



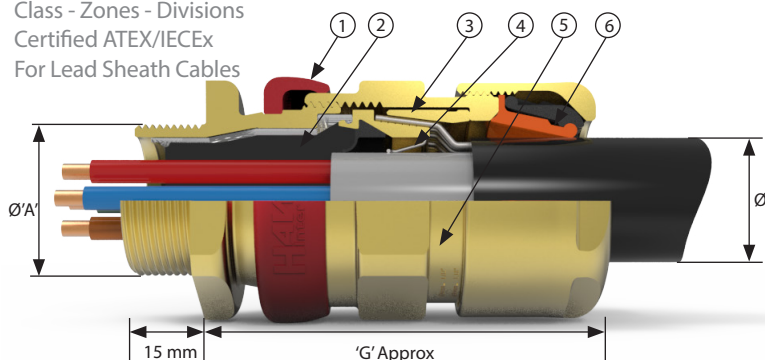
ICG/653/UNIV/L

Flameproof, Increased Safety, Dust Protection

Class - Zones - Divisions

Certified ATEX/IECEx

For Lead Sheath Cables



- 1 Inspectable Deluge Seal
- Offering IP66, IP67, IP68 & IP69 Ingress Protection
- 2 Transparent Elastomeric Fully Inspectable Compound Pot –
compatible with both injectable resin and 2 part compound
- 3 Reversible Armour Clamp
- For all types of armour and braid
- 4 Suitable for installation on both armoured
and non-armoured cable
- 5 Electrical Bond on the cables lead inner sheath
- 6 Patented Cable Gland Tightening Guide
- Helps prevent damage caused by over tightening
- 7 Unique Rear Seal - Offering ultimate sealing over an
extremely wide cable acceptance range

Dual certified fully inspectable Exe/Exd barrier gland providing a seal around individual cable cores on lead sheathed cables which are not effectively filled, have hygroscopic fillers or contains fibre optic cores. For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z' elastomer and plastic insulated cables with a lead inner sheath. The ICG/653/UNIVERSAL/L is available with either ExPress liquid barrier resin or QSP 2-part hand mix compound, both with a cure time of 30 minutes.

Cable Gland Selection Table

| Size Ref. | Entry Thread Size 'A' | | Cable Acceptance Details | | | | | | | | 'G' | Hexagon Dimension | |
|-----------|-----------------------|---------------|---------------------------|------------------------|-----------------|-----------------------|------------------|------|------------------|---------------|-------|-------------------|----------------|
| | Metric | NPT* Standard | Inner Sheath / Cores 'ØA' | | | | Outer Sheath 'B' | | Armour Braid 'C' | | | Across Flats | Across Corners |
| | | | Max Inner Sheath | Max Over Core Diameter | Max No of Cores | Max No of Fibre Optic | Min | Max | Orientation 1 | Orientation 2 | | | |
| Os | M20 ² | ½" | 8.1** | 8 | 12 | 48 | 5.5 | 12 | 0.8 / 1.25 | 0.0 / 0.8 | 58.4 | 24 | 26.5 |
| O | M20 ² | ½" | 11.7 | 8.8 | 12 | 48 | 9.5 | 16 | 0.8 / 1.25 | 0.0 / 0.8 | 58.4 | 24 | 26.5 |
| A | M20 | ¾" or ½" | 14 | 10.8 | 15 | 72 | 12.5 | 20.5 | 0.8 / 1.25 | 0.0 / 0.8 | 60.6 | 30 | 32.5 |
| B | M25 | 1" or ¾" | 19.9 | 15.9 | 30 | 144 | 16.9 | 26 | 1.25 / 1.6 | 0.0 / 0.7 | 67.3 | 36 | 39.5 |
| C | M32 | 1¼" or 1" | 26.2 | 21.9 | 42 | - | 22 | 33 | 1.6 / 2.0 | 0.0 / 0.7 | 73.2 | 46 | 50.5 |
| C2 | M40 | 1½" or 1¼" | 32.3 | 26.7 | 60 | - | 28 | 41 | 1.6 / 2.0 | 0.0 / 0.7 | 78.3 | 55 | 60.6 |
| D | M50 | 2" or 1 1½" | 44.2 | 37.7 | 80 | - | 36 | 52.6 | 1.8 / 2.5 | 0.0 / 1.0 | 97.5 | 65 | 70.8 |
| E | M63 | 2½" or 2" | 56 | 49 | 100 | - | 46 | 65.3 | 1.8 / 2.5 | 0.0 / 1.0 | 93.5 | 80 | 88 |
| F | M75 | 3" or 2½" | 68 | 59.8 | 120 | - | 57 | 78 | 1.8 / 2.5 | 0.0 / 1.0 | 104.5 | 95 | 104 |

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

2. Are available with M16 entry thread, which reduces Max Over Core Diameter to 7mm.

**Recommended value to suit integrated Express resin stop. May be increased to 10.0 if QSP compound or alternative Express resin stop method are used.

Technical Data

| | |
|-----------------------|---|
| Ingress Protection | IP66, IP67, IP68 (30 metres for 7 days, special conditions may apply), IP69 to IEC/EN 60529 and NEMA 4X |
| Deluge Protection | to DTS01 |
| Operating Temperature | -60°C to +80°C |

ATEX/IECEx

| | |
|-------------------------------|---|
| ATEX/IECEx Protection Class | Ex II 2GD Ex db IIC Gb; Ex eb IIC Gb; Ex nR IIC Gc; Ex tb IIIC Db |
| ATEX Certificate No | CML 18ATEX1268X CML 19ATEX4507 (Ex nR) |
| IECEx Certificate No | CML 18.0131X |
| Construction & Test Standards | IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7, IEC/EN 60079-15 and IEC/EN 60079-31 |
| Marine Approvals | DNV: TAE0000BS |
| Additional Certifications | EAC: TC RU C-GB HA91 B 0046 19 |
| | Inmetro: IEx 14.0272X |
| | KCs: 17-KA4BO-0159X to 0167X |
| | PESO: P450038 CNEX: CNEx17 2858X |

NEC/CEC

| | |
|-------------------------------|--|
| NEC Protection Class | Class I Div 1 ABCD Class II Div 2 EFG and Class III Class I, Zone I, AEx db IIC Gb, AEx eb IIC Gb; Zone 21, AEx tb IIIC Db |
| CEC Protection Class | Class I Div 1 ABCD Class II Div 2 EFG and Class III Ex db IIC Gb; Ex eb IIC Gb; Ex tb IIIC Db |
| c CSA us Certificate | 1024328 |
| Construction & Test Standards | UL2225, UL1203, UL514B, CSA C22.2 NO. 0-10, CSA C22.2 NO. 174-18, CSA 22.2 60079-0, CSA 22.2 60079-1, CSA 22.2 60079-7 and CSA 22.2 60079-31 |

Alternative Reversible Armour Clamping Ring Size Selection

| Size Ref | 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 |

Ordering Information

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

| Cable Gland Type | Size | Thread | Barrier Type | Material | (Optional) |
|------------------|------|--------|----------------------------|----------|------------|
| ICG 653/UNIV/L | C | M32 | (Standard 2 part compound) | Brass | AR |
| ICG 653/UNIV/L | C | 1 1/4" | EP (ExPress Resin) | Brass | AR |

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

Example Code: ICG 653/UNIV /L C M32 EP Stainless Steel

Barrier Gland Options

ExPress barrier resin – a liquid injectable and fast curing resin, allowing for faster installation time than traditional 2-part compounds. Utilising a unique clear compound chamber allowing full visibility of the flameproof seal during installation and inspection, the ExPress barrier resin is unparalleled as a global Exd solution.

QSP 2-part hand mix putty, simple to use with a cure time from 30 minutes. Particularly useful where termination space is limited or cables are running horizontally to the installation area. Can be inspected and repaired if necessary, allowing for the very highest level of safety.

Cable Gland Tightening Guide

Whilst Hawke International goes to great lengths to ensure products are designed to be as simple to install, inspect and maintain as is possible, differing levels of competency, training and understanding can lead to glands being incorrectly installed. With hazardous area products, any poor installation issues can not only lead to expensive equipment failure, but also potential explosion risks and associated risk to life.

To help address issues with the overtightening of cable glands and the resultant damage to cables and seals, Hawke International has developed the patented **INBUILT TIGHTENING GUIDE**.

Without the need for fiddly measuring systems, the guide provides a permanent visual indication of the gland tightness through installation, inspection and maintenance.

How it works

The gland is permanently marked with various lines/numbers indicating the correct tightening level related to the cable diameter. Following the relevant cable gland Installation Instructions, the back seal should be tightened until a seal is formed on the cable outer sheath and then tightened one further turn.



Follow cable gland installation instructions until final stage – tightening of rear seal



Tighten backnut until a seal is formed onto the cable, then tighten one further turn



The backnut should be level with the marking guide corresponding to its diameter – this can be visually inspected and adjusted as necessary

Note: The cable gland installation instructions have a printed cable OD measure for if the cable OD is not known