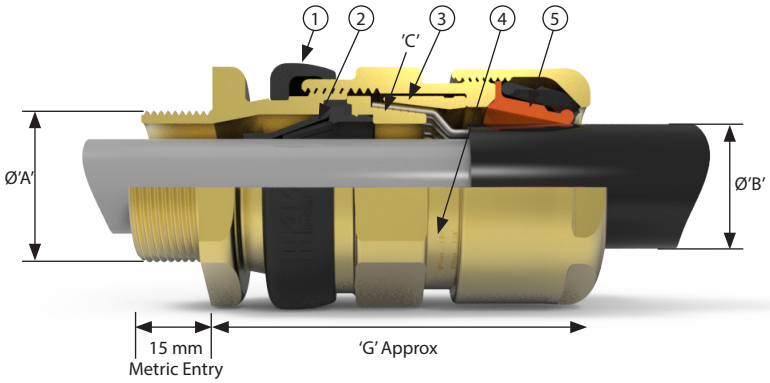
MADE IN BRITAIN

# 153/UNIV

Industrial gland for indoor or outdoor use




- 1 Inspectable Deluge Seal
  - Offering IP66, IP67, IP68 & IP69 Ingress Protection
- 2 Passive diaphragm seal
  - Suitable for cables exhibiting 'Cold Flow.' Fully inspectable
- 3 Reversible Armour Clamp - For all types of armour and braid
- 4 Patented Cable Gland Tightening Guide
  - Helps prevent damage caused by over tightening
- 5 Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range

The industrial 153/Universal Cable Gland is robust and 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 exhibit 'Cold Flow' characteristics.

## Cable Gland Selection Table

| Size Ref. | Entry Thread Size 'A' | | Cable Acceptance Details | | | | | | 'G' | Hexagon Dimensions | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Metric | NPT* | Inner Sheath | | Outer Sheath 'B' | | Armour/Braid 'C' | | | Across Flats | Across Corners |
| | | | Min | Max | Min | Max | Orientation 1 | Orientation 2 | | | |
| Os | M202 | ½" | 3.5 | 8.1 | 5.5 | 12 | 0.8/1.25 | 0.0/0.8 | 58.4 | 24 | 26.5 |
| O | M202 | ½" | 6.5 | 11.4 | 9.5 | 16 | 0.8/1.25 | 0.0/0.8 | 58.4 | 24 | 26.5 |
| A | M20 | ¾" or ½" | 8.4 | 14.3 | 12.5 | 20.5 | 0.8/1.25 | 0.0/0.8 | 59.6 | 30 | 32.5 |
| B | M25 | 1" or ¾" | 11.1 | 19.7 | 16.9 | 26 | 1.25/1.6 | 0.0/0.7 | 66.4 | 36 | 39.5 |
| C | M32 | 1¼" or 1" | 17.6 | 26.5 | 22 | 33 | 1.6/2.0 | 0.0/0.7 | 71.2 | 46 | 50.5 |
| C2 | M40 | 1½" or 1¼" | 23.1 | 32.5 | 28 | 41 | 1.6/2.0 | 0.0/0.7 | 75.2 | 55 | 60.6 |
| D | M50 | 2" or 1½" | 28.9 | 44.4/42.3[1] | 36 | 52.6 | 1.8/2.5 | 0.0/1.0 | 98 | 65 | 70.8 |
| E | M63 | 2½" or 2" | 39.9 | 56.3/54.3[1] | 46 | 65.3 | 1.8/2.5 | 0.0/1.0 | 94.4 | 80 | 88.0 |
| F | M75 | 3" or 2½" | 50.5 | 68.2/65.3[1] | 57 | 78 | 1.8/2.5 | 0.0/1.0 | 102 | 95 | 104.0 |
| G | M80 | 3½" | 67 | 73 | 75 | 89.5 | 2.0/3.5 | 0.0/1.0 | 90.6 | 106.4 | 115.0 |
| H | M90 | 3½" | 67 | 77.6 | 75 | 89.5 | 2.0/3.5 | 0.0/1.0 | 90.6 | 115 | 130.0 |
| J | M100 | 4" | 75 | 91.6 | 88 | 104.5 | 2.5/4.0 | 0.0/1.0 | 90.6 | 127 | 142.0 |

All dimensions in millimetres (except * where dimensions are in inches). Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.
G size and above are available in the 153/RAC design style.

*1 Smaller value is applicable when selecting reduced NPT entry option.*
*2 Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm.*

## Technical Data

| | |
|---|---|
| Material Options | Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel |
| Construction & Test Standards | IEC/EN 62444 (Anchorage Type D) |
| Ingress Protection | IP66, IP67, IP69 to IEC/EN 60529 and NEMA 4X |
| Enclosure Protection | IK10 to IEC 62262 |
| Deluge Protection | DTS01 |
| Operating Temperature | -60°C to +80°C |

## 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 Clamping Ring (AR), add suffix AR to ordering information

| Cable Gland Type | Size | Thread | Material | (Optional) |
|---|---|---|---|---|
| 153/UNIV | C | M32 | Brass | AR |
| 153/UNIV | C | 1¼" NPT | NP Brass | AR |

Example Code: 153/UNIV C M32 Stainless

# 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.

**Step 1**

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

**Step 2**

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

**Step 3**

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***