ATTENTION: To help prevent electrical shock, disconnect from power source before installing or servicing. Follow NFPA 70E requirements or other applicable installation standards. Install in suitable enclosure. Keep free from contaminants. Only suitably trained personnel can install, adjust, commission, use, assemble, disassemble, and maintain the product in accordance with applicable codes of practice. If a malfunction or damage occurs, do not attempt to repair the product.

IMPORTANT When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. They must be knowledgeable of the applicable rules and regulations. These instructions provide a summary of the most important installation measures. Everyone working with the product must read these instructions so that they are familiar with the correct handling of the product.

Keep these instructions for future reference as they must be available throughout the expected life of the product.

Product Description

- **Plastic Cable Gland Kits**
  These kits must be installed within Bulletin 800G "EX" assembled stations. They cannot be used in Bulletin 800G c-UL-us stations for Class I Division 2 and Class I Zone 1 hazardous areas. They are not intended to be installed in third-party explosion-proof or flame-proof enclosures. Cable gland kit coneces are as follows:

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>800G-ACGK1</td>
<td>M20 plastic cable gland (1) with earth bracket (1)</td>
</tr>
<tr>
<td>800G-ACGK3</td>
<td>M25 plastic cable gland (1) with earth bracket (1)</td>
</tr>
</tbody>
</table>

- **Metal Cable Gland Kits**
  These kits must be installed within Bulletin 800G "EX" assembled stations or Bulletin 800G c-UL-us assembled stations for Class I Division 2 and Class I Zone 1 hazardous areas. They are not intended to be installed in third-party explosions-proof or flame-proof enclosures. Cable gland kit coneces are as follows:

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>800G-ACGK5</td>
<td>M20 metal cable gland (1) with earth plate (1)</td>
</tr>
<tr>
<td>800G-ACGK6</td>
<td>M25 metal cable gland (1) with earth plate (1)</td>
</tr>
<tr>
<td>800G-ACGK7</td>
<td>M20S metal cable gland (2) with earth plate (1)</td>
</tr>
</tbody>
</table>

### Specifications

<table>
<thead>
<tr>
<th>Certifications and Ratings (Bulletin 800G Assembled Stations)</th>
<th>Plastic Cable Glands</th>
<th>Metal Cable Gland</th>
</tr>
</thead>
<tbody>
<tr>
<td>c-UL-us Stations</td>
<td>—</td>
<td>E10314</td>
</tr>
<tr>
<td>ATEX (-EX Stations)</td>
<td>CML 15 ATEX 3024</td>
<td>CML 15 ATEX 3024</td>
</tr>
<tr>
<td>IECEx (-EX Stations)</td>
<td>IECEx CML 15 0014</td>
<td>IECEx CML 15 0014</td>
</tr>
<tr>
<td>UKEx(-EX Stations)</td>
<td>CML 21 UKEX 31392</td>
<td>CML 21 UKEX 31392</td>
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<tr>
<td>INMETRO (-EX Stations)</td>
<td>UL-BR 17 0366</td>
<td>UL-BR 17 0366</td>
</tr>
<tr>
<td>CCC (-EX Stations)</td>
<td>2020122304113731</td>
<td>2020122304113731</td>
</tr>
<tr>
<td>Gas and Dust protection type</td>
<td>2 G Ex db eb IEC T6 Gb</td>
<td>2 G Ex db eb IEC T6 Gb</td>
</tr>
<tr>
<td></td>
<td>2 D Ex tb IEC T8C Db</td>
<td>2 D Ex tb IEC T8C Db</td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td>-55...+60 °C</td>
<td>-55...+60 °C</td>
</tr>
<tr>
<td></td>
<td>(-67...+140 °F)</td>
<td>(-67...+140 °F)</td>
</tr>
<tr>
<td>Degree of Protection</td>
<td>IP64, IP66</td>
<td>IP64, IP66</td>
</tr>
</tbody>
</table>

Miscellaneous Cable Gland Kit Product Information

<table>
<thead>
<tr>
<th>Cable Gland Material</th>
<th>• Body/Cap: Polyamide  &lt;br&gt;• Seal: Silicone &lt;br&gt;• Body/Cap: Nickel-plated brass &lt;br&gt;• Seal/O-ring: Silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Gland Outer Thread Size and Pitch</td>
<td>M20 x 1.5, M25 x 1.5</td>
</tr>
<tr>
<td></td>
<td>M20 x 1.5, M25 x 1.5</td>
</tr>
<tr>
<td>Cable Gland Clamping Range (Inner Seal)</td>
<td>M20: 7...13 mm &lt;br&gt; M25: 12...17 mm &lt;br&gt; (9/32...3/64 in.) &lt;br&gt; (15/32...43/64 in.)</td>
</tr>
<tr>
<td></td>
<td>M20: 6...12 mm &lt;br&gt; M25: 12...20 mm &lt;br&gt; (15/32...32/32 in.)</td>
</tr>
<tr>
<td></td>
<td>M20: 8.5...14.5 mm &lt;br&gt; (21/64...37/64 in.)</td>
</tr>
<tr>
<td></td>
<td>M25: 12...20 mm &lt;br&gt; (15/32...25/32 in.)</td>
</tr>
<tr>
<td></td>
<td>M20: 0.7...1.25 mm &lt;br&gt; (1/32...3/64 in.)</td>
</tr>
<tr>
<td></td>
<td>M20: 0.9...1.3 mm &lt;br&gt; (1/32...3/64 in.)</td>
</tr>
<tr>
<td></td>
<td>M25: 1.0...1.6 mm &lt;br&gt; (2/64...1/16 in.)</td>
</tr>
</tbody>
</table>

At the end of its life, this equipment should be collected separately from any unsorted municipal waste.
Safety Instructions

Improper installation can cause malfunctioning and the loss of explosion protection.

Cable glands can only be used within the specified ambient temperature range and must be installed in a manner that maintains the specified ingress protection rating.

Use in areas other than those areas specified or the modification of the product by anyone other than the manufacturer is not permitted and exempts Rockwell Automation from liability for defects and any further liability.

The applicable statutory rules and other binding directives that relate to workplace safety, accident prevention, and environmental protection must be observed.

Before you commission or restart operator, check compliance with all applicable laws and directives.

All cable gland kits can only be used if they are in a clean and undamaged condition. Do not modify these components in any way.

Special Conditions for Safe Use

The cable glands must be mounted at the electrical apparatus in a way that helps prevent accidental rotation and loosening. The cable glands are only suitable for fixed installations. Cables must be effectively clamped to help prevent pulling or twisting.

![WARNING: For gas and dust installations: Potential electrostatic charging hazard. Clean only with anti-static cloths.](image)

The certificate does not cover hazards that come from environmental conditions different from the hazards clearly and precisely indicated in EN 60079-0 Clause 1.

Harmonized/Designated Standards Conformed To (800G “-EX” Assembled Station)

- EN 60079-0
- IEC 60079-0
- EN 60079-1
- IEC 60079-1
- EN 60079-7
- IEC 60079-7
- EN 60079-31
- IEC 60079-31

Assemble, Install, and Commission

![ATTENTION: Risk of serious injury due to incorrect assembly, installation, and commissioning.](image)

- Only qualified personnel are allowed to assemble, disassemble, install, and commission the device.
- Protect devices against mechanical damage or electrostatic discharge.
- Use suitable tools and install cable firmly.
- Use cable that is rated with an appropriate temperature range suitable for the application.

General Assembly

In hazardous areas, the cable glands must be used in the following ways:

- In appropriate enclosures with "Ex e" increased safety type of protection. The clearance and creepage distances under IEC/EN60079-7 Clauses 4.3 and 4.4 must be observed.
- In an enclosure that corresponds to another approved type of protection that is specified in IEC/EN 60079-0 Clause 1.
- Within an 800G “-EX” assembled station that has been drilled/tapped at the manufacturing facility. Field modification of 800G “-EX” enclosures is not permitted and voids all certifications and hazardous location ratings.

Plastic Cable Gland Installation

Follow these steps to install the plastic cable gland:

1. Verify that the cable gland and earth bracket are intact with no physical damage.
2. Thread the cable gland onto the appropriately sized opening on the top or bottom of the Bulletin 800G “-EX” enclosure, verifying that the red sealing washer is between the cable gland body and the 800G “-EX” enclosure.
3. Tighten the gland to the following torque range:
   - M20 cable glands - 1.5...2.5 N•m(13.3...22.1 lb•in)
   - M25 cable glands - 2.0...3.0 N•m(17.7...26.6 lb•in)
4. Remove the red dust plug and route the field cable through the seal of the cable gland. Adjust the free length of the cable so it can connect to all back-of-panel components inside of the enclosure.
5. Position the earth bracket where the cable gland is installed (top or bottom) and push the earth bracket between the rib and inside wall of the enclosure.
6. Open the terminal cages of the earth bracket and insert the conductors that must be grounded.
7. Tighten the earth bracket terminals to a torque range of 0.7...1.0 N•m (6...9 lb-in).
8. Tighten the cable gland cap to the following torque range:
   - M20 cable glands - 5.5...6.5 N•m (48.7...57.5 lb-in)
   - M25 cable glands - 8.0...10.0 N•m (70.8...88.5 lb-in)
Metal Cable Gland Installation

Figure 1 - Metal Cable Gland Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cap</td>
<td>F</td>
<td>Grounding cone</td>
</tr>
<tr>
<td>B</td>
<td>Upper sealing ring</td>
<td>G</td>
<td>O-ring</td>
</tr>
<tr>
<td>C</td>
<td>Middle body</td>
<td>H</td>
<td>Lower sealing ring</td>
</tr>
<tr>
<td>D</td>
<td>O-ring</td>
<td>I</td>
<td>Lower Body</td>
</tr>
<tr>
<td>E</td>
<td>Swivel braid retainer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IMPORTANT** When completing steps 4, 5, 9, 10, and 13 for the two M20S metal cable glands configuration, verify that the first cable gland is oriented as shown before installing the second cable gland.

This orientation allows for both the proper threading and installation of the cable glands.

1. Verify that the cable gland and earth plate are intact with no physical damage.
2. Position the earth plate where the cable gland will be installed (top or bottom of enclosure) and push the earth plate between the rib and inside wall of the enclosure.
3. Separate the lower body assembly and middle body assembly from one another, verifying that the lower sealing ring and grounding cone are on the lower body assembly of the cable gland.
4. Thread the lower body assembly of the cable gland onto the opening at the top or bottom of the 800G "-EX" or 800G c-UL-US enclosure, verifying that the O-ring is between the cable gland and the enclosure.
5. Tighten the lower body of the cable gland to the following torque:
   - M20 cable glands: 16.2...19.8 N-m (143...175 lb-in)
   - M25 and M20S cable glands: 18...22 N-m (159...195 lb-in)
6. Insert the field cable through the middle body assembly of the cable gland. Adjust the free length of the cable so it can connect to all back-of-panel components inside of the enclosure.
7. If the field cable has armor of shielding, the length of the armor or shielding must be no more than the height of the grounding cone plus 2 mm (0.08 in.).
8. If the field cable has armor, distribute it evenly along the outer conical circumference of the grounding cone.
9. Insert the field cable through the lower body assembly of the cable gland. Begin to thread the middle body assembly onto the lower body assembly.
10. Tighten the middle body to the following torque ranges:
    - M20 cable glands: 13.5...16.5 N-m (119...146 lb-in)
    - M25 and M20S cable glands: 16.2...19.8 N-m (143...175 lb-in)
11. Open the terminal cages of the earth plate and insert the conductors that must be grounded.
12. Tighten the earth plate terminals to a torque range of 0.7...1.0 N-m (6...9 lb-in).
13. Tighten the cable gland cap to the following torque:
    - M20 cable glands: 13.5...16.5 N-m (119...146 lb-in)
    - M25 and M20S cable glands: 16.2...19.8 N-m (143...175 lb-in)

**Maintenance**

**ATTENTION:** Risk of serious injury due to incorrect maintenance.

- Only qualified personnel are allowed to do any maintenance.
- IEC/EN 60079-17 must be observed.

You must keep all cable gland kit components in good condition, operate them properly, monitor them, and clean them regularly.

- Check all cable glands, grounding components, and cables regularly for cracks, damage, or physical anomalies. Verify that they are properly installed.

**IMPORTANT** Potential electrostatic charging hazard. Clean only with wet, anti-static cloth.

**Repair and Replacement**

**ATTENTION:** Defective cable glands cannot be repaired; they must be replaced.

- Cable gland kits are defective if the integrity of the device or seal has been compromised.
- Devices must be replaced with an equivalent catalog number from the manufacturer.
Accessories and Replacement Parts

For more accessories and replacement parts that Rockwell Automation offers, see https://ab.rockwellautomation.com/Push-Buttons/Hazardous-Location/800G.

Disposal

At the end of its life, this equipment must be collected separately from any unsorted municipal waste. Follow all local and national requirements for disposal of this product.

Approximate Dimensions

Dimensions are shown in millimeters (inches).

Cable Gland (M20 Plastic) [Used with Kit Cat. No. 800G-ACGK1]

Cable Gland (M25 Plastic) [Used with Kit Cat. No. 800G-ACGK3]

Cable Gland (M20 Metal) [Used with Kit Cat. No. 800G-ACGK5]

Cable Gland (M25 Metal) [Used with Kit Cat. No. 800G-ACGK6]

Cable Gland (M20S Metal) [Used with Kit Cat. No. 800G-ACGK7]

Declaration of Conformity

Rockwell Automation, Inc., declares that plastic cable gland kits (800G-ACGK1, 800G-ACGK3) and metal cable gland kits (800G-ACGK5, 800G-ACGK6, 800G-ACGK7), when installed within Bulletin 800G “-EX” assembled stations, are in compliance with Essential Health and Safety Requirements of Directive 2014/34/EU (ATEX) and Directive UKSI 2016:1107 (as amended) as follows:

- Equipment Group II, Equipment Category 2
- Type of protection “Ex ab ed IIC Gb / Ex tb IIIC T80C Db”

The full text of the EU declaration of conformity is available at rok.auto/certifications.