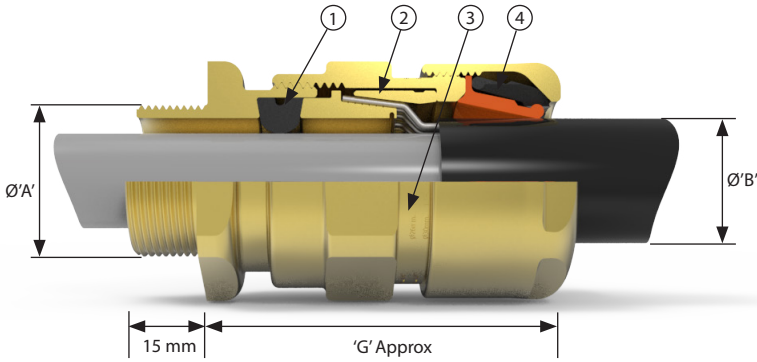
MADE IN BRITAIN

International Approvals

501/453/RAC

Flameproof, Increased Safety, Dust Protection
Class - Zones
Certified ATEX / IECEx / c CSA us



- 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.

The 501/453/RAC 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. See technical section for installation rules and regulations

Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details								'G'	Hexagon Dimensions	
			Inner Sheath				Outer Sheath 'B'		Armour Braid 'C'				
			Standard Seal		Alternative Seal (S)								
	Metric	NPT* Standard							Orientation	Orientation		Across Flats	Across Corners
Os	M202	½"	3.2	8.0	-	-	5.5	12.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5
O	M202	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"	10.0	14.3	9.0	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"	13.0	20.2	9.5	15.4	16.9	26.0	1.25 / 1.6	0.0 / 0.7	59.5	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"	25.0	32.5	22.0	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]	39.0	46.5	46.0	65.3	1.8 / 2.5	0.0 / 1.0	78.4	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
G	M80	3½"	67.0	73.0	-	-	75.0	89.5	2.0 / 3.5	0.0 / 1.0	95.6	106.4	115.0
H	M90	3½"	67.0	77.6	-	-	75.0	89.5	2.0 / 3.5	0.0 / 1.0	95.6	115.0	130.0
J	M100	4"	77.0	91.6	-	-	88.0	104.5	2.5 / 4.0	0.0 / 1.0	95.6	127.0	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
G - J size metric entry threads are 2mm pitch as standard, 20mm length of thread

[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
Brass NPT entries are nickel plated as standard.

Technical Data

Ingress Protection	IP66, IP67 and IP68 (30 metres for 7 days, special conditions may apply) to IEC/EN 60529 and NEMA 4X
Deluge Protection	to DTS01
Operating Temperature	-60°C to +100°C
ATEX/IECEx	
ATEX/IECEx Protection Class	Ex II 2GD Ex db IIC Gb; Ex eb IIC Gb; Extb IIIC Db
ATEX Certificate No	CML 19ATEX1167X
IECEx Certificate No	CML 19.0045X
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31
Marine Approvals	DNV: TAE0000BS
Additional Certifications	CNEX: CNEx17 2858X EAC: TC RU C-GB HA91 B 0046 19 EQM: 20-11-27224/Q20-11-000979/NB0007 Inmetro: IEx 14.0272X KCs: 17-KA4BO-0129X to 0137X PESO: P450038 SONCAP: LCOGB049552-0500
NEC/CEC	
NEC Protection Class	Class I, Zone I, AEx eb IIC Gb; Zone 21, AEx tb IIIC Db
CEC Protection Class	Class I Div 2 ABCD, Class II Div 2 EFG and Class III Ex db IIC Gb; Ex eb IIC Gb
c CSA us Certificate	CSA1015065
Construction & Test Standards	UL 60079-0, UL 60079-7, UL 60079-31, CSA 22.2 No: 60079-0, CSA 22.2 No: 60079-1, CSA 22.2 No: 60079-7, CSA 22.2 No: 60079-31, UL514B; UL1203; UL 2225

Alternative Reversible Armour Clamping Ring Size Selection

Size Ref	Steel Wire Armour / Braid / Tape	
	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 Ring (AR), add suffix S and/or AR to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
501/453/RAC	C	M32	Brass	AR
501/453/RAC	C	1¼" NPT	Brass	S

Order Example: 501/453/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