



Harsh & Hazardous

KILLARK[®]

MC & MCX Series

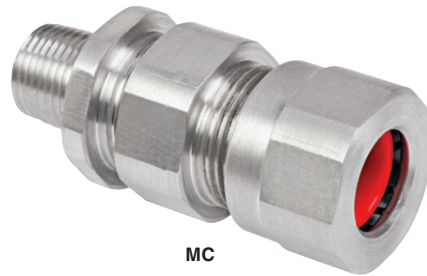
Armored & Unarmored Cable Glands

*Innovated Reliable
Connectivity*





ALUMINUM CABLE CONNECTORS



MC

Class II, Div. 1 & 2, Groups E, F, G
 Class III
 Class I, Zone 2†, Group IIC, Zone 20
 Suitable for wet locations
 Types 3, 4X IP66
 MC5 thru MC0: IPX8 6ft 1hr
 Suitable for use in hazardous location applications when installed according to NEC Articles 501.10



CLENCHER®

FEATURES-SPECIFICATIONS

Applications

Designed for use with jacketed interlocked, continuously corrugated and welded armor cable (all types shown in chart below). Install where it is essential to provide positive grounding to the cable and for a Type 3,4 connection.

Features

- 360° armor grounding spring is reusable.
- Robust threads and world class seal enables easy installation with minimal torque required.
- Design meets and exceeds third party requirements for cable retention.
- Provides sealing back nut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure.
- Copper free aluminum construction for hostile, corrosive and certain hazardous locations

Materials

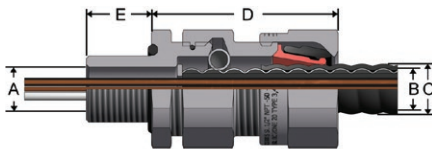
- Body – Copper free aluminum (less than 4/10 of 1%)
- Ground Spring – Stainless Steel
- Backnut Seal – Thermoplastic elastomer (silicone)

- Backnut Clamp – Nylon
- Inner and Outer O-rings – Nitrile

Operating Temperature Range

- -50°C to +60°C

Construction Details



SUITABLE ARMORED/METAL CLAD CABLE TYPES	
AC-	AC90, ACWU90, AC90-HL, ACWU90-HL, ACG90, ACGWU90
MC-	MCC, MCI, MCI-A, MC-HL
RA-	RA90, RA90-HL
TECK-	TECK90, TECK90-HL

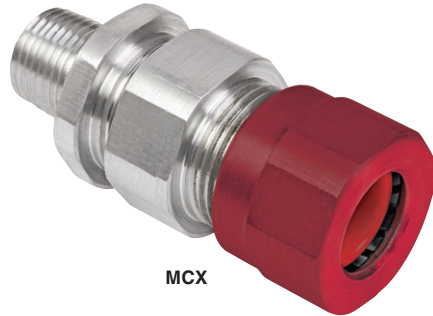
CATALOG NUMBER	ENTRY THREAD SIZE (NPT)	CABLE ACCEPTANCE DETAILS						MAX LENGTH 'D'	NPT LENGTH 'E'	HEXAGON DIMENSIONS	
		MAX NUMBER OF CORES	THROUGH DIAMETER 'A'	ARMOR DIAMETER 'B'		DIAMETER 'C'				ACROSS FLATS	ACROSS CORNERS
				MIN.	MAX.	MIN.	MAX.				
MC1B	1/2"	6	.47" (11.9)	0.43" (10.9)	0.55" (14.0)	0.51" (13.0)	0.63" (16.0)	1.7" (43)	0.83" (21.1)	1.06" (26.9)	1.12" (28.4)
MC1C	1/2"	10	0.56" (14.2)	0.52" (13.2)	0.74" (18.8)	0.60" (15.2)	0.82" (20.8)	2.3" (58)	0.83" (21.1)	1.42" (36)	1.50" (38.1)
MC2	3/4"	21	0.80" (20.3)	0.65" (16.5)	0.95" (24.1)	0.73" (18.5)	1.03" (26.2)	2.5" (64)	0.84" (21.3)	1.61" (41)	1.69" (42.9)
MC3	1"	42	1.04" (26.4)	0.89" (22.6)	1.23" (31.2)	0.97" (24.6)	1.31" (33.3)	2.6" (66)	1.03" (26.2)	1.97" (50)	2.13" (54.1)
MC4	1 1/4"	73	1.28" (32.5)	1.15" (29.2)	1.48" (37.6)	1.23" (31.2)	1.56" (39.6)	3.1" (79)	1.05" (26.7)	2.36" (60)	2.50" (63.5)
MC5	1 1/2"	80	1.66" (42.2)	1.39" (35.3)	1.62" (41.1)	1.47" (37.3)	1.78" (45.2)	4.5" (114.3)	1.07" (27.2)	2.95" (74.9)	3.06" (77.7)
MC6	2"	80	1.98" (50.3)	1.39" (35.3)	1.89" (48)	1.47" (37.3)	2.04" (51.8)	4.5" (114.3)	1.10" (27.9)	2.95" (74.9)	3.06" (77.7)
MC7	2 1/2"	100	2.46" (62.5)	1.85" (47)	2.36" (60)	1.93" (49)	2.51" (63.8)	4.7" (119.4)	1.62" (41.1)	3.54" (89.1)	3.65" (92.7)
MC8	3"	120	2.93" (74.4)	2.19" (55.6)	2.81" (71.4)	2.27" (57.7)	3.01" (76.5)	4.8" (121.9)	1.68" (42.7)	4.06" (103.1)	4.22" (107.2)
MC9	3 1/2"	120	3.40" (86.4)	2.69" (68.3)	3.28" (83.3)	2.77" (70.4)	3.46" (87.9)	4.8" (121.9)	1.73" (43.9)	4.53" (115.1)	4.69" (119.1)
MC0	4"	120	3.92" (99.6)	3.28" (83.3)	3.82" (97)	3.46" (87.9)	4.07" (103.4)	5.1" (129.5)	1.78" (45.2)	5.12" (130)	5.33" (135.4)

Cable armor diameter and cable jacket diameter refer to the dimensions across the crest.

† Where explosion proof/flameproof enclosures are being used the MC must be installed in conjunction with an approved sealing fitting. In Division 2 areas the MC can be fitted directly to an enclosure which has no source of ignition.



ALUMINUM CABLE CONNECTORS



MCX

Class I, Div. 1 & 2, Groups A, B, C, D
Class II, Div. 1 & 2, Groups E, F, G
Class III
Class I, Zones 1 & 2, Group IIC, Zone 20
Types 3, 4X IP66
MCX5-MCX0: IPX8 6ft/1hr.



CLENCHER®

FEATURES-SPECIFICATIONS

Applications

Designed for use with jacketed interlocked, continuously corrugated and welded armor cable (all types shown in chart below). Install where it is essential to provide positive grounding to the cable with a complete gas block/explosion proof seal. Also for a Type 3, 4X connection.

Features

- 360° armor grounding spring is reusable.
- Robust threads and world class seal enables easy installation with minimal torque required.
- Provides a barrier seal between the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.

- Provides cable retention and a low smoke and fume, zero halogen seal onto the cables outer sheath.
- Provides sealing back nut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure
- Copper free aluminum construction for harsh, corrosive and hazardous duty
- Back nut is RED to indicate HAZARDOUS area product

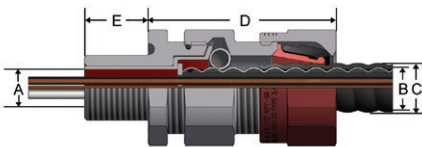
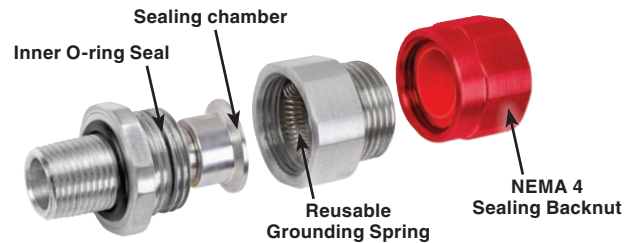
Materials

- Body – Copper free aluminum (less than 4/10 of 1%)
- Ground Spring – Stainless Steel
- Backnut Seal – Thermoplastic elastomer (silicone)
- Backnut Clamp – Nylon
- Inner and Outer O-rings – Nitrile

Operating Temperature Range

- -50°C to +60°C

Construction Details



SUITABLE ARMORED/METAL CLAD CABLE TYPES	
AC-	AC90, ACWU90, AC90-HL, ACWU90-HL, ACG90, ACGWU90
MC-	MCC, MCI, MCI-A, MC-HL
RA-	RA90, RA90-HL
TECK-	TECK90, TECK90-HL

CATALOG NUMBER	ENTRY THREAD SIZE (NPT)	MAX NUMBER OF CORES	CABLE ACCEPTANCE DETAILS						MAX LENGTH 'D'	NPT LENGTH 'E'	HEXAGON DIMENSIONS	
			THROUGH DIAMETER 'A'	ARMOR DIAMETER 'B'		DIAMETER 'C'		ACROSS FLATS			ACROSS CORNERS	
				MIN.	MAX.	MIN.	MAX.					
MCX1B	1/2"	6	0.39" (9.9)	0.43" (10.9)	0.55" (14.0)	0.51" (13.0)	0.63" (16.0)	2.1" (53.3)	0.83" (21.1)	1.06" (26.9)	1.12" (28.4)	
MCX1C	1/2"	10	0.48" (12.2)	0.52" (13.2)	0.74" (18.8)	0.60" (15.2)	0.82" (20.8)	2.4" (61)	0.83" (21.1)	1.42" (36)	1.50" (38.1)	
MCX2	3/4"	21	0.71" (18.1)	0.65" (16.5)	0.95" (24.1)	0.73" (18.5)	1.03" (26.2)	2.6" (66)	0.84" (21.3)	1.61" (41)	1.69" (42.9)	
MCX3	1"	42	0.96" (26.4)	0.89" (22.6)	1.23" (31.2)	0.97" (24.6)	1.31" (33.3)	2.7" (69)	1.03" (26.2)	1.97" (50)	2.13" (54.1)	
MCX4	1 1/4"	73	1.16" (29.5)	1.15" (29.5)	1.48" (37.6)	1.23" (31.2)	1.56" (39.6)	3.2" (81)	1.05" (26.7)	2.36" (60)	2.50" (63.5)	
MCX5	1 1/2"	80	1.35" (34.3)	1.39" (35.3)	1.62" (41.1)	1.47" (37.3)	1.78" (45.2)	4.5" (114.3)	1.07" (27.2)	2.95" (75)	3.06" (77.8)	
MCX6	2"	80	1.62" (41.1)	1.39" (35.3)	1.89" (48.0)	1.47" (37.3)	2.04" (51.8)	4.5" (114.3)	1.10" (27.9)	2.95" (75)	3.06" (77.8)	
MCX7	2 1/2"	100	2.09" (53.1)	1.85" (47.0)	2.36" (59.9)	1.93" (49.0)	2.51" (63.8)	4.7" (119.4)	1.62" (41.1)	3.54" (90)	3.65" (92.8)	
MCX8	3"	120	2.52" (64.0)	2.19" (55.6)	2.81" (71.4)	2.27" (57.7)	3.01" (76.5)	4.8" (121.9)	1.68" (42.7)	4.06" (103)	4.22" (107.2)	
MCX9	3 1/2"	120	3.01" (76.5)	2.69" (68.3)	3.28" (83.3)	2.77" (70.4)	3.46" (87.9)	4.8" (121.9)	1.73" (43.9)	4.53" (115)	4.69" (119.2)	
MCX0	4"	120	3.50" (88.9)	3.28" (83.3)	3.82" (97.0)	3.46" (87.9)	4.07" (103.4)	5.1" (129.5)	1.78" (45.2)	5.12" (130)	5.33" (135.3)	

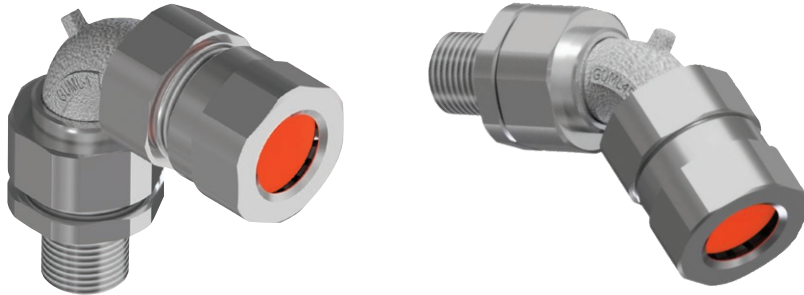
Cable armor diameter and cable jacket diameter refer to the dimensions across the crest.



MC 45°/90° SERIES

KILLARK

ALUMINUM CABLE CONNECTORS



Class II, Div. 1, Groups E, F, G
 Class III,
 Zone 20, IP66,
 Types 3, 4X
 Suitable for use in hazardous location
 application when installed according to
 NEC Articles 501.10



FEATURES-SPECIFICATIONS

Applications:

Designed for use with jacketed interlock, continuously corrugated and welded armor cable. Rated for indoor and outdoor use and allows for a 45 and 90 degree bend where space is limited.

Features:

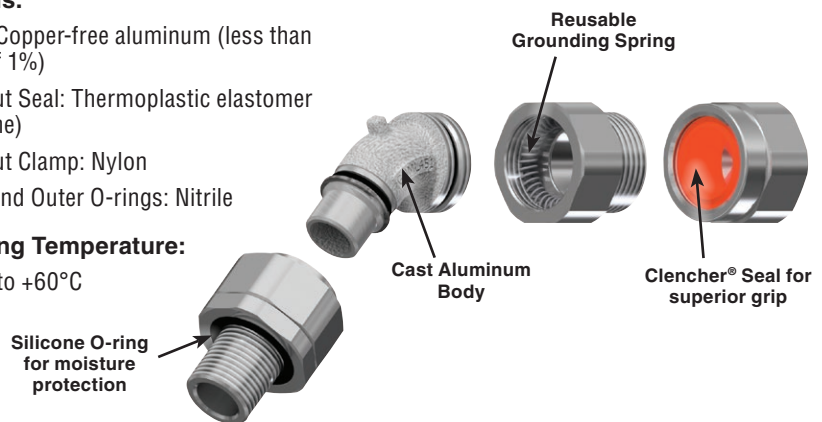
- 360° armor grounding spring is reusable
- Provides sealing backnut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure
- Copper-free aluminum construction for harsh, corrosive and hazardous duty
- Patent pending combination union elbow that allows proper 360° alignment where space is limited
- Compact 45° & 90° bends for optimized wiring configurations
- Armor is terminated prior to bend allowing for minimal bending radius

Materials:

- Body: Copper-free aluminum (less than 4/10 of 1%)
- Backnut Seal: Thermoplastic elastomer (silicone)
- Backnut Clamp: Nylon
- Inner and Outer O-rings: Nitrile

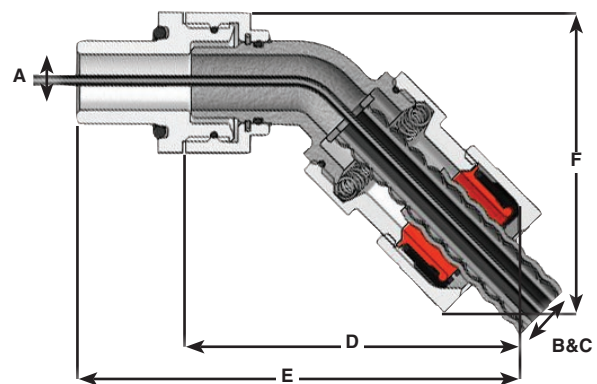
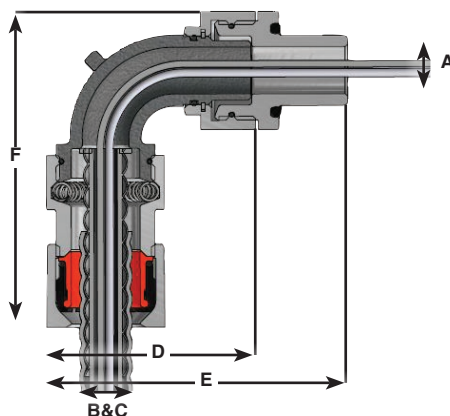
Operating Temperature:

- -50°C to +60°C



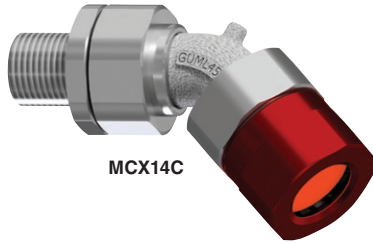
SUITABLE ARMORED/METAL CLAD CABLE TYPES	
AC-	AC90, ACWU90, AC90-HL, ACWU90-HL, ACG90, ACGWU90
MC-	MCC, MCI, MCI-A, MC-HL
RA-	RA90, RA90-HL
TECK-	TECK90, TECK90-HL

CATALOG NUMBER	ENTRY THREAD SIZE (NPT)	BEND	CABLE ACCEPTANCE DETAILS								
			MAX NUMBER OF CORES	THROUGH DIAMETER 'A'	ARMOR DIAMETER 'B'		DIAMETER 'C'		MAX LENGTH 'D'	MAX LENGTH 'E'	MAX LENGTH 'F'
					MIN.	MAX.	MIN.	MAX.			
MC14C	1/2"	45°	10	.48" (12.2)	.52" (13.2)	.74" (18.8)	.60" (15.2)	.82" (20.8)	3.25" (82.6)	4.35" (110.5)	2.05" (52)
MC24C	3/4"	45°	21	.71" (18)	.65" (16.5)	.95" (24.1)	.73" (18.5)	1.03" (26.2)	3.43" (87.1)	4.55" (115.6)	2.19" (55.6)
MC19C	1/2"	90°	10	.48" (12.2)	.52" (13.2)	.74" (18.8)	.60" (15.2)	.82" (20.8)	2.51" (63.8)	3.62" (91.9)	3.51" (89.2)
MC29	3/4"	90°	21	.71" (18)	.65" (16.5)	.95" (24.1)	.73" (18.5)	1.03" (26.2)	2.61" (66.3)	3.73" (94.7)	3.60" (91.4)

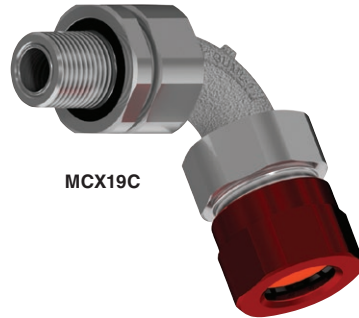




ALUMINUM CABLE CONNECTORS



MCX14C



MCX19C

Class I, Div. 1, Groups A, B, C, D
 Class II, Div. 1, Groups E, F, G
 Class III,
 CL. I Zone 1 GR. IIC. Zone 20
 Types 3, 4X



FEATURES-SPECIFICATIONS

Applications:

Designed for use with jacketed interlock, continuously corrugated and welded armor cable where it is essential to prevent explosive vapors from passing through electrical devices. This series provides a 45 and 90 degree bend for the most compact space. It is rated for indoor and outdoor use.

Features:

- 360° armor grounding spring is reusable
- Provides a barrier seal between the individual insulated cores within the cable
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- Provides a cable retention and low smoke fume, zero halogen seal onto the cables outer sheath
- Copper-free aluminum construction for harsh, corrosive and hazardous areas

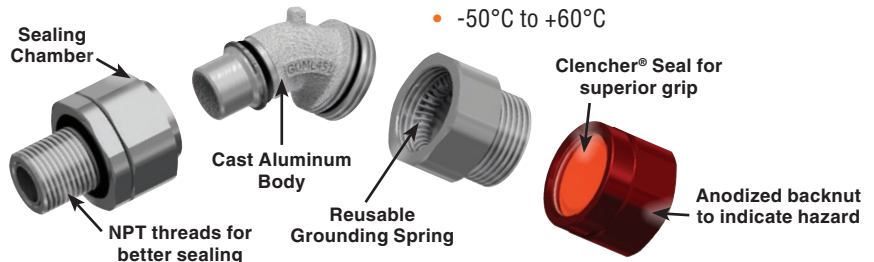
- Patent pending combination union elbow that allows proper 360° alignment where space is limited
- Compact 45° & 90° bends for optimized wiring configurations
- Armor is terminated prior to bend allowing for minimal bending radius
- Backnut is anodized RED to indicate HAZARDOUS area product

Materials:

- Body: Copper-free aluminum (less than 4/10 of 1%)
- Backnut Seal: Thermoplastic elastomer (silicone)
- Backnut Clamp: Nylon
- Inner and Outer O-rings: Nitrile

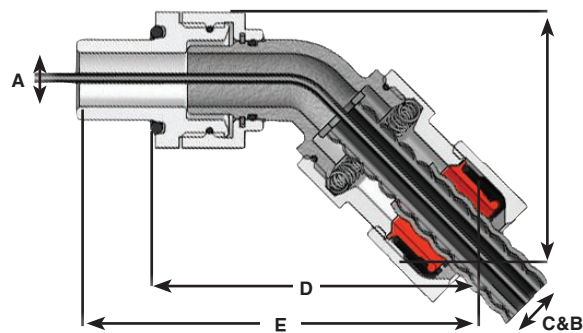
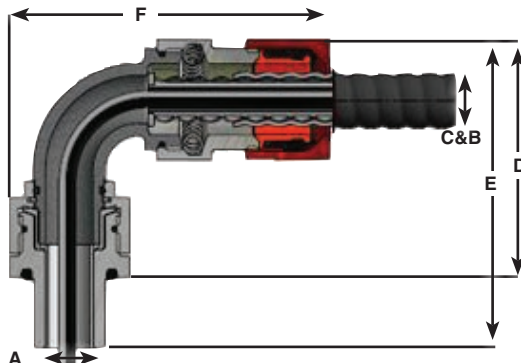
Operating Temperature:

- -50°C to +60°C



SUITABLE ARMORED/METAL CLAD CABLE TYPES	
AC-	AC90, ACWU90, AC90-HL, ACWU90-HL, ACG90, ACGWU90
MC-	MCC, MCI, MCI-A, MC-HL
RA-	RA90, RA90-HL
TECK-	TECK90, TECK90-HL

CATALOG #	ENTRY THREAD SIZE (NPT)	BEND	CABLE ACCEPTANCE DETAILS						MAX LENGTH 'D'	MAX LENGTH 'E'	MAX LENGTH 'F'
			MAX NUMBER OF CORES	THROUGH DIAMETER 'A'	ARMOR DIAMETER 'B'		DIAMETER 'C'				
					MIN.	MAX.	MIN.	MAX.			
MCX14C	1/2"	45°	10	.48" (12.2)	.52" (13.2)	.74" (18.8)	.60" (15.2)	.82" (20.8)	3.25" (82.6)	4.35" (110.5)	2.05" (52)
MCX24	3/4"	45°	21	.71" (18)	.65" (16.5)	.95" (24.1)	.73" (18.5)	1.03" (26.2)	3.43" (87.1)	4.55" (115.6)	2.19" (55.6)
MCX19C	1/2"	90°	10	.48" (12.2)	.52" (13.2)	.74" (18.8)	.60" (15.2)	.82" (20.8)	2.51" (63.8)	3.62" (91.9)	3.51" (89.2)
MCX29	3/4"	90°	21	.71" (18)	.65" (16.5)	.95" (24.1)	.73" (18.5)	1.03" (26.2)	2.61" (66.3)	3.73" (94.7)	3.60" (91.4)



Z SERIES – ALUMINUM CORD CONNECTORS



ZS108

Applications

Use to secure and seal cords or cables entering enclosures or race-ways.

Z Series connectors are also suitable for use in hazardous locations per National Electrical Code (Articles 501-4(b), 502-4(a&b), 503-3(a&b)). Consult these articles for sealing requirements that may apply.

Materials/Finish

- Copper-free aluminum (less than 4/10 of 1%)
- Natural finish

Features

- Aluminum construction resists corrosion
- Neoprene grommet seals out oil and moisture
- Nylon retention ring ensures superior holding power
- Wide range of sizes and configurations

Z SERIES – STRAIGHT STEEL CORD CONNECTORS



ZS002ZP

Applications

Z Series Steel Cord Connectors are used to secure and seal cords or cables entering enclosures or race-ways. Z Series connectors are also suitable for use in hazardous locations per National Electrical Code (Articles 501.10(B), 502.10(A)(B) and 505.15(C)). Consult these articles for sealing requirements that may apply.

Materials/Finish

- Steel/malleable iron
- Zinc electro-plated
- Natural Finish

Features

- Neoprene grommet seals out oil and moisture
- Nylon retention ring incorporates a split hinge design to prevent friction and provide strain relief, also color-coded for sizing identification
- These heavy-duty connectors hold up to most manufacturing chemicals including, acid solutions, solvents and other corrosive materials
- Machined steel nut and body allows for tightening the compression nut and NPT hub without worrying about stripping the threads
- Wide range of sizes and configurations

Z SERIES – CORROSION RESISTANT NYLON CORD CONNECTORS



ZS210CR

ZN210CR

Applications

Durable nylon construction makes these connectors perfectly suited to corrosive environments.

Typical applications for nylon cord connectors include food processing facilities, chemical and sewage treatment plants and off-shore and dockside installations.

Features

- Nylon retention ring for increased holding power
- Neoprene bushing seals against moisture
- Nylon connectors obtain approximately the same cord retention values with hand tightening that can be produced only by wrench tightening of metal cord connectors

Material

- Nylon

HKSB-MC-MCX 10-19 © Killark, 2019

KILLARK[®]

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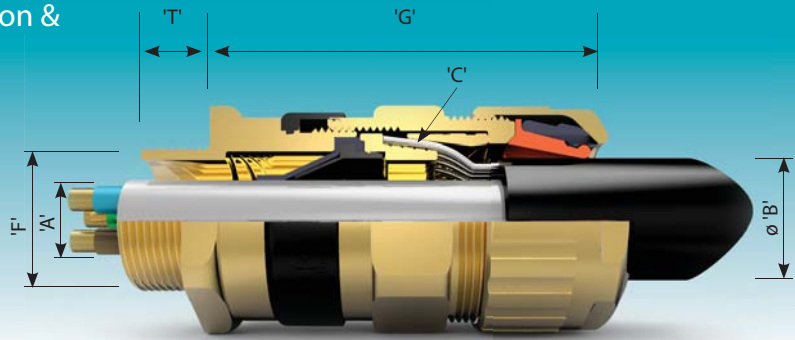
Harsh & Hazardous

Group II Cable Glands

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

Application

- Outdoor or indoor use.
- 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.
- See technical section for installation rules and regulations.



501/453/UNIV

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details						'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Inner Sheath 'A'		Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			Min.	Max.	Min.	Max.	Orientation 1	Orientation 2			
Os	M20 ²	½"	3.5	8.1	5.5	12.0	0.8 / 1.25	0.0 / 0.8	61.6	24.0	26.5
O	M20 ²	½"	6.5	11.4	9.5	16.0	0.8 / 1.25	0.0 / 0.8	61.6	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	63.0	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	69.9	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	73.2	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	77.9	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	93.5	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	94.0	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	103.0	95.0	104.0
G	M80	3½"	67.0	73.0	75.0	89.5	2.0 / 3.5	0.0 / 1.0	90.6	106.4	115.0
H	M90	3½"	67.0	77.6	75.0	89.5	2.0 / 3.5	0.0 / 1.0	90.6	115.0	130.0
J	M100	4"	75.0	91.6	88.0	104.5	2.5 / 4.0	0.0 / 1.0	90.6	127.0	142.0

¹'T' — Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.

G size and above are available in the 501/453/RAC design style.

All dimensions in millimetres (except * where dimensions are in inches).

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

²Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb, Dust Extb IIIC Db and ExnR IIC Gc (Ex) II 2 / 3GD.
- Certificate No's: For sizes Os to F: Baseefa06ATEX0057X and IECEx BAS 06.0014X. For sizes G to J: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7, IEC/EN 60079-15 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 300 (Sizes Os to F) and AI 303 (Sizes G to J).

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides armour clamping using one clamping arrangement for all armour / braid types.
- Provides a diaphragm seal on inner sheath of cable which will not damage cables that exhibit 'Cold Flow' characteristics.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Alternative Reversible Armour Clamping Rings (RAC)

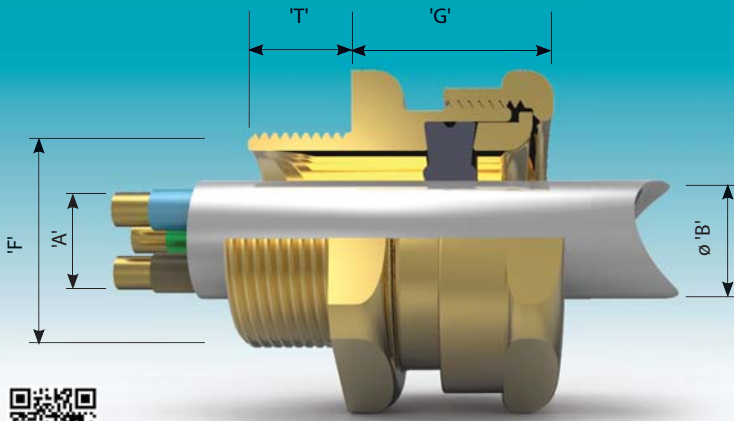
Size Ref.	SELECTION TABLE	
	Steel Wire Armour / Braid / Tape	
	Orientation 1	Orientation 2
B	0.9 - 1.25	0.5 - 0.9
C	1.2 - 1.6	0.6 - 1.2
C2	1.2 - 1.6	0.6 - 1.2
D	1.45 - 1.8	1.0 - 1.45
E	1.45 - 1.8	1.0 - 1.45
F	1.45 - 1.8	1.0 - 1.45

Ordering Information

Format for ordering is as follows: Alternative Clamping Ring (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/453/UNIV	C	M32	Brass	AR
501/453/UNIV	C	1 ¼" NPT	Brass	AR

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



Application

- The 501/421 cable gland provides a seal on the outer cable sheath
- For use on non-armoured elastomer and plastic insulated cables
- Suitable for installation in Zone 1 (21), Zone 2 (22) and Division 2 hazardous areas.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details				Fully Compressed Length 'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Outer Sheath 'B'					Across Flats	Across Corners
			Standard Seal		Alternative Seal (S)				
			Min.	Max.	Min.	Max.			
2K	M16	-	3.2	8.0	-	-	23.5	19.0	21.2
Os	M20 ²	½"	3.2	8.0	-	-	23.8	24.0	26.5
O	M20 ²	½"	6.5	11.9	-	-	23.8	24.0	26.5
A	M20	¾" or ½"	10.0	14.3	8.5	13.5	24.8	30.0	32.5
B	M25	1" or ¾"	13.0	20.2	9.5	15.4	25.8	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	28.2	46.0	50.5
C2	M40	1½" or 1¼"	25.0	32.5	22.0	28.0	29.5	55.0	60.6
D	M50	2" or 1½"	31.5	44.4 / 42.3 ¹	27.5	34.8	40.4	65.0	70.8
E	M63	2½" or 2"	42.5	56.3 / 54.3 ¹	39.0	46.5	38.2	80.0	88.0
F	M75	3" or 2½"	54.5	68.2 / 65.3 ¹	48.5	58.3	40.5	95.0	104.0
G	M80	3½"	67.0	73.0	-	-	41.0	106.4	115.0
H	M90	3½"	67.0	77.6	-	-	41.0	115.0	130.0
J	M100	4"	75.0	91.6	-	-	41.0	127.0	142.0

'T' — 2K to F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.
All dimensions in millimetres (except * where dimensions are in inches).

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

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex II 2 GD).
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +100°C.
- Assembly Instruction Sheet: AI 307.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- When used in Increased Safety applications, this cable gland may be used with braided cable where the braid and the outer sheath pass into the enclosure. The braid must then be suitably terminated inside the enclosure.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.
- Cable glands are marked with ATEX/IECEx and c CSA us certification information as standard.

Ordering Information

Format for ordering is as follows: Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/421	C	M32	Brass	S
501/421	C	1 ¼" NPT	Brass	S

Alternative certification options available:

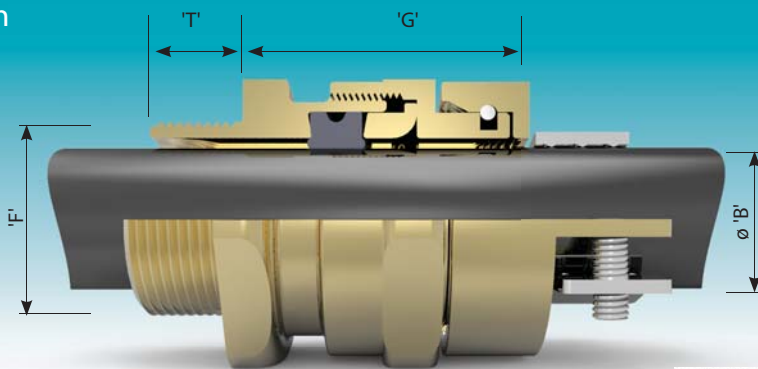


Group II Cable Glands

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

Application

- The 501/421/R cable gland provides a seal and cable clamp on the outer cable sheath and is intended for use on non-armoured elastomer and plastic insulated cables.
- Certified Exd, Exe and Extb.
- Suitable for installation in Zone 1 (21) and Zone 2 (22) hazardous areas.



501/421/R

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details				'G'	Hexagon Dimensions	
			Outer Sheath 'B'					Across Flats	Across Corners
	Metric	NPT* Standard or Option	Standard Seal		Alternative Seal (S)				
			Min.	Max.	Min.	Max.			
Os	M20 ²	½"	3.2	8.0	-	-	52.0	24.0	27.7
O	M20 ²	½"	6.5	11.9	-	-	52.0	24.0	27.7
A	M20	¾" or ½"	10.0	14.3	9.0	13.4	52.0	30.0	34.6
B	M25	1" or ¾"	13.0	20.2	9.5	15.4	61.0	36.0	41.6
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	67.0	46.0	53.1
C2	M40	1½" or 1¼"	25.0	32.5	22.0	28.0	67.0	55.0	63.5

*T — Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread.
All dimensions in millimetres (except * where dimensions are in inches).

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

Technical Data

- Flameproof Exd and Increased Safety Exd IIC Gb, Exe IIGb, Extb IIIC Db, Ex II 2 GD
- Certificate No's: Baseefa 06ATEX0056X and IECEx BAS06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +100°C.
- Assembly Instruction Sheet: AI 427.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- When used in Increased Safety applications, this cable gland may be used with braided cable where the braid and the outer sheath pass into the enclosure. The braid must then be suitably terminated inside the enclosure.
- Manufactured in Brass (standard), Nickel Plated Brass or 316 Stainless Steel.
- Brass NPT entries are nickel plated as standard.
- Cable clamp provides required clamp and cleat function.

Ordering Information

Format for ordering is as follows:

Certification required i.e. ATEX / IECEx

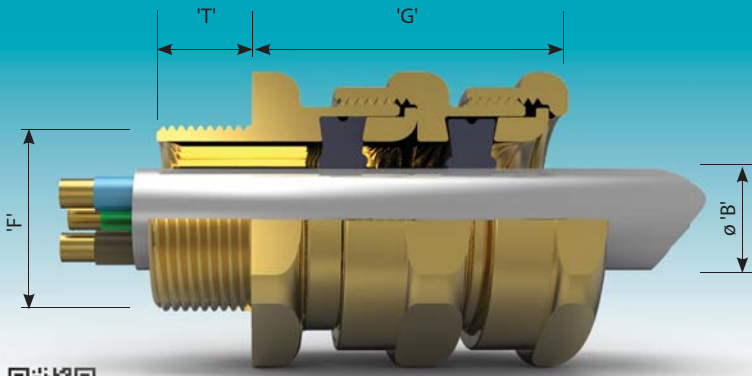
Material & Finish i.e. Brass Nickel Plated

Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/421/R	C	M32	Brass	S
501/421/R	C	1 ¼" NPT	Brass	S

Alternative certification options available:

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



Application

- The 501/423 cable gland provides two independent seals on non-armoured elastomer and plastic insulated cables. The first is a flameproof seal on the inner or outer cable sheath, with an additional IP seal on the outer sheath.
- Certified Exd, Exe and Extb
- Suitable for installation in Zone 1 (21) and Zone 2 (22) hazardous areas.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details				'G'	Hexagon Dimensions	
			Outer Sheath 'B'					Across Flats	Across Corners
	Metric	NPT * Standard or Option	Standard Seal		Alternative Seal (S)				
			Min.	Max.	Min.	Max.			
Os	M20 ²	½"	3.2	8.0	-	-	40.0	24.0	26.5
O	M20 ²	½"	6.5	11.9	-	-	40.0	24.0	26.5
A	M20	¾" or ½"	10.0	14.3	9.0	13.4	40.4	30.0	32.5
B	M25	1" or ¾"	13.0	20.2	9.5	15.4	44.3	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	47.2	46.0	50.5
C2	M40	1½" or 1¼"	25.0	32.5	22.0	28.0	49.5	55.0	60.6
D	M50	2" or 1½"	31.5	44.4 / 42.3 ¹	27.5	34.8	72.5	65.0	70.8
E	M63	2½" or 2"	42.5	56.3 / 54.3 ¹	39.0	46.5	64.8	80.0	88.0
F	M75	3" or 2½"	54.5	68.2 / 65.3 ¹	49.5	58.3	68.0	95.0	104.0
G	M80	3½"	67.0	73.0	-	-	68.0	106.4	115.0
H	M90	3½"	67.0	77.6	-	-	68.0	115.0	130.0
J	M100	4"	75.0	91.6	-	-	68.0	127.0	142.0

¹'T' — Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.
 All dimensions in millimetres (except * where dimensions are in inches).

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

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex II 2 GD).
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X. Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +100°C.
- Assembly Instruction Sheet: AI 306.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides superior cable retention to standard unarmoured cable glands, with a seal at two independent points.
- When used in Increased Safety applications, this cable gland may be used with braided cable where the braid and the outer sheath pass into the enclosure. The braid must then be suitably terminated inside the enclosure.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows:

Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/423	C	M32	Brass	S
501/423	C	1 ¼" NPT	Brass	S

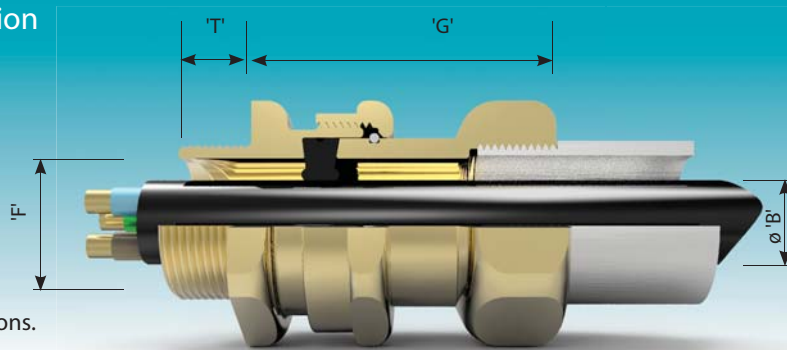


Group II Cable Glands

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

Application

- Outdoor or indoor use.
- For use with non-armoured elastomer and plastic insulated cables installed in conduit.
- See technical section for installation rules and regulations.



501/414

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'				Cable Acceptance Details				'G'	Hexagon Dimensions	
	Male		Female		Outer Sheath 'B'					Across Flats	Across Corners
	Metric	NPT * Standard or Option	Metric	NPT # Standard or Option	Standard Seal		Alternative Seal (S)				
					Min.	Max.	Min.	Max.			
Os	M20 ²	½"	M20	-	3.2	8.0	-	-	54.5	24.0	26.5
O	M20 ²	½"	M20	-	6.5	11.9	-	-	54.5	24.0	26.5
A	M20	¾" or ½"	M20	-	10.0	14.3	9.0	13.4	56.4	30.0	32.5
B	M25	1" or ¾"	M25	-	13.0	20.2	9.5	15.4	48.2	36.0	39.5
C	M32	1¼" or 1"	M32	-	19.0	26.5	15.5	21.2	61.6	46.0	50.5
C2	M40	1½" or 1¼"	M40	-	25.0	32.5	22.0	28.0	64.6	55.0	60.6
D	M50	2" or 1½"	M50	-	31.5	44.4/42.3 ¹	27.5	34.8	83.2	65.0	70.8
E	M63	2½" or 2"	M63	-	42.5	56.3/54.3 ¹	39.0	46.5	83.2	80.0	88.0
F	M75	3" or 2½"	M75	-	54.5	68.2/65.3 ¹	49.5	58.3	86.4	95.0	104.0

¹ 'T' — 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 male entry option.

² Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

NPT female thread sizes equivalent to those shown in the table for the male thread size are available. Hexagon dimensions as shown may alter.

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex) II 2 GD.
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +100°C.
- Assembly Instruction Sheet: AI 310.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides a cable retention seal onto the cables outer sheath.
- When used in Increased Safety applications, this cable gland may be used with braided cable where the braid and the cables outer sheath pass into the enclosure. The braid must be suitably terminated into the enclosure.
- Provides female running coupler for cable gland or conduit entry.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

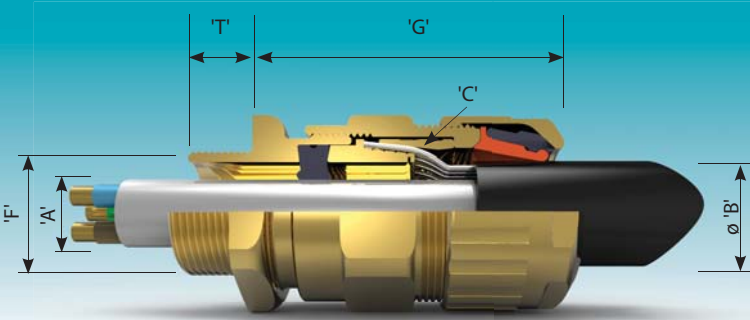
Ordering Information

Format for ordering is as follows:

Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/414	C	M32	Brass	S
501/414	C	1¼" NPT	Brass	S

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



Application

- Outdoor or indoor use.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables.
- See technical section for installation rules and regulations.



CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details								'G'	Hexagon Dimensions	
	Metric	"NPT * Standard or Option"	Inner Sheath 'A'				Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			Standard Seal		Alternative Seal (S)				Orientation 1	Orientation 2			
			Min.	Max.	Min.	Max.	Min.	Max.					
Os	M20 ²	½"	3.2	8.0	-	-	5.5	12.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5
O	M20 ²	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"	75.0	91.6	-	-	88.0	104.5	2.5 / 4.0	0.0 / 1.0	95.6	127.0	142.0

¹T — Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.
All dimensions in millimetres (except * where dimensions are in inches).

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 inner sheath diameter is 10.9mm.

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db II 2 GD.
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X. Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01. (Deluge Seal Optional)
- Operating Temperature Range: -60°C to +100°C.
- Assembly Instruction Sheet: AI 302.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides armour clamping using one clamping arrangement for all armour / braid types.
- Provides a seal on the cables inner sheath.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Alternative Reversible Armour Clamping Rings (RAC)

SELECTION TABLE

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 Clamping Ring (AR), add suffix AR to ordering information. Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
501/453/RAC	C	M32	Brass	AR
501/453/RAC	C	1 ¼" NPT	Brass	AR
501/453/RAC	C	M32	Brass	S
501/453/RAC	C	1 ¼" NPT	Brass	S

Alternative certification options available:

Connection Solutions

www.ehawke.com

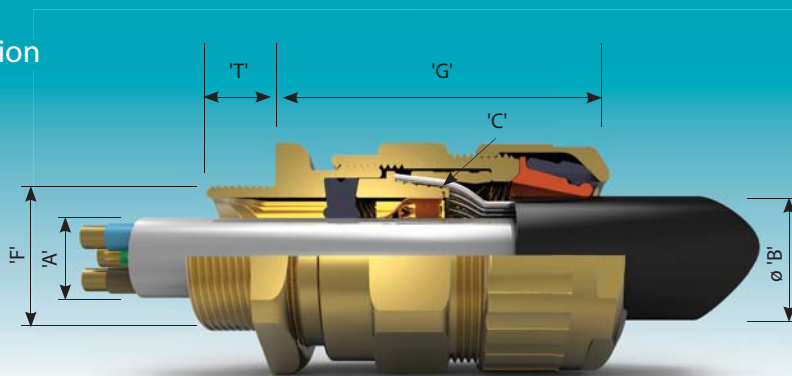
Group II Cable Glands

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

(for Lead Sheath Cables)

Application

- Outdoor or indoor use.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables with a lead inner sheath.
- See technical section for installation rules and regulations.



501/453/RAC/L

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details								'G'		Hexagon Dimensions	
	Metric	NPT * Standard or Option	Inner Sheath 'A'				Outer Sheath 'B'		Armour / Braid 'C'				Across Flats	Across Corners
			Standard Seal (L) Seal + Bond		Alternative Seal (K) Seal + Bond				Orientation 1	Orientation 2				
			Min.	Max.	Min.	Max.	Min.	Max.						
O	M20 ²	½"	6.5	10.5	-	-	9.5	16.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5	
A	M20	¾" or ½"	-	-	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	19.0	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	25.0	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	31.2	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	42.3 / 42.8 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	53.3 / 54.5 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	66.0 / 64.3 ¹	48.5	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	70.0	-	-	75.0	89.5	2.0 / 3.15	0.0 / 1.0	95.6	106.4	115.0	
H	M90	3½"	67.0	75.0	-	-	75.0	89.5	2.0 / 3.15	0.0 / 1.0	95.6	115.0	130.0	
J	M100	4"	75.0	89.5	-	-	88.0	104.5	2.5 / 4.0	0.0 / 1.0	95.6	127.0	142.0	

¹T — O - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering.
All dimensions in millimetres (except * where dimensions are in inches).

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

²Size O is available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex) II 2 GD.
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01 (Deluge Seal Optional).
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 302 and AI 336.

Features

- Provides armour clamping using one clamping arrangement for all armour / braid types.
- Provides a seal and an electrical bond to the cables lead inner sheath.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Deluge protection option available, contact Hawke Technical Sales for details.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Alternative Reversible Armour Clamping Rings (RAC)

Size Ref.	SELECTION TABLE	
	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

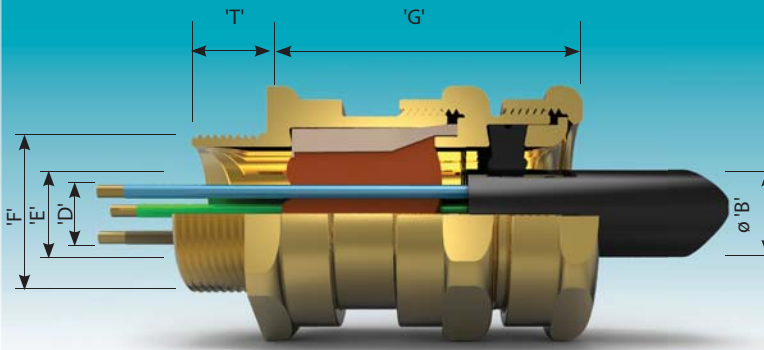
Ordering Information

Format for ordering is as follows:
Standard Inner Seal + Bond, add suffix L to ordering information.
Alternative Inner Seal + Bond, add suffix K to ordering information.
Alternative Clamping Ring (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Lead	Material	(Optional)
501/453/RAC	C	M32	L	Brass	AR
501/453/RAC	C	1 ¼" NPT	L	Brass	AR
501/453/RAC	C	1 ¼" NPT	K	Brass	AR



Flameproof, Increased Safety, Dust Protection
Class - Zones - Divisions
Certified ATEX / IECEx



Application

- Outdoor or indoor use.
- For use with non-armoured elastomer and plastic insulated cables.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area and exceeding 2 litres in volume.
- See technical section for installation rules and regulations.



CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details							'G'	Hexagon Dimensions	
			Inner Sheath / Cores			Outer Sheath 'B'					Across Flats	Across Corners
	Metric	NPT* Standard or Option	'D' Max. Over Cores	'E' Max. Inner Sheath	Max. No. of Cores	Standard Seal		Alternative Seal (S)				
						Min.	Max.	Min.	Max.			
Os	M20	½"	8.0	8.0	16	3.0	8.0	-	-	56.4	24.0	26.5
O	M20	½"	8.9	10.0	16	6.5	11.9	-	-	56.4	24.0	26.5
A	M20	¾" or ½"	11.0	12.5	30	10.0	14.3	8.5	13.4	55.8	30.0	32.5
B	M25	1" or ¾"	16.2	18.4	32	13.0	20.2	9.5	15.4	58.8	36.0	39.5
C	M32	1¼" or 1"	21.9	24.7	60	19.0	26.5	15.5	21.2	62.0	46.0	50.5
C2	M40	1½" or 1¼"	26.3	29.7	80	25.0	32.5	22.0	28.0	64.5	55.0	60.6
D	M50	2" or 1½"	37.1	41.7	100	31.5	44.4	27.5	34.8	72.8	65.0	70.8

*'T' — Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.
All dimensions in millimetres (except * where dimensions are in inches).

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

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex II 2 GD).
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 6079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 456.

Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- QSP putty offers fast curing time and sets in half the time of the standard putty.
- Provides a cable retention seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows:

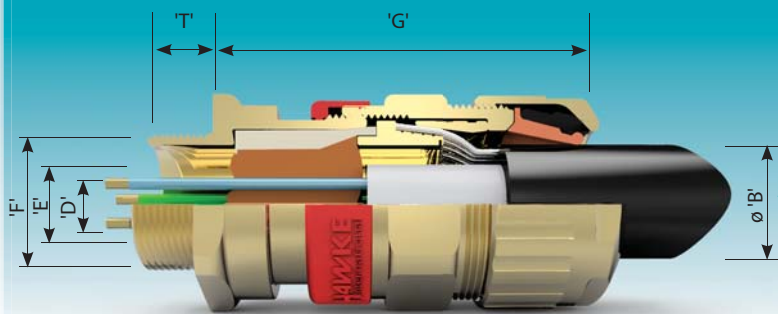
Alternative Seal (S), add suffix S to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
ICG 623/QSP	C	M32	Brass	S
ICG 623/QSP	C	1 ¼" NPT	Brass	S

Two part sealing compound and assembly instructions are supplied with the cable gland.



Flameproof, Increased Safety, Dust Protection
 Class - Zones - Divisions
 Certified ATEX / IECEx



Application

- Outdoor or indoor use.
- 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 are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area.
- See technical section for installation rules and regulations.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details							'G'	Hexagon Dimensions	
			Inner Sheath / Cores			Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
	Metric	NPT * Standard or Option	Max. Over Cores 'D'	Max Inner Sheath 'E'	Max. No. of Cores	Min	Max	Orientation 1	Orientation 2			
Os	M20	½"	8.9	10.0	16	5.5	12.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
O	M20	½"	8.9	10.0	16	9.5	16.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
A	M20	¾" or ½"	11.0	12.5	30	12.5	20.5	0.8 / 1.25	0.0 / 0.8	67.0	30.0	32.5
B	M25	1" or ¾"	16.2	18.4	32	16.9	26.0	1.25 / 1.6	0.0 / 0.7	73.6	36.0	39.5
C	M32	1¼" or 1"	21.9	24.7	60	22.0	33.0	1.6 / 2.0	0.0 / 0.7	78.0	46.0	50.5
C2	M40	1½" or 1¼"	26.3	29.7	80	28.0	41.0	1.6 / 2.0	0.0 / 0.7	82.4	55.0	60.6
D	M50	2" or 1½"	37.1	41.7	100	36.0	52.6	1.8 / 2.5	0.0 / 1.0	88.7	65.0	70.8

'T' — Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.
 All dimensions in millimetres (except * where dimensions are in inches).

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb, Dust Extb IIIC Db and ExnR IIC Gc (Ex) II 2 / 3GD.
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 454

Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- QSP putty offers fast curing time and sets in half the time of the standard putty.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Alternative Reversible Armour Clamping Rings (RAC)

SELECTION TABLE

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 (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
ICG 653/UNIV/QSP	C	M32	Brass	AR
ICG 653/UNIV/QSP	C	1 ¼" NPT	Brass	AR

Two part sealing compound and assembly instructions are supplied with the cable gland.

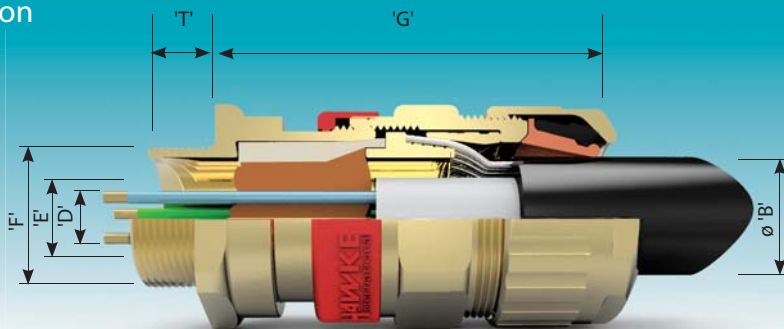


Group II Cable Glands

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

Application

- Outdoor or indoor use.
- 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 are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area.
- See technical section for installation rules and regulations.



ICG 653/UNIV

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details								'G'	Hexagon Dimensions	
			Inner Sheath / Cores				Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
	Metric	NPT * Standard or Option	Max. Over Cores 'D'	Max Inner Sheath 'E'	NOTE 1 Max. No. of Cores	NOTE 2 Max. No. of Cores	Min	Max	Orientation 1	Orientation 2			
Os	M20	1/2"	8.9	10.0	12	6	5.5	12.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
O	M20	1/2"	8.9	10.0	12	6	9.5	16.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
A	M20	3/4" or 1/2"	11.0	12.5	15	10	12.5	20.5	0.8 / 1.25	0.0 / 0.8	67.0	30.0	32.5
B	M25	1" or 3/4"	16.2	18.4	30	21	16.9	26.0	1.25 / 1.6	0.0 / 0.7	73.6	36.0	39.5
C	M32	1 1/4" or 1"	21.9	24.7	42	42	22.0	33.0	1.6 / 2.0	0.0 / 0.7	78.0	46.0	50.5
C2	M40	1 1/2" or 1 1/4"	26.3	29.7	60	60	28.0	41.0	1.6 / 2.0	0.0 / 0.7	82.4	55.0	60.6
D	M50	2" or 1 1/2"	37.1	41.7	80	80	36.0	52.6	1.8 / 2.5	0.0 / 1.0	88.7	65.0	70.8
E	M63	2 1/2" or 2"	47.8	53.5	100	100	46.0	65.3	1.8 / 2.5	0.0 / 1.0	92.7	80.0	88.0
F	M75	3" or 2 1/2"	59.0	66.2 / 65.3 ¹	120	120	57.0	78.0	1.8 / 2.5	0.0 / 1.0	99.4	95.0	104.0

'T' — Metric entry threads are 1.5mm pitch as standard, 15mm length of thread. All dimensions in millimetres (except * where dimensions are in inches).
Note 1: ATEX / IECEx certification only - Note 2: All other certification.

¹Smaller value is applicable when selecting reduced NPT entry option. Note: Larger sizes are available.

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb, Dust Extb IIIC Db and ExnR IIC Gc Ⓢ II 2 / 3GD.
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 301

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows: Alternative Seal (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Material	(Optional)
ICG 653/UNIV	C	M32	Brass	AR
ICG 653/UNIV	C	1 1/4" NPT	Brass	AR

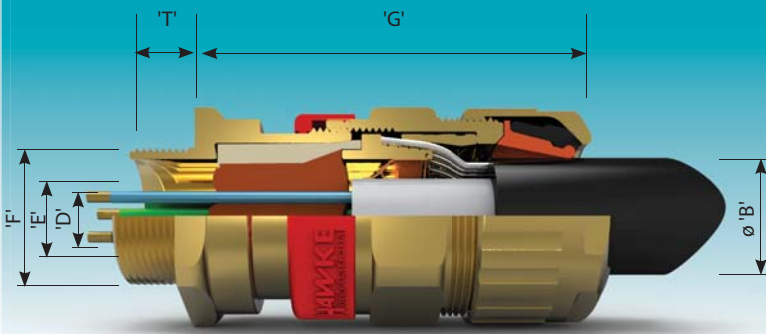
Two part sealing compound and assembly instructions are supplied with the cable gland.

Alternative Reversible Armour Clamping Rings (RAC)

Size Ref.	SELECTION TABLE	
	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

Flameproof, Increased Safety, Dust Protection
Class - Zones - Divisions
Certified ATEX / IECEx

(for Lead Sheath Cables)



Application

- Outdoor or indoor use.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables with a lead inner sheath.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area.
- See technical section for installation rules and regulations.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details							'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Inner Sheath / Cores			Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			'D' Max. Over Cores	Max Inner Sheath 'E'	Max. No. of Cores	Min.	Max.	Orientation 1	Orientation 2			
Os	M20	½"	8.5	10.0	16	5.5	12.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
O	M20	½"	8.5	10.0	16	9.5	16.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
A	M20	¾" or ½"	10.8	12.5	30	12.5	20.5	0.8 / 1.25	0.0 / 0.8	67.0	30.0	32.5
B	M25	1" or ¾"	16.2	18.4	32	16.9	26.0	1.25 / 1.6	0.0 / 0.7	73.6	36.0	39.5
C	M32	1¼" or 1"	21.9	24.7	60	22.0	33.0	1.6 / 2.0	0.0 / 0.7	78.0	46.0	50.5
C2	M40	1½" or 1¼"	26.3	29.7	80	28.0	41.0	1.6 / 2.0	0.0 / 0.7	82.4	55.0	60.6
D	M50	2" or 1½"	37.1	41.7	100	36.0	52.6	1.8 / 2.5	0.0 / 1.0	88.7	65.0	70.8

'T' — 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

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex II 2 GD).
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 454 and AI 336.

Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- QSP putty offers fast curing time and sets in half the time of the standard putty.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides a seal and an electrical bond on the cables lead inner sheath.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows: Alternative Seal (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Lead	Material	(Optional)
ICG 653/UNIV/QSP	C	M32	L	Brass	AR
ICG 653/UNIV/QSP	C	1 ¼" NPT	L	Brass	AR

Two part sealing compound and assembly instructions are supplied with the cable gland.

Alternative Reversible Armour Clamping Rings (RAC)

Size Ref.	SELECTION TABLE	
	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

Connection Solutions

www.ehawke.com

Alternative certification options available:



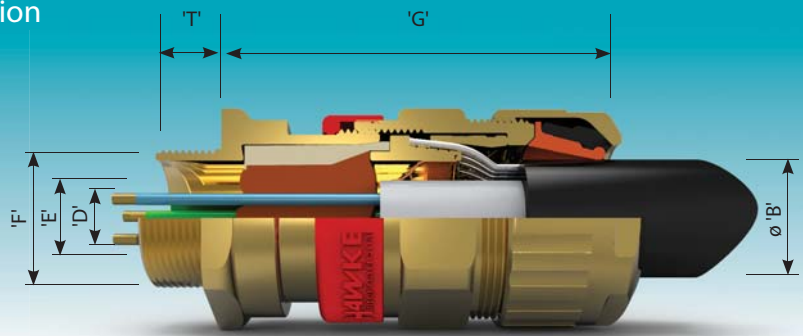
Group II Cable Glands

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

(for Lead Sheath Cables)

Application

- Outdoor or indoor use.
- For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables with a lead inner sheath.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area.
- See technical section for installation rules and regulations.



ICG 653/UNIV/L

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details								'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Inner Sheath / Cores				Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			'D' Max. Over Cores	Max Inner Sheath 'E'	NOTE 1 Max. No. of Cores	NOTE 2 Max. No. of Cores	Min.	Max.	Orientation 1	Orientation 2			
Os	M20	½"	8.5	10.0	12	6	5.5	12.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
O	M20	½"	8.5	10.0	12	6	9.5	16.0	0.8 / 1.25	0.0 / 0.8	67.0	24.0	26.5
A	M20	¾" or ½"	10.8	12.5	15	10	12.5	20.5	0.8 / 1.25	0.0 / 0.8	67.0	30.0	32.5
B	M25	1" or ¾"	16.2	18.4	30	21	16.9	26.0	1.25 / 1.6	0.0 / 0.7	73.6	36.0	39.5
C	M32	1¼" or 1"	21.9	24.7	42	42	22.0	33.0	1.6 / 2.0	0.0 / 0.7	78.0	46.0	50.5
C2	M40	1½" or 1¼"	26.3	29.7	60	60	28.0	41.0	1.6 / 2.0	0.0 / 0.7	82.4	55.0	60.6
D	M50	2" or 1½"	37.1	41.7	80	80	36.0	52.6	1.8 / 2.5	0.0 / 1.0	88.7	65.0	70.8
E	M63	2½" or 2"	47.8	53.3	100	100	46.0	65.3	1.8 / 2.5	0.0 / 1.0	92.7	80.0	88.0
F	M75	3" or 2½"	59.0	64.0	120	120	57.0	78.0	1.8 / 2.5	0.0 / 1.0	99.4	95.0	104.0

'T' — All dimensions in millimetres (except * where dimensions are in inches). Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.
Note 1: ATEX / IECEx certification only - Note 2: All other certification.

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex) II 2 GD.
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 301 and AI 336.

Features

- Provides an inspectable, repairable barrier seal to the individual insulated cores within the cable, and prevents entry of the products of an explosion into the cable.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- Provides armour clamping, using one clamping arrangement for all armour / braid types.
- Provides a seal and an electrical bond on the cables lead inner sheath.
- Provides an outer deluge seal to prevent moisture ingress to the cable armour / braid.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows: Alternative Seal (AR), add suffix AR to ordering information.

Cable Gland Type	Size	Thread	Lead	Material	(Optional)
ICG 653/UNIV	C	M32	L	Brass	AR
ICG 653/UNIV	C	1 ¼" NPT	L	Brass	AR

Two part sealing compound and assembly instructions are supplied with the cable gland.

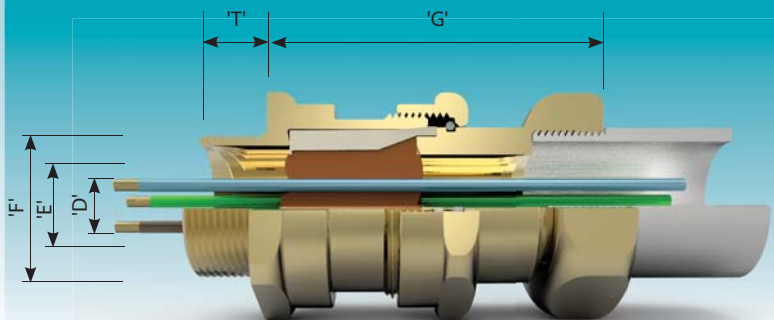
Alternative Reversible Armour Clamping Rings (RAC)

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



Alternative certification options available:

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



Application

- Outdoor or indoor use.
- For use with conduit incorporating individual insulated conductors.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area and exceeding 2 litres in volume.
- See technical section for installation rules and regulations.

CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'				Inner Sheath / Cores			'G' Metric	Hexagon Dimensions	
	Male		Female		Max. Over Cores 'D'	Max Inner Sheath 'E'	Max. No. of Cores		Across Flats	Across Corners
	Metric	NPT * Standard or Option	Metric	NPT * Standard or Option						
A	M20	¾" or ½"	M20	¾" or ½"	11.0	12.5	30	74	30.0	32.5
B	M25	1" or ¾"	M25	1" or ¾"	16.2	18.4	32	65	36.0	39.5
C	M32	1¼" or 1"	M32	1¼" or 1"	21.9	24.7	60	80	46.0	50.5
C2	M40	1½" or 1¼"	M40	1½" or 1¼"	26.3	29.7	80	83	55.0	60.6
D	M50	2" or 1½"	M50	2" or 1½"	37.1	41.7	100	94	65.0	70.8

'T' — 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

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex II 2 GD).
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 459.

Features

- Provides a barrier seal between the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable or conduit.
- Seals conductors at entry to enclosure via conduit or enables an existing cable gland to be converted to a barrier type cable gland.
- The device is fitted with a simple compound filled chamber which permits packing around individual insulated conductors.
- QSP putty offers fast curing time and sets in half the time of the standard putty.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- If required, external voids can be repaired.
- Provides female running coupler for cable gland or conduit entry.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows:

Cable Gland Type	Size	Male Thread	Female Thread	Material
CSB 656N/QSP	C	M32	M32	Brass
CSB 656N/QSP	C	1 ¼" NPT	M32	Brass

Two part sealing compound and assembly instructions are supplied with the cable gland.

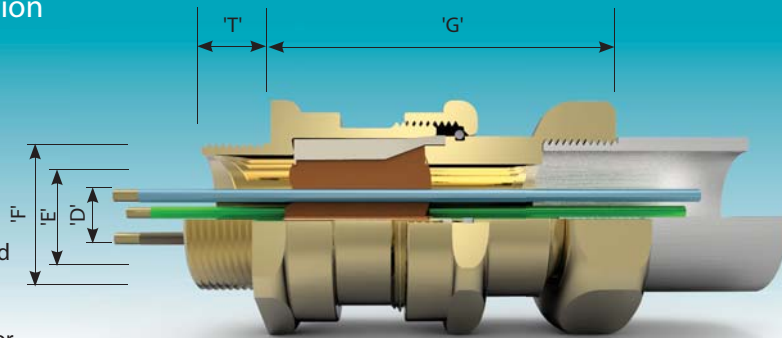


Group II Cable Glands

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

Application

- Outdoor or indoor use.
- For use with conduit incorporating individual insulated conductors.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
 - Enclosures containing an ignition source in gas group IIC areas or containing an ignition source in a Zone 1 area and exceeding 2 litres in volume.
- See technical section for installation rules and regulations.



CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'				Inner Sheath / Cores			'G' Metric	Hexagon Dimensions	
	Male		Female		Max. Over Cores 'B'	Max Inner Sheath 'E'	Max. No. of Cores		Across Flats	Across Corners
	Metric	NPT * Standard or Option	Metric	NPT * Standard or Option						
A	M20	¾" or ½"	M20	¾" or ½"	11.0	12.5	15	74	30.0	32.5
B	M25	1" or ¾"	M25	1" or ¾"	16.2	18.4	30	65	36.0	39.5
C	M32	1¼" or 1"	M32	1¼" or 1"	21.9	24.7	42	80	46.0	50.5
C2	M40	1½" or 1¼"	M40	1½" or 1¼"	26.3	29.7	60	83	55.0	60.6
D	M50	2" or 1½"	M50	2" or 1½"	37.1	41.7	80	94	65.0	70.8
E	M63	2½" or 2"	M63	2½" or 2"	47.8	53.5	100	97	80.0	88.0
F	M75	3" or 2½"	M75	3" or 2½"	59.0	66.2 / 65.3'	120	100	95.0	104.0

'T' — All dimensions in millimetres (except * where dimensions are in inches). Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.

* Smaller value is applicable when selecting reduced NPT male entry option. Hexagon dimensions as shown may alter.

Technical Data

ATEX/IECEx

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db (Ex) II 2 GD.
- Certificate No's: Baseefa06ATEX0058X and IECEx BAS 06.0015X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 375.

c CSA us

- Flameproof AExd IIC Gb, Increased Safety AExe IIC Gb and Dust AExtD Zone 21.
- Explosion-proof Class 1 Division 2 Groups ABCD, Class II Division 2 Groups EFG, Class III.
- Certificate No's: CSA1015065 for Marine Shipboard Cable.
- Construction and Test Standards: UL 60079-0, UL 60079-1, UL 60079-7, ISA 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, UL 2225

Features

- Provides a barrier seal between the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable or conduit.
- Seals conductors at entry to enclosure via conduit or enables an existing cable gland to be converted to a barrier type cable gland.
- The device is fitted with a simple compound filled chamber which permits packing around individual insulated conductors.
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- If required, external voids can be repaired.
- Provides female running coupler for cable gland or conduit entry.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

Ordering Information

Format for ordering is as follows:

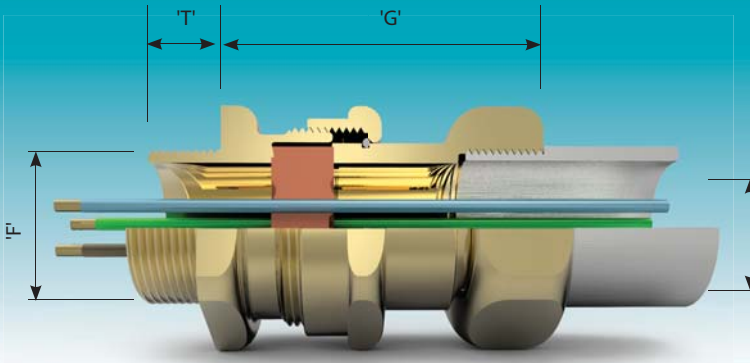
Cable Gland Type	Size	Male Thread	Female Thread	Material
CSB 656N	C	M32	M32	Brass
CSB 656N	C	1 ¼" NPT	M32	Brass

Two part sealing compound and assembly instructions are supplied with the cable gland.

CSB 656N

Alternative certification options available:

Flameproof, Increased Safety, Dust Protection
Class - Zones - Divisions
Certified ATEX / IECEx



Application

- Outdoor or indoor use.
- For particular use with:-
 - Cables that are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
- See technical section for installation rules and regulations.



CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'				'G'	Hexagon Dimensions	
	Male		Female			Across Flats	Across Corners
	Metric	NPT * Standard or Option	Metric	NPT # Standard or Option			
A	M20	¾" or ½"	M20	-	69.0	30.0	32.5
B	M25	1" or ¾"	M25	-	61.0	36.0	39.5
C	M32	1¼" or 1"	M32	-	61.95	46.0	50.5

'T' — All dimensions in millimetres (except * where dimensions are in inches). Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.

NPT female thread sizes equivalent to those shown in the table for the male thread size are available. Hexagon dimensions as shown may alter.

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db Ex II 2 GD.
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01.
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 309.

Features

- Provides a barrier seal between the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable.
- The required number of holes for the cores are punched in the seal by means of a special tool to suit the core size.
- Provides female running coupler for cable gland or conduit entry.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

CABLE GLAND SIZE FOR CORE SIZE AND NUMBER

Max. No. of Cores	Cores Cross Sectional Area mm ²				
	1.5	2.5	4.0	6.0	10.0
7	A & B	A & B	B & C	C	C
4	-	-	-	B	-
3	-	-	-	-	B

PUNCH TOOL SIZE DETAILS

Punch Ref.	No. 1	No. 2	No. 3
Cores C.S.A.mm ²	1.5 - 2.5	4.0 - 6.0	10.0

Ordering Information

To select the correct size punch tool, please see table. Format for ordering is as follows:

Cable Gland Type	Size	Thread	Material	Punch Tool Required
SB 474	C	M32	Brass	Punch Tool No. 1
SB 474	C	1 ¼" NPT	Brass	Punch Tool No. 1

Alternative certification options available:

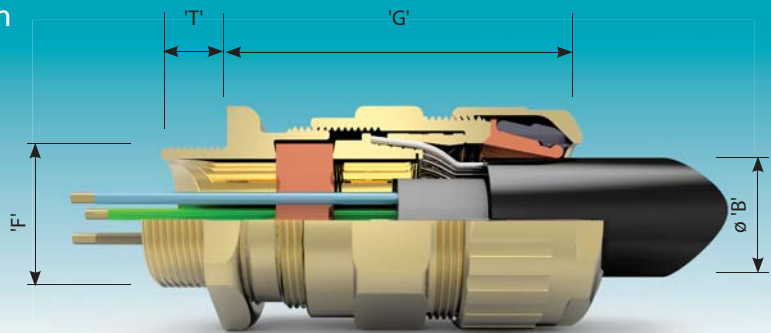


Group II Cable Glands

Flameproof, Increased Safety, Dust Protection
Class - Zones - Divisions
Certified ATEX / IECEx

Application

- Outdoor or indoor use.
- 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 are not effectively filled, compact and/or circular, have tape bedding or have hygroscopic fillers.
 - Cables that exhibit 'Cold Flow' characteristics.
- See technical section for installation rules and regulations



CABLE GLAND SELECTION TABLE

Size Ref.	Entry Thread Size 'F'		Cable Acceptance Details				'G'	Hexagon Dimensions	
	Metric	NPT * Standard or Option	Outer Sheath 'B'		Armour / Braid 'C'			Across Flats	Across Corners
			Min.	Max.	Orientation 1	Orientation 2			
A	M20	¾" or ½"	12.5	20.5	0.8 / 1.25	0.0 / 0.8	53.0	30.0	32.5
B	M25	1" or ¾"	16.9	26.0	1.25 / 1.6	0.0 / 0.7	69.5	36.0	39.5
C	M32	1¼" or 1"	22.0	33.0	1.6 / 2.0	0.0 / 0.7	64.0	46.0	50.5

* — Metric entry threads are 1.5mm pitch as standard, 15mm length of thread.
All dimensions in millimetres (except * where dimensions are in inches).

Technical Data

- Flameproof Exd IIC Gb, Increased Safety Exe IIC Gb and Dust Extb IIIC Db Ex II 2 GD.
- Certificate No's: Baseefa06ATEX0056X and IECEx BAS 06.0013X.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66, IP67 and IP 68 (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X.
- Deluge Protection to DTS01 (Deluge Seal Optional).
- Operating Temperature Range: -60°C to +80°C.
- Assembly Instruction Sheet: AI 312.

Features

- Provides a barrier seal to the individual insulated cores within the cable and prevents entry of the products of an explosion into the cable.
- The required number of holes for the cores are punched in the seal by means of a special tool to suit the core size.
- Provides armour clamping using one clamping arrangement for all armour / braid types.
- Provides a cable retention and low smoke and fume, zero halogen seal onto the cables outer sheath.
- Deluge protection option available, contact Hawke Technical Sales for details.
- Manufactured in Brass (standard), Nickel Plated Brass, 316 Stainless Steel or Aluminium.
- Brass NPT entries are nickel plated as standard.

CABLE GLAND SIZE FOR CORE SIZE AND NUMBER

Max. No. of Cores	Cores Cross Sectional Area mm ²				
	1.5	2.5	4.0	6.0	10.0
7	A & B	A & B	B & C	C	C
4	-	-	-	B	-
3	-	-	-	-	B

PUNCH TOOL SIZE DETAILS

Punch Ref.	No. 1	No. 2	No. 3
Cores C.S.A.mm ²	1.5 - 2.5	4.0 - 6.0	10.0

Deluge protection option available.

Ordering Information

To select the correct size punch tool, please see table.
Format for ordering is as follows:

Cable Gland Type	Size	Thread	Material	Punch Tool Required
PSG 553/RAC	C	M32	Brass	Punch Tool No. 1
PSG 553/RAC	C	1 ¼" NPT	Brass	Punch Tool No. 1