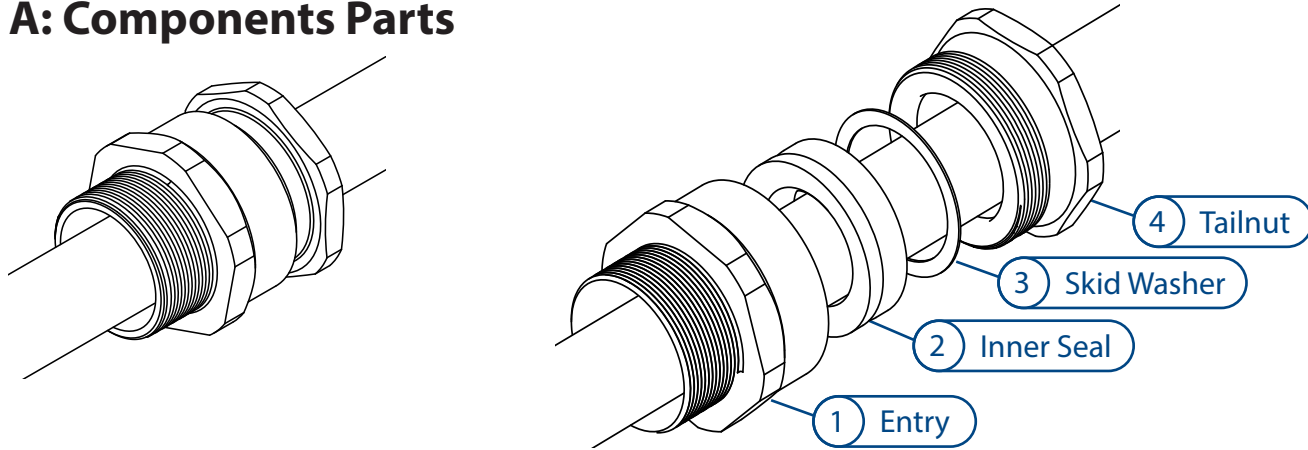
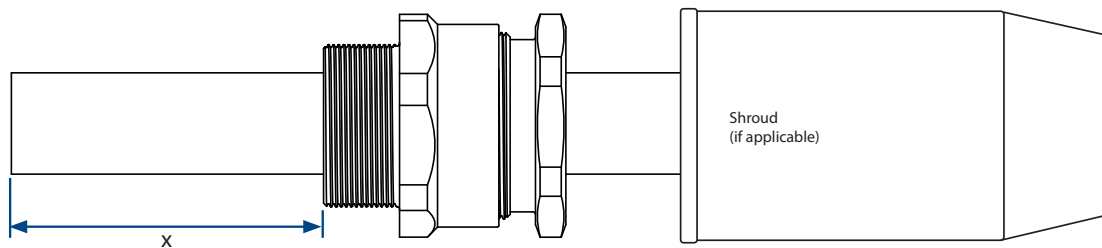


A: Components Parts



B: Cable Preparation

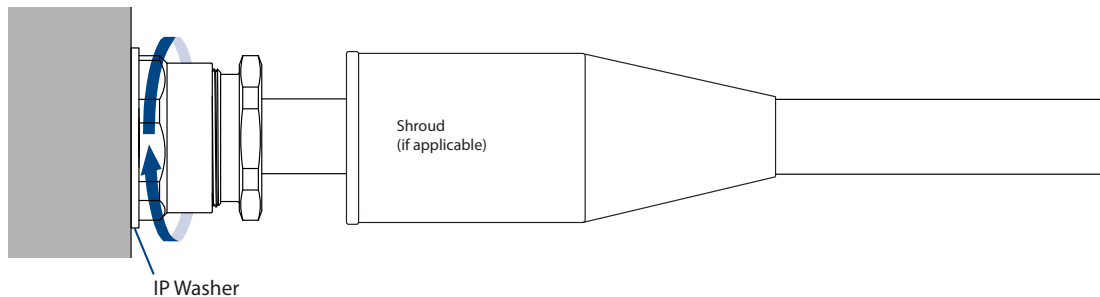
Slide shroud (if applicable) and Cable Gland onto cable.
Allow sufficient length of cable 'x' to suit equipment.



C: Installing Cable Gland

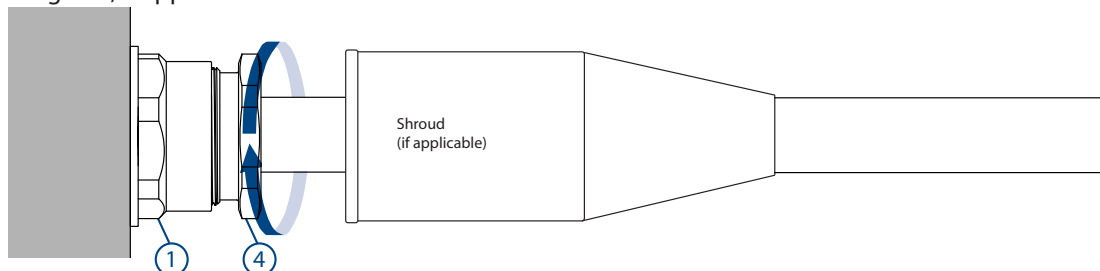
STEP 1: Fit Cable Gland to Enclosure

Use a wrench to fit cable gland to the enclosure. If required, use an appropriate IP washer.



STEP 2: Tighten Tailnut

Hold Entry (1) in position with a spanner/wrench to prevent rotation and tighten the Tailnut (4) using a spanner/wrench until a seal is formed between seal and cable. Then turn the Tailnut (4) through a further half to one full turn to complete the inner seal. Locate the shroud over the cable gland, if applicable.



NOTE: Support the cable to prevent it twisting. To aid wiring inside the enclosure, it may be necessary to strip the inner sheath prior to bringing the cable through the gland.

Technical Information

APEX A2F



TECHNICAL DATA

Cable Gland Type:	Apex A2F
Equipment Type:	Group II Compression Cable Gland
Ingress Protection:	IP66, IP67
Operating Temp:	-60°C to +130°C

CERTIFICATION DETAILS

Ex db eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da	
ATEX: CML23ATEX1003X	CML19ATEX4507X (Ex nR)
UKEX: CML23UKEX1005X	CML21UKEX4133X (Ex nR)
IECEX: IECEX CML23.0002X	IECEX CML21.0012X (Ex nR)

INSTALLATION NOTES

- When used in Increased Safety applications, these cable glands may be used with braided cables where the braid and the outer sheath pass into the enclosure, so long as the cable construction requirements of 60079-14 are met. In these situations, the braid may then be suitably terminated within the enclosure.
- All cable glands must be installed by a suitably trained and competent individual.
- Cable gland entry threads are machined in accordance with BS 3643 6g (Metric) or ANSI/ASME B1.20.1 (NPT).
- The enclosure material shall be compatible with the cable gland. The material used shall not introduce environmental factors that affect the type of protection applied.
- To maintain IP ratings, Hawke recommends the use of a Hawke IP washer or other approved sealing method.
- To ensure effective sealing of an IP washer, enclosure sealing face surface finish shall be smooth and free from damage. The entry hole should be drilled perpendicular to the sealing face.
- When using enclosures with plain through holes, Hawke recommends nominal +0.3mm of diametric clearance over the major diameter of the thread. For example, to accommodate an M20 entry, drill 20.3 diameter.
- Enclosure wall thickness is dependent on gland entry thread length, style of enclosure entry hole (threaded or plain), protection concept of the installation and the required use of accessories. The installer should be aware of and specify for these requirements, for example Exd requires 5 full threads of metric engagement in line with 60079-14.
- External earth tags are recommended to be fitted adjacent to the flange of the cable gland entry, so they remain in direct contact with the cable gland. Any sealing washer should be placed between tag and enclosure. For more information on placement of accessories, visit www.hubbell.com/hawke.

ACCESSORIES

Hawke offer the following accessories to enable correct sealing and ground of cable gland.

Shroud:	For additional corrosion protection
Locknut:	To secure gland into position
Sealing Washer:	For additional ingress protection
Earth Tag:	For external bonding point
Serrated Washer:	To prevent vibration loosening locknuts

SPECIFIC CONDITIONS OF USE (SPECIAL CONDITIONS)

The following conditions relate to safe installation and/or use of the equipment.

- When the glands are used for increased safety, dust protection and/or restricted breathing, the entry thread shall be suitably sealed (in accordance with EN / IEC 60079-14) to maintain the ingress protection rating of the associated enclosure. Not applicable when Hawke IP 66/67 sealing washer is used.
- The glands have a service temperature of -60°C to +130°C.
- Glands for use with unarmoured or braided cables are only suitable for fixed installations, the cable for which must be effectively clamped to prevent pulling and twisting (does not apply when fitted with rear clamping device or Hawke Gland Mounted Clamp (GMC)).

TORQUE VALUES

The torque values below are a general recommendation and may vary dependent on cable type. For best results, tighten in line with the number of turns described in the instruction STEP 2.

Torque Figures Nm									
Gland Size	Os	O	A	B	C	C2	D	E	F
Tailnut Torque	15-20	12-17	15-20	15-20	25-30	25-30	30-35	40-45	40-45

CABLE GLAND SELECTION TABLE							
Size Ref.	Entry Thread Size		Cable Acceptance Details		Max Installed Length	Hexagon Dimensions	
	Metric	NPT	Outer Sheath			Across Flats	Across Corners
			Min.	Max.			
Os	M16		2.5	7.5	28.5	19.0	21.2
	M20	1/2"			23.7	24.0	26.5
O	M16		6.5	11.8	29.0	19.0	21.2
	M20	1/2"			24.2	24.0	26.5
A	M20	1/2"	8.0	14.4	26.4	24.0	26.5
		3/4"					
B	M25	3/4"	10.0	19.7	34.5	32.0	36.0
		1"					
C	M32	1"	14.5	26.4	35.4	41.0	44.0
		1 1/4"					
C2	M40	1 1/4"	21.0	32.4	38.4	50.0	55.5
		1 1/2"					
D	M50	1 1/2"	29.0	42.3*	45.9	60.0	66.0
		2"		44.0			
E	M63	2"	41.5	54.3*	46.1	76.2	82.5
		2 1/2"		55.0			
F	M75	2 1/2"	52.0	65.3*	51.3	88.9	97.5
		3"		67.5			

All dimensions in millimetres (except NPT where dimensions are in inches)

Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread.

*Smaller diameters apply when selecting smaller diameter NPT entry threadform.

EU Declaration of Conformity and UK Attestation of Conformity in accordance with European Directive 2014/34/EU and UK Statutory Instrument 2016/1107

Manufacturer: Hawke International, Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom

Equipment: APEX A2F Cable Gland

Provisions of the Directive fulfilled by the Equipment: Group II Category 2G Ex db eb IIC Gb, 3G Ex nR IIC Gc, 1D Ex ta IIIC Da – IP66/67

Harmonized Standards used: EN 60079-0:2018, EN60079-1:2014, EN60079-7:2015+A1:2018, EN60079-15:2019, EN60079-31:2014

Notified Body for EU-Type Examination: CML B.V. 2776 Amsterdam, NLD

EU-type Examination Certificate: CML23ATEX1003X, CML19ATEX4507X (Ex nR)

Notified Body for production: 0598

Approved Body for UK-Type Examination: CML B.V. 2503 Chester, UK

UK-type Examination Certificate: CML 23UKEX1005X, CML21UKEX4133X (Ex nR)

Approved Body for production: 1180

On behalf of the above named company, I declare that on the date the equipment, accompanied by this declaration, is placed on the market the equipment conforms with all technical and regulatory requirements of the above listed directives.


Andrew Reid
Technical Manager