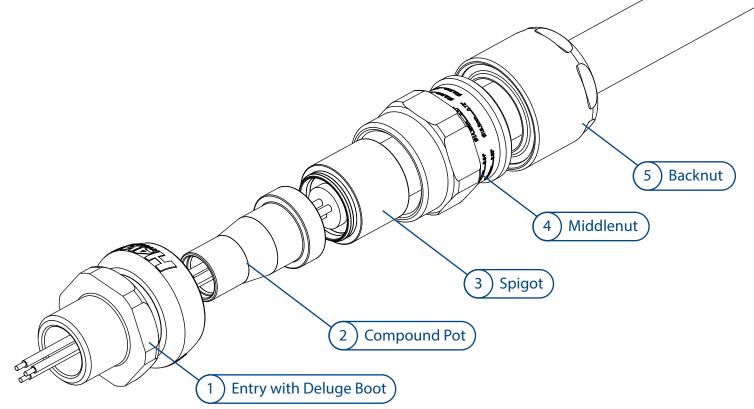
## Cable Gland Assembly Instructions **710-X**



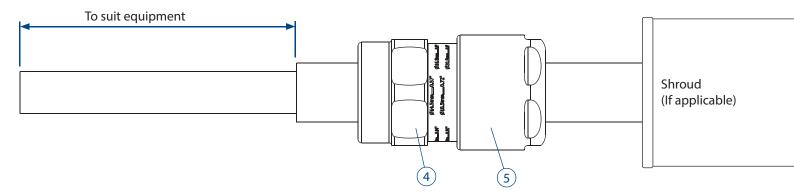
## **A: Component Parts**



### **B: Cable Preparation**

Slide shroud (if included), backnut (5) and middlenut (4) onto cable. Cut cable length and strip outer sheath to suit equipment. For preparation of Drain Wires see separate AI 2028. If an inner sheath is not present and using Express Resin, use electrical tape wrapped

around the base of the cores to create a suitable sealing surface.

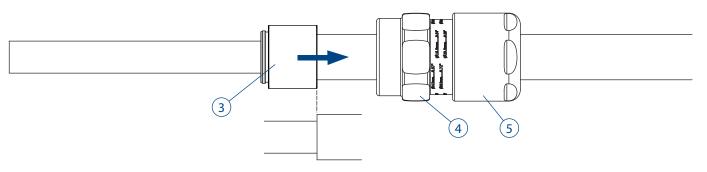




## **C: Installing Cable Gland**

#### **STEP 1: Fit Spigot**

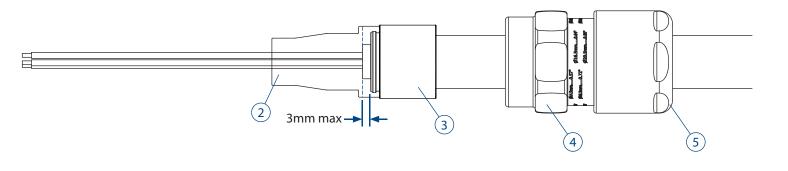
Check cut end of cable inner sheath for any sharp edges. If necessary clean up with a knife or apply electrical tape to smooth corners. Slide spigot ③ over cable, taking care not to damage rubber resin dam, until rear end of spigot is at the point the inner sheath is stripped back.



#### STEP 2: Strip inner sheath to expose cores

Strip inner sheath back to between flush and 3mm from end of spigot ③, taking care not to damage resin dam. Ensure the inner sheath protrudes through the resin daml.

Fit the pot 2 and check that the inner sheath is below the height of the pot shoulder as shown below.



0 25

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#### STEP 3: Pot gland with compound

Gland assembly is now ready for compound. Refer to the correct instructions depending on compound type. These instructions are supplied with the compound.



2-Part Epoxy Putty See AI 2034

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2-Part Pouring Epoxy Resin See AI 2035

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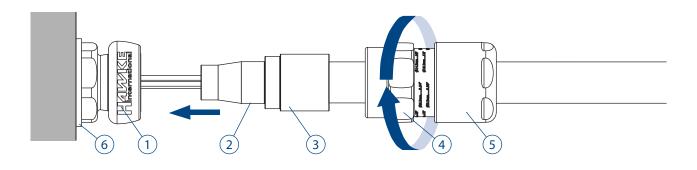
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#### **STEP 4: Fit to Enclosure**

Now potting the gland is complete, use a wrench to fit entry ① into enclosure. If required, use the appropriate IP washer ⑥. Slide cable through entry ① until pot ② is seated in the entry.

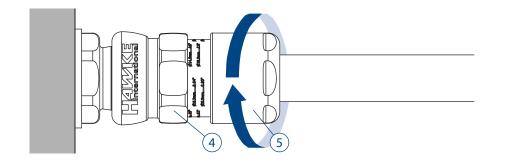
Hand tighten the middlenut 3 to entry and add 1/5 - 1/4 turn with a wrench.



#### **STEP 5: Install Backnut**

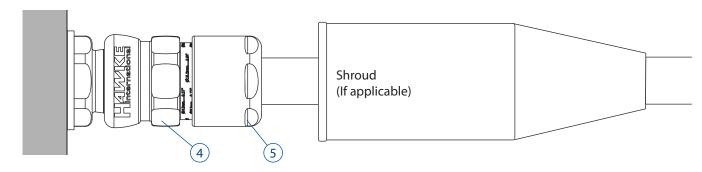
Hand tighten the backnut (5) until a seal is formed around the cable.

Use a wrench/spanner to grip the middlenut ④. While preventing the middlenut ④ turning, use a second wrench to apply one further full turn to the backnut ⑤.



#### STEP 6: Inspect Backnut

Use the middlenut ④ guide as an indication that the backnut ⑤ is in the correct position to suit cable diameter. A diameter scale below is provided to assist this process. Slide shroud over cable gland if applicable.



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80 Diameter Scale (mm)

Correct when printed A4 Booklet Style

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# Technical Information **710-X**



 TECHNICAL DATA

 Cable Gland Type:
 710-X

 Equipment Type:
 Group II Barrier Cable Glands

 Ingress Protection:
 IP66, IP67, IP68\*, IP69, NEMA 4X

 \*30m for 7 days with thread sealant

 10m for 24hrs no thread sealant, Os-C size only

 -50°C to +80°C (UL)

 -60°C to +80°C (ATEX/IECEx)

#### **CERTIFICATION DETAILS**

UL: Class I, Zone 1, AEx d IIC, Ex db IIC Gb, AEx e IIC, Ex eb IIC Gb; Zone 21, AEx tb IIIC, Ex tb IIIC Db Class I, Zone 2, AEx d IIC, Ex db IIC Gb, AEx e IIC, Ex eb IIC Gc; Zone 22, AEx tb IIIC Dc, Ex tb IIIC Dc

Class I Div 1 ABCD, (TC-ER-HL max O/D 1", ITC-HL) Class II Div 1 EFG & Class III (ITC-HL) Class I Div 2 ABCD, Class II Div 2 FG & Class III Div 2 (TC, TC-ER; PLTC, PTLC-ER, ITC, ITC-ER)

Listing No. E84940 Sealing compound to be indicated in gland marking with SL suffix

#### ATEX/IECEx:

Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db ATex: CML18ATEX1268X IECx: CML 18.0131X

#### SPECIFIC CONDITIONS OF USE

1. When the gland is used for increased safety, the entry thread shall be suitably sealed to maintain the ingress protection rating of the associated enclosure.

2. Compound cross section must be minimum 20% of total area over a depth of 20mm.

#### ACCESSORIES

Hawke offer the following accessories to enable correct ingress protection and grounding 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

#### INSTALLATION NOTES

1. All cable glands must be installed by a suitably trained and competent individual.

 Entry threads are in accordance with Metric BS3643 or ANSI/ASME B1.20.1
 Installer must check material compatability with enclosure and environment.

4. To maintain IP66/IP67/IP69, Hawke certified sealing washer or other approved sealing method must be used.

5. Sealing face surface must be smooth and free from damage

6. Wall thicknesses depended on thread length or retention type (locknut etc). Exd must maintain the requirements of IEC/EN 60079-1

7. All entries must be installed perpendicular to the mounting surface.

#### TORQUE VALUES

All torque values below were generated on metallic mandrels. For cable, it is recommended that the assembly instructions are followed.

Torque Figures N/m									
Gland Size	Os	0	А	В	С	C2	D	Е	F
Backnut Torque	12	12	20	30	35	45	56	60	75

CABLE GLAND SELECTION TABLE												
	Finder	. Thursday	Cable Acceptance Details								Hoveron	
Size	Entry Thread Size		Inner Jacket			Cores			Outer Sheath		Hexagon Dimensions	
Ref.	Metric	NPT	Min. Dia	Max. Dia	Max. Over Cores	Max. No. of Cores	Max .No. Fibre Optic	Min.	Max.	Length	Across Flats	Across Corners
Os	M20	1⁄2"	0.14″	0.32″	0.31″	12	48	0.22″	0.47″	2.85″	0.94″	1.04″
0	M20	1⁄2"	0.26″	0.46″	0.35″	12	48	0.37″	0.63″	2.85″	0.94″	1.04″
А	M20	1⁄2" - 3⁄4"	0.33″	0.55″	0.43″	15	72	0.49″	0.81″	3.00″	1.18″	1.28″
В	M25	<sup>3</sup> ⁄4" - 1"	0.44″	0.78″	0.63″	30	144	0.67″	1.02″	3.22″	1.42″	1.56″
С	M32	1" - 1¼"	0.69″	1.03″	0.86″	42	-	0.87″	1.30″	3.50″	1.81″	1.99″
C2	M40	11⁄4" - 11⁄2"	0.91″	1.27″	1.05″	60	-	1.10″	1.61″	3.80″	2.17″	2.39″
D	M50	2"	1.14″	1.74″	1.48″	80	-	1.42″	2.07″	4.82″	2.56″	2.79″
E	M63	21⁄2"	1.57″	2.20″	1.93″	100	-	1.81″	2.57″	4.67″	3.15″	3.46″
F	M75	3"	1.99″	2.68″	2.35″	120	-	2.24″	3.07″	5.07″	3.74″	4.09″

EU Declaration of Conformity in accordance with European Directive 2014/34/EU

**Provisions of the Directive fulfilled by the Equipment:** Group II Category 2/3 GD Ex eb IIC Gb, Ex db IIC Gb, Ex tb IIIC Db - IP66

Notified Body for EU-Type Examination: CML 2776 Chester UK EU-type Examination Certificate: CML18ATEX1268X Notified Body for production: SGS-Baseefa 1180 Buxton UK Harmonised Standards used: EN 60079-0:2018, EN60079-1:2014, EN60079-7:2015, EN60079-31:2014

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On behalf of the aforementioned 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.

.....9 A. Tindall

Technical Manager

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