7	65.0	70.8
E	M63	2½" or 2"	47.8	53.5	100	46.0	65.3	1.8 / 2.5	0.0 / 1.0	92.7	80.0	88.0
F	M75	3" or 2½"	59.0	66.2 / 65.3[1]	120	57.0	78.0	1.8 / /2.5	0.0 / 1.0	99.4	95.0	104.0

All dimensions in millimetres (except * where dimensions are in inches). Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.

[1] *Smaller value is applicable when selecting reduced NPT entry option.*

Technical Data

- Flameproof Exdb and Increased Safety Exeb Ⓔx I M2.
- Certificate No's: Baseefa08ATEX0329X and IECEx BAS 08.0115X.
- Suitable for use in Mines.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN 60079-7.
- Ingress Protection: IP66, IP67 and IP 68* (30 metres for 7 days) to IEC/EN 60529.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 466.

** Additional installation procedures required.*

Alternative Reversible Armour Clamping Rings (RAC)

SELECTION TABLE

Size Ref.	Steel Wire Armour / Braid / Tape	
	Orientation 1	Orientation 2
B	0.9 - 1.25	0.5 - 0.9
C	1.2 - 1.6	0.6 - 1.2
C2	1.2 - 1.6	0.6 - 1.2
D	1.45 - 1.8	1.0 - 1.45
E	1.45 - 1.8	1.0 - 1.45
F	1.45 - 1.8	1.0 - 1.45

Features

- Provides a barrier seal between the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- The compound chamber may be separated from the cured compound to ensure that the chamber has been effectively filled. If required, external voids can be repaired.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides a cable retention seal and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass or 316 Stainless Steel.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows:
Alternative Seal (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
653/UNIV	C	M32	Brass	AR
653/UNIV	C	1 ¼" NPT	Brass	AR

Two part sealing compound and assembly instructions are supplied with the cable gland.

Alternative certification options available: