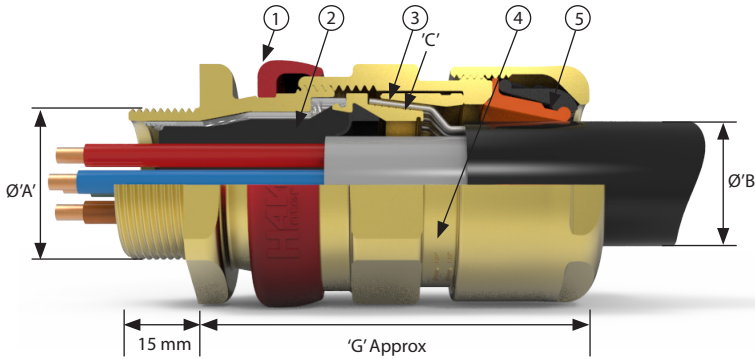




653/UNIV GP1

Mining, Flameproof, Increased Safety
Certified ATEX / IECEx / UKEX



- 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 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

Dual certified Exe/Exd group I mining barrier gland, providing a seal around individual cable cores, especially for cables that exhibit "cold flow" characteristics, are not effectively filled, have hygroscopic fillers or have fibre optic cores. For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z' elastomer and plastic insulated cables. The 653/UNIVERSAL 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 Dimensions	
	Metric	NPT*	Inner Sheath / Cores				Outer Sheath 'B'		Armour/Braid 'C'			Across Flats	Across Corners
			Max Inner Sheath 'E'	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.

Technical Data

Material Options	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
Ingress Protection	IP66, IP67, IP68 (30 metres for 7 days, special conditions may apply) and IP69 to IEC/EN 60529 and NEMA 4X
Operating Temperature	-60°C to +80°C
Enclosure Protection	IK10 to IEC 62262

Approvals

Protection Class	Ex I M2 Ex db I Mb, Ex eb I Mb
ATEX Certificate No	CML19ATEX1169X
IECEx Certificate No	CML 19.0047X
UKEX Certificate No	CML 21UKEX1162X
Construction & Test Standards	IEC/EN 62444 (Anchorage Type D), IEC/EN 60079-0, 1, 7
Additional Certifications	EAC: No EA3C RU C-GB.HA91.B.00264/21 EQM: 20-11-27224/Q20-11-000979/NB0007

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)
M/653/UNIV	C	M32	N/A (Express Resin supplied as standard)	Brass	AR
M/ 653/UNIV	C	1 1/4 "	QSP (2 part putty compound)	Brass	AR

Assembly instructions are supplied with the cable gland
Example Code: M/653/UNIV C M32 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. All barrier glands are now supplied with Express Resin as standard.



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