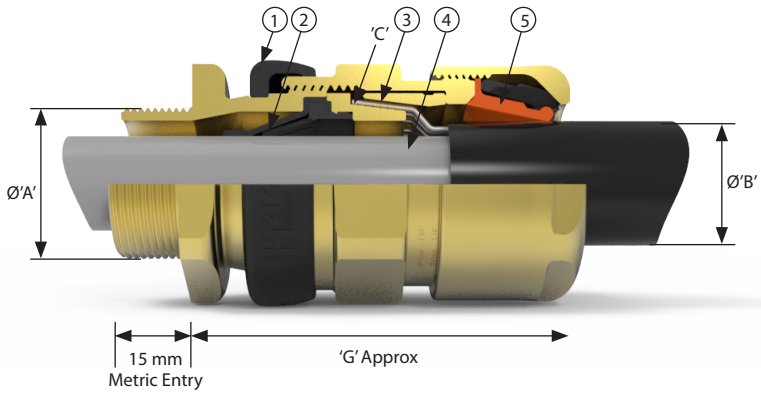
MADE IN BRITAIN

453/UNIV GP1

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

International Approvals



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 453 Universal group I mining Cable Gland is dual certified Exe/Exd, 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, with a fully inspectable passive inner diaphragm seal.

Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details						'G'	Hexagon Dimensions	
	Metric	NPT* Standard	Inner Sheath		Outer Sheath 'B'		Armour/Braid 'C'			Across Flats	Across Corners
			Min	Max	Min	Max	Orientation 1	Orientation 2			
Os	M20	½"	3.5	8.1	5.5	12.0	0.8 / 1.25	0.0 / 0.8	58.4	24.0	26.5
O	M20	½"	6.5	11.4	9.5	16.0	0.8 / 1.25	0.0 / 0.8	58.4	24.0	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	30.0	32.5
B	M25	1" or ¾"	11.1	19.7	16.9	26.0	1.25 / 1.6	0.0 / 0.7	66.4	36.0	39.5
C	M32	1¼" or 1"	17.6	26.5	22.0	33.0	1.6 / 2.0	0.0 / 0.7	71.2	46.0	50.5
C2	M40	1½" or 1¼"	23.1	32.5	28.0	41.0	1.6 / 2.0	0.0 / 0.7	75.2	55.0	60.6
D	M50	2" or 1½"	28.9	44.4 / 42.3[1]	36.0	52.6	1.8 / 2.5	0.0 / 1.0	98	65.0	70.8
E	M63	2½" or 2"	39.9	56.3 / 54.3[1]	46.0	65.3	1.8 / 2.5	0.0 / 1.0	94.4	80.0	88.0
F	M75	3" or 2½"	50.5	68.2 / 65.3[1]	57.0	78.0	1.8 / 2.5	0.0 / 1.0	102	95.0	104.0

All dimensions in millimetres (except * where dimensions are in inches). Metric entry threads are 1.5mm pitch as standard

[1] *Smaller value is applicable when selecting reduced NPT entry option.*

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 instructions apply), IP69 to IEC/EN 60529 and NEMA 4X
Enclosure Protection	IK10 to IEC 62262
Operating Temperature	-60°C to +80°C
Applications	Suitable for use in Group 1 Mining Applications
Approvals	
ATEX/IECEx Protection Class	Ex IM2 Ex db I Mb, Ex eb I Mb
ATEX Certificate No	CML 19ATEX1166X
IECEx Certificate No	CML 19.0044X
UKEX Certificate No	CML 21UKEX1160X
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

Ordering Information

If brass is required please omit material selection
Format for ordering is as follows: Alternative Ring (R), add suffix R to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
453UM	C	M32		R
453UM	C	1.25	NP	R

Example Code: 453UMCM32R

Please note all NPT entries should be state as a decimal
Please refer to part code logic information page for further details on product options

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

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