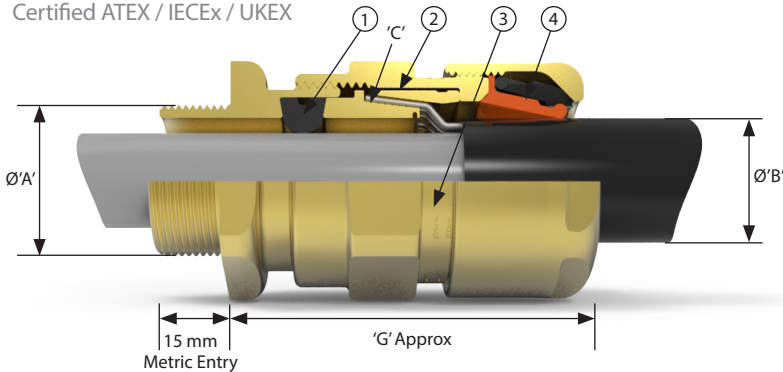




453/RAC GP1

Mining
Flameproof, Increased Safety
Certified ATEX / IECEx / UKEX



- 1 Elastomeric Exd flameproof seal on cable inner sheath
- 2 Reversible Armour Clamp - For all types of armour and braid
- 3 Patented Cable Gland Tightening Guide - Helps prevent damage caused by over tightening
- 4 Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range

International Approvals
CE
Ex
EAC
IECEx
UK
CA

The 453/RAC 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. The gland provides an elastomeric seal on the cable inner sheath, and a low smoke, zero halogen IP and retention seal onto the cable outer sheath.

Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details								Hexagon Dimensions		
	Metric	NPT* Standard	Inner Sheath				Outer Sheath 'B'		Armour/Braid 'C'		'G'	Across Flats	Across Corners
			Standard Seal		Alternative Seal (S)		Min	Max	Orientation 1	Orientation 2			
			Min	Max	Min	Max							
Os	M20	½"	3.2	8	-	-	5.5	12.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5
O	M20	½"	6.5	11.9	-	-	9.5	16.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5
A	M20	¾" or ½"	10	14.3	9	13.4	12.5	20.5	0.8 / 1.25	0.0 / 0.8	53.0	30.0	32.5
B	M25	1" or ¾"	13	20.2	9.5	15.4	16.9	26.0	1.25 / 1.6	0.0 / 0.7	69.5	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	22.0	33.0	1.6 / 2.0	0.0 / 0.7	64.0	46.0	50.5
C2	M40	1½" or 1¼"	25	32.5	22	28.0	28.0	41.0	1.6 / 2.0	0.0 / 0.7	68.3	55.0	60.6
D	M50	2" or 1½"	31.5	44.4 / 42.3 ¹	27.5	34.8	36.0	52.6	1.8 / 2.5	0.0 / 1.0	79.0	65.0	70.8
E	M63	2½" or 2"	42.5	56.3 / 54.3 ¹	39	46.5	46.0	65.3	1.8 / 2.5	0.0 / 1.0	78.9	80.0	88.0
F	M75	3" or 2½"	54.5	68.2 / 65.3 ¹	49.5	58.3	57.0	78.0	1.8 / 2.5	0.0 / 1.0	83.7	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 and IP68 (30 metres for 7 days, special instructions apply) to IEC/EN 60529
Operating Temperature	-60°C to +100°C
Enclosure Protection	IK10 to IEC 62262

Approvals

ATEX/IECEx Protection Class	Ex IM2 Ex db I Mb, Ex eb I Mb
ATEX Certificate No	CML 19ATEX1165X
IECEx Certificate No	CML 19.0043X
UKEX Certificate No	CML 21UKEX1159X
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 (S), Alternative Clamping Ring (AR), add suffix S and/or AR to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
M/453/RAC	C	M32	Brass	AR
M/453/RAC	C	1¼" NPT	Brass	S

Order Example: M/453/RAC C M32 BRASS AR

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