

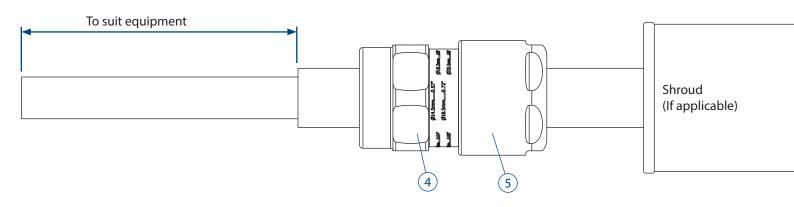
# **B: Cable Preparation**

Slide shroud (if included), backnut  $\ensuremath{\mathfrak{G}}$  and middlenut  $\ensuremath{\mathfrak{G}}$  onto cable.

Cut cable length and strip outer sheath to suit equipment.

For preparation of Drain Wires see separate Al 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.

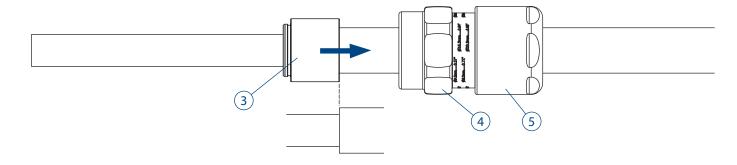




# C: Installing Cable Gland

# **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.

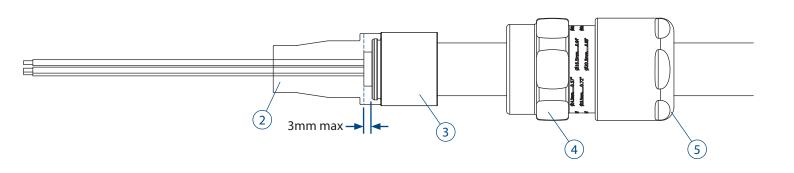


# STEP 2: Strip inner sheath to expose cores

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.



### 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 Al 2034



2-Part Pouring Epoxy Resin See AI 2035

Images for illustration purposes only.

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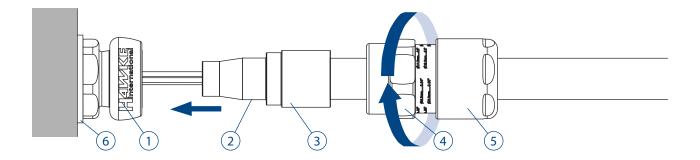
Product supplied may differ from that shown.

5<sub>1</sub> 10<sub>1</sub> 15<sub>1</sub> 20<sub>1</sub> 25<sub>1</sub> 30<sub>1</sub> 35<sub>1</sub> 40<sub>1</sub> 4

### **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.

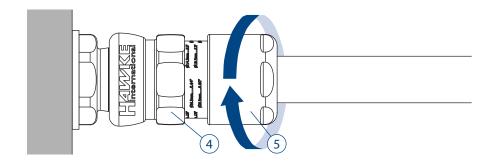
Hand tighten the middlenut 4 to entry and add 1/5 - 1/4 turn with a wrench.



### 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.

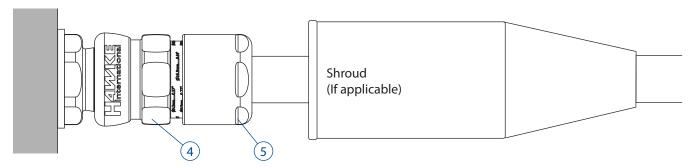


# STEP 6: Inspect Backnut

Use the middlenut 9 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.



Images for illustration purposes only.

Al 2029 - Issue H / Page 3 of 4 Product supplied may differ from that shown.

50 55 60 65 70 75 80 Diameter Scale (mm)

# Technical Information



**TECHNICAL DATA** 

Cable Gland Type: 710

**Equipment Type:** Group II Barrier Cable Glands Ingress Protection: IP66, IP67, IP68\*, IP69, Type 4X

\*30m for 7 days to EN60529 with thread sealant **Shroud:** 

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

Operating Temp: -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 Div 1 ABCD

Class II Div 1 EFG & Class III

UL Listed for use with cable types TC-ER-HL, Type P, TC, TC-ER,

PLTC, PLTC-ER, ITC, ITC-ER

Listing No. E84940

### ATEX/IECEx:

Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex tb IIIC Db

ATEX: CML18ATEX1268X

IECx: CML 18.0131X UKEX: CML21UKEX1132X

### 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.
- 2. Entry threads are in accordance with Metric BS3643 or ANSI/ASME B1.20.1
- 3. 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	Α	В	C	C2	D	Е	F	
Backnut Torque	12	12	20	30	35	45	56	60	75	

CABLE GLAND SELECTION TABLE												
			Cable Acceptance Details									
Size	Entry Thread Size		Inner Jacket		Cores			Outer Sheath		Max	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"
Α	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	3/4" - 1"	0.44"	0.78"	0.63"	30	144	0.67"	1.02"	3.22"	1.42"	1.56"
C	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"
Е	M63	2½"	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 and UK Statutory Instrument 2016/1107

Manufacturer: Hawke International, Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom Equipment: 710

Provisions of the Directive fulfilled by the Equipment: Group II Category 2GD Ex db eb IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db – IP66 67 68 69 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

Ret-type Examination Certificate: CML18ATEX1268X, CML19ATEX4507X (Ex nR)

Notified Body for production: 0598

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

UK-type Examination Certificate: CML21UKEX1132X, 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.

