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International Approvals



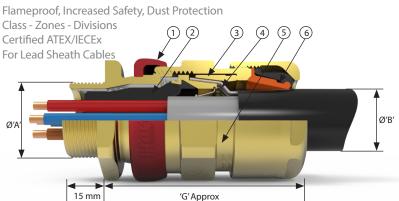








### ICG/653/UNIVERSAL/L



- (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 Electrical Bond on the cables lead inner sheath
  - Patented Cable Gland Tightening Guide Helps prevent damage caused by over tightening
  - 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 or have hygroscopic fillers. For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z' elastomer and plastic insulated cables with a lead inner sheath.

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								Hexagon Dimensions		
	Metric	NPT* Standard	Inner Sheath / Cores				Outer Sheath 'B'		Armour Braid 'C'		'G'	0.000.00	0.242.22
			Max Inner Sheath 'E'	Max Over Core Diameter	Max No of Cores	Max No of Fibre Optic	Min	Max	Orientation 1	Orientation 2		Across Flats	Across Corners
Os	M20	1/2"	8.1	8.0	12	48	5.5	12.0	0.8/1.25	0.0/0.8	58.4	24.0	26.5
0	M20	1/2"	10.2	8.8	12	48	9.5	16.0	0.8/1.25	0.0/0.8	58.4	24.0	26.5
Α	M20	3/4" or 1/2"	12.5	10.8	15	72	12.5	20.5	0.8/1.25	0.0/0.8	60.6	30.0	32.5
В	M25	1" or ¾"	18.0	15.9	30	144	16.9	26.0	1.25/1.6	0.0/0.7	67.3	36.0	39.5
C	M32	1¼" or 1"	24.3	21.9	42	-	22.0	33.0	1.6/2.0	0.0/0.7	73.2	46.0	50.5
C2	M40	1½" or 1¼"	30.3	26.7	60	-	28.0	41.0	1.6/2.0	0.0/0.7	78.3	55.0	60.6
D	M50	2"	41.9	37.7	80	-	36.0	52.6	1.8/2.5	0.0/1.0	97.5	65.0	70.8
Е	M63	21/2"	52.9	49.0	100	-	46.0	65.3	1.8/2.5	0.0/1.0	93.5	80.0	88.0
F	M75	3"	64.9	59.8	120	-	57.0	78.0	1.8/2.5	0.0/1.0	104.5	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.													

Technical Data						
Type of Protection	Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db Ex II 2GD					
ATEX Classification	Certificate No's: CML18ATEX1268X and IECEx CML 18.0131X					
Area Classification	Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and Gas Groups IIA, IIB and IIC					
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31					
Ingress Protection	IP66, IP67, IP68 (30 metres for 7 days) and IP69 to IEC/EN 60529 and NEMA 4X					
Deluge Protection	To DTS01					
Operating Temperature	-60°C to +80°C					

Alternative Reversible Armour Clamping Ring Size Selection							
Size Ref	Steel Wire Armour / Braid / Tape						
Size Ref	Orientation 1	Orientation 2					
В	0.9 - 1.25	0.5 - 0.9					
С	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

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

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

 $\stackrel{\cdot}{\text{Two part sealing compound and assembly instructions are supplied with the cable gland}$ 





HKE-DS-ICG/653/UNIV/L-V1 June 2019

### Barrier Gland Options

1 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



