Assembly Instructions for cable gland:
710 - ATEX / IECEx Certified

Operating temperature range: -60°C +80°C

1. Backnut
2. Middle Nut
3. Pot Cap
4. Compound Pot
5. Entry (with captive deluge seal), if fitted

A. Strip Cable to suit equipment as shown above, removing all cable fillers.
Length ‘I’ to suit equipment.

B. Position rear of pot cap ① level with prepared face of cable insulation, ensuring that the cap remains concentric to cable at all times.

C. Spread out the cable cores and the individual strands of uninsulated conductors for the compound packing. Pack the compound between the cores and strands as shown.

See notes overleaf and Fig. 7 for compound preparation.

Certification Details

Gland Type: 710
Exdb IIC Gb / Exeb IIC Gb / ExnR IIC Gc / Extb IIIIC Db
SIRA06ATEX1295X II 2 GD IP66
SIRA07ATEX4330X II 3 GD IP66
IECEx SIR06.0082X
EAC RU C-GB.TB5.B.00750

Standards:
IEC 60079-0:2011 Ed 6
IEC 60079-1:2014 Ed 7
IEC 60079-7:2015 Ed 5
IEC 60079-15:2010 Ed 4
IEC 60079-31:2013 Ed 2
EN 60079-0:2012+A11:2013
EN 60079-1:2014
EN 60079-7:2015
EN 60079-15:2010
EN 60079-31:2013

Note: ExnR II and Cat 3 marking is optional.
With all gaps and voids filled, bring the conductors back together and pack more compound around the outside of the conductors. Tape the conductors together to prevent disturbance of the compound seal. Pass the compound pot over pot cap and remove any surplus compound from the top of compound pot and joint faces as indicated.

Replace the entry over the compound pot ensuring that compound does not cover end of compound pot.

Note: If the equipment has a threaded entry it may be advisable to screw the entry component into the equipment to prevent twisting of the cable after step F.

Locate and hand tighten the sub-assembly and to the entry. While holding the entry with a spanner/wrench add half a turn to the middle nut. Unscrew the sub-assembly and from the entry then remove any surplus compound from the gland components. Again locate and hand tighten the sub-assembly and onto the entry.

To further locate and support the compound and compound pot assembly, while holding the middle nut with a spanner/wrench, tighten the backnut until the seal grips the cable to prevent movement of the cable gland.

Allow the compound to cure. (See Fig. 7 for Curing Times). Untighten firstly the backnut from and secondly the middle nut from the entry. Check that compound has cured.

Hand tighten the sub-assembly and to the entry and add half a turn to with a spanner/wrench. Tighten the backnut to form a seal around the cable, then tighten a further half to full turn using a spanner/wrench. Ensure that the middle nut does not rotate when tightening the backnut. Ensure that the deluge seal is pulled into position if fitted. Locate the shroud over the cable gland if applicable.

IMPORTANT: The conductors must not be moved for a minimum of four hours.
The following instructions are the approved methods of passing drain wires etc. through the compound barrier and should be followed if permitted by cable installation specifications.

UNINSULATED EARTH OR DRAIN WIRE PREPARATION

1.0 INSULATING EARTH OR DRAIN WIRES WITH HEAT SHRINK OR COLD SHRINK TUBING

1.1 Remove foils and tape level with the inner sheath, exposing the uninsulated earth or drain wires and insulated conductors. Cut back a further 10mm of inner sheath.

1.2 Pass 100mm length of heat shrink or cold shrink tubing over the uninsulated earth or drain wire until it comes into contact with the foils, then shrink the tubing evenly down onto the uninsulated earth or drain wire so that no air pockets occur.

1.3 To insulate the joint between the foils and the tubing a suitable piece of 10mm long shrink tubing or neoprene stretch tubing or a 10mm wide lap of PVC tape may be used.

1.4 After completing 1.1 to 1.4 on each earth or drain wire, lay the armour parallel to the cable, if applicable, then carry out instruction B.

INDIVIDUAL SHIELDING OR SCREEN PREPARATION

2.0 INSULATING SCREENS WITH HEAT SHRINK OR COLD SHRINK TUBING

2.1 Unravel one or two groups of wires from the individual shielding or screen wires, then remove the remainder of the individual shielding or screen wires (See Fig. 2) and twist the wires along their full length.

2.2 Pass 100mm length of heat shrink or cold shrink tubing over the individual shielding or screen until it comes into contact with the foils, then shrink the tubing evenly down onto the individual shielding or screen so that no air pockets occur.

2.3 To insulate the joint between the individual shielding or screen wires and the tubing, place one lap of PVC insulating tape over the exposed metallic joint.

2.4 After completing 2.1 to 2.5 on each individual shielding or screen, lay the armour parallel to the cable. Then carry out instruction B.

Epoxy Compound Cure Time Vs. Temperature

- The compound may be adversely affected by some solvent vapours. If such vapours are likely to be present in the vicinity of the cable gland in service, suitable precautions may be necessary. (Contact Hawke’s Technical Dept).

- The compound cures at a Shore D hardness of 85, when it can be handled. The compound when fully cured is suitable for use at a temperature range of -50°C to +60°C.
## CABLE GLAND SELECTION TABLE

<table>
<thead>
<tr>
<th>Size Ref.</th>
<th>Entry Thread Size</th>
<th>Cable Acceptance Details</th>
<th>Hexagon Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric</td>
<td>NPT</td>
<td>Max. Over Cores</td>
<td>Max. No. of Cores</td>
</tr>
<tr>
<td>O</td>
<td>M20 ½&quot;</td>
<td>10.0</td>
<td>12</td>
</tr>
<tr>
<td>A</td>
<td>M20 ¾&quot; - ½&quot;</td>
<td>12.5</td>
<td>15</td>
</tr>
<tr>
<td>B</td>
<td>M25 1&quot; - ¾&quot;</td>
<td>18.4</td>
<td>30</td>
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<tr>
<td>C</td>
<td>M32 1¼&quot; - 1&quot;</td>
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<tr>
<td>C2</td>
<td>M40 1½&quot; - 1¼&quot;</td>
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<tr>
<td>F</td>
<td>M75 3&quot; - 2½&quot;</td>
<td>66.2</td>
<td>120</td>
</tr>
</tbody>
</table>

### ADDITIONAL INSTRUCTIONS
1. The equipment may be used with flammable gases and vapours with apparatus group(s) IIA, IIB and IIC.

2. Installation and cable selection shall be carried out by suitably trained personnel in accordance with the applicable code of practice e.g. EN 60079-14 (IEC 60079-14).

3. The cable glands contain no serviceable parts and spare parts are not allowed to be supplied under the certification.

4. The certification of this equipment relies upon the following materials used in its construction:
   - Brass, Nickel Plated Brass, Aluminium, Stainless Steel metallic body and armour clamping components, Epoxy Compound and Silicon Rubber seals (back seal and optional deluge seal) and Acetal for the rear seal clamp. The user is responsible in ensuring that the materials listed are suitable for their intended application in both normal and hostile atmospheres. Particular attention should be paid to aggressive substances e.g. acids and alkalis or gases that may attack metals, or solvents or other liquids that may affect polymeric material.

5. Inspection and maintenance of these cable glands shall be carried out by suitably trained personnel in accordance with the applicable code of practice e.g. EN 60079-17 (IEC 60079-17). During periodic inspections the cable glands should be checked externally for tightness and visually inspected for any harmful corrosion.

6. Cable gland installation work should not be carried out on live circuits.

### ACCESSORIES:
Before cable gland assembly or stripping of the cable gland assembly, consideration should be given to any cable gland accessories that may be required, such as:
- Shroud, to offer additional corrosion protection.
- Locknut, to secure cable glands into position.
- Sealing washer, to offer additional ingress protection of the enclosure at the cable gland entry.
- Earhtag, to provide an external armour / braid bonding point.
- Serrated washer, to dampen any vibrations that may loosen the locknut or cable gland assembly.

### SPECIFIC CONDITIONS OF USE:
1. The entry thread shall be suitably sealed, in accordance with the applicable installation code of practice, to ensure that the ingress protection and restricted breathing sealing standards are maintained.
2. The flameproof joints shall not be repaired.

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

**Manufacturer: Hawke International**

**Address: Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom**

**Equipment Type: Range of Group II Barrier Cable Glands types: 710**

**Provisions of the Directive fulfilled by the Equipment:** Group II Category 2/3GD Exeb IIC Gb, Exdb IIC Gb, ExnRc IIC Gc, Extb IIC Db – IP66

**Notified Body for EU-Type Examination:** SIRA Certification 0518 Chester UK

**EU-type Examination Certificate:** Sira 06ATEX1295X, ExnR covered on Sira 07ATEX4330X.

**Notified Body for production:** SIRA Certification 0518 Chester UK


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.

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A. Tindall

Technical Manager