E1EX~QS
Ex d IIC, Ex e IIC, Ex nR IIC, Ex tb IIIC

BARRIER GLAND for Steel and Aluminium Armoured Cable

Features and Benefits
- For use indoors, outdoors and hazardous areas with unfilled hygroscopic multicore cables.
- Two part handling, no loose parts.
- Captive Cone and Cone Ring provides an armour clamp and earth bond for steel wire armour and aluminium armour.
- Captive Conical Resin. Resin forms a 100% barrier seal around the individual cores of the cable.
- Prevents gas and moisture transmitting down cable. Prevents explosive gases transmitting down cable.

Technical Data
Type: E1EX~QS
Gland Material: Brass (Nickel Plated), Stainless Steel
Seal Material: Thermostat Elastomer, Quick setting Barrier Resin
Cable Type: Steel Wire Armour, Aluminium Armour
Armour Clamping: Captive Cone and Cone Ring
Sealing Area: Inner and Outer Sheath
Optional Accessories: Adaptor, Earth Tag, Locknut, Reducer, Serrated Washer and Shroud

Standards and Certifications
Equipment Protection Levels: Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db
II 2G, II 2D, II 3G
Certification: Australian/New Zealand/IEC: IECEx IIA 12.0014X
ATEX: TÜV 13 ATEX 7397X
SANS/IEC: MAS 2013/13-028X
Marine: 09-SG435799-PDA
Operating Temperature: -20°C to +95°C
Ingress Protection: IP 66/68 (2m) IEC 60529

Installation Standards
The use of E1EX~QS Barrier Cable Gland is prescribed by the installation standards as follows:
- Ex d A5/NZS/SANS/IEC 60079-14 Paragraph 9.3
- Ex e A5/NZS/SANS/IEC 60079-14 Paragraph 10.4.2
- Ex nR A5/NZS/SANS/IEC 60079-14 Paragraph 14.3.2.2
- Ex p A5/NZS/SANS/IEC 60079-14 Paragraph 13.1.7
- Ex i A5/NZS/SANS/IEC 60079-14 Paragraph 5.9

Product Code | Gland Size Reference | Metric Entry Thread | NPT Entry Thread | Cable Details (Dia) | Max Length | Armour Dia | Hexagonal Detail | Install Torque Value Nm
--- | --- | --- | --- | --- | --- | --- | --- | ---
056000-16 | - | - | - | - | - | - | - | -
056000 | - | - | - | - | - | - | - | -
056000 | 0-016s | 001 | 1 | - | - | - | - | -
056000 | 0-020s | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056000 | 1-120 | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056000 | 2-25 | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056000 | 3-32s | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056004 | 4-40s | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056005 | 5-50s | 001 | 1 1/4 | 15 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056005 | 5-50s | 001 | 1 1/2 | 21 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056006 | 6-63s | 001 | 1 1/2 | 21 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056007 | 7-75s | 001 | 1 1/2 | 21 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056007 | 7-75s | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056008 | 8-80 | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056009 | 9-90s | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056009 | 9-90s | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056009 | 9/10s | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056009 | 9/10s | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056010 | 10-100 | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056010 | 11-1115 | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056012 | 12-120 | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0
056013 | 13-130 | 001 | 1 2/3 | 30 | 0.5 | 1.25 | 0.25 | 24.0 | 0.25 | 24.0 | 27.0 | 21.0

All dimensions except NPT are in mm
Metric glands may be utilised with a locknut for use on Ex e, Ex nR, Ex i equipment.
*For use with CCG Posi Fit Box • For use with CCG Hex Spanner • For use with CCG C Spanner

CCG reserves the right to make additions to the technical data, dimensions, designs and products available without notice. The illustrations cannot be considered binding. Please contact CCG for assistance.
1. Separate the inner Ⓐ from the body Ⓑ. Cut back the cable outer sheath to expose the armour to a length as per the table below. Strip back the inner bedding to expose the inner cable cores using the cone Ⓒ as a gauge.

<table>
<thead>
<tr>
<th>Gland Size</th>
<th>SWA Length</th>
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<th>Gland Size</th>
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<td>00-16ss</td>
<td>20.0</td>
<td>32-35ss</td>
<td>30.0</td>
<td>65-63ss</td>
<td>45.0</td>
<td>9-90s</td>
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<td>35-40ss</td>
<td>30.0</td>
<td>67-75ss</td>
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<td>4-40s</td>
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<td>77-75s</td>
<td>50.0</td>
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<td>8-80s</td>
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</tbody>
</table>

2. Using a cloth, clean the cable cores.

3. Using the insulation tape bundle the cores together at the end.

4. Screw the inner Ⓐ into the apparatus and tighten to the installation torque using a CCG Spanner Ⓑ. If the apparatus is untapped use a locknut. Pass the bundled cable cores through the outer nut Ⓒ and body Ⓑ. Pass the bundled cables cores through the inner Ⓐ and inner diaphragm seal and splay the armour wires over the cone Ⓒ.

5. Screw the body Ⓑ onto the inner Ⓐ until hand tight, then tighten with a CCG Spanner Ⓑ with ⅓ turn.

6. Unscrew the body Ⓑ. Check that the armouring has locked between the cone Ⓔ and the cone ring Ⓔ. Withdraw the gland sub-assembly Ⓔ and bundled cables. Remove insulation tape.

7. Remove the cap Ⓑ from resin applicator and attach the mixing nozzle Ⓑ (use extension nozzle for small multicore cables). Whilst holding the gland sub-assembly Ⓑ upright and holding the diaphragm seal firmly against the cable sheath inject the resin into the resin chamber. Make sure the resin fills all the way to the top of the resin chamber and wipe any excess resin away.

   Wait for the resin to set from a liquid to a gel, This should take: 15 minutes at 10°C 7 minutes at 20°C 6 minutes at 30°C 5 minutes at 40°C

   If there is still Resin left in the tube, discard the mixing nozzle Ⓑ and replace the cap Ⓑ for use with the next gland.

8. Re-insert the gland sub-assembly Ⓔ back into the inner Ⓐ.

9. Tighten the body Ⓑ onto the inner Ⓐ to the required torque using a CCG Spanner Ⓑ. Tighten the outer nut Ⓒ to produce a moisture proof seal by turning until the seal makes contact with the outer sheath of cable and then make one full turn.