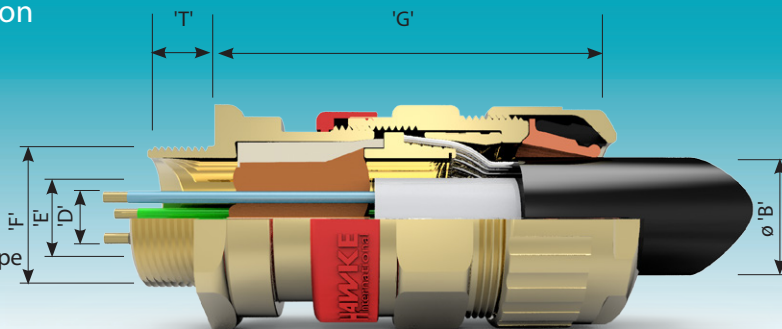


# Group II Cable Glands

Flameproof, Increased Safety, Dust Protection  
Class - Zones - Divisions  
Certified ATEX / IECEx / c CSA us

## Application

- Outdoor or indoor use.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables.
- For particular use with-
  - Cable inner sheaths 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 in gas group IIC areas or containing an ignition source in a Zone 1 area.
- See technical section for installation rules and regulations.



ICG 653/UNIV

**CABLE GLAND SELECTION TABLE**

| Size Ref. | Entry Thread Size 'F' |                          | Cable Acceptance Details |                          |                          |                          |                  |      |                    |               | 'G'  | Hexagon Dimensions |                |
|-----------|-----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------|------|--------------------|---------------|------|--------------------|----------------|
|           |                       |                          | Inner Sheath / Cores     |                          |                          |                          | Outer Sheath 'B' |      | Armour / Braid 'C' |               |      | Across Flats       | Across Corners |
|           | Metric                | NPT * Standard or Option | Max. Over Cores 'D'      | Max Inner Sheath 'E'     | NOTE 1 Max. No. of Cores | NOTE 2 Max. No. of Cores | Min              | Max  | Orientation 1      | Orientation 2 |      |                    |                |
| Os        | M20                   | 1/2"                     | 8.9                      | 10.0                     | 12                       | 6                        | 5.5              | 12.0 | 0.8 / 1.25         | 0.0 / 0.8     | 67.0 | 24.0               | 26.5           |
| O         | M20                   | 1/2"                     | 8.9                      | 10.0                     | 12                       | 6                        | 9.5              | 16.0 | 0.8 / 1.25         | 0.0 / 0.8     | 67.0 | 24.0               | 26.5           |
| A         | M20                   | 3/4" or 1/2"             | 11.0                     | 12.5                     | 15                       | 10                       | 12.5             | 20.5 | 0.8 / 1.25         | 0.0 / 0.8     | 67.0 | 30.0               | 32.5           |
| B         | M25                   | 1" or 3/4"               | 16.2                     | 18.4                     | 30                       | 21                       | 16.9             | 26.0 | 1.25 / 1.6         | 0.0 / 0.7     | 73.6 | 36.0               | 39.5           |
| C         | M32                   | 1 1/4" or 1"             | 21.9                     | 24.7                     | 42                       | 42                       | 22.0             | 33.0 | 1.6 / 2.0          | 0.0 / 0.7     | 78.0 | 46.0               | 50.5           |
| C2        | M40                   | 1 1/2" or 1 1/4"         | 26.3                     | 29.7                     | 60                       | 60                       | 28.0             | 41.0 | 1.6 / 2.0          | 0.0 / 0.7     | 82.4 | 55.0               | 60.6           |
| D         | M50                   | 2" or 1 1/2"             | 37.1                     | 41.7                     | 80                       | 80                       | 36.0             | 52.6 | 1.8 / 2.5          | 0.0 / 1.0     | 88.7 | 65.0               | 70.8           |
| E         | M63                   | 2 1/2" or 2"             | 47.8                     | 53.5                     | 100                      | 100                      | 46.0             | 65.3 | 1.8 / 2.5          | 0.0 / 1.0     | 92.7 | 80.0               | 88.0           |
| F         | M75                   | 3" or 2 1/2"             | 59.0                     | 66.2 / 65.3 <sup>1</sup> | 120                      | 120                      | 57.0             | 78.0 | 1.8 / 2.5          | 0.0 / 1.0     | 99.4 | 95.0               | 104.0          |

'T' — Metric entry threads are 1.5mm pitch as standard, 15mm length of thread. All dimensions in millimetres (except \* where dimensions are in inches).  
Note 1: ATEX / IECEx certification only - Note 2: All other certification.

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option. Note: Larger sizes are available.

## Technical Data

### ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb, Dust Extb IIIC Db and ExnR IIC Gc (Ex) II 2 / 3GD.
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68\* (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 301

### c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 60079-31, CSA 22.2 No: 60079-0, CSA 22.2 No: 60079-1, CSA 22.2 No: 60079-7, CSA 22.2 No: 60079-31, UL 2225

## Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- 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) |
|------------------|------|------------|----------|------------|
| ICG 653/UNIV     | C    | M32        | Brass    | AR         |
| ICG 653/UNIV     | C    | 1 1/4" NPT | Brass    | AR         |

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

### Alternative Reversible Armour Clamping Rings (RAC)

| 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    |

