

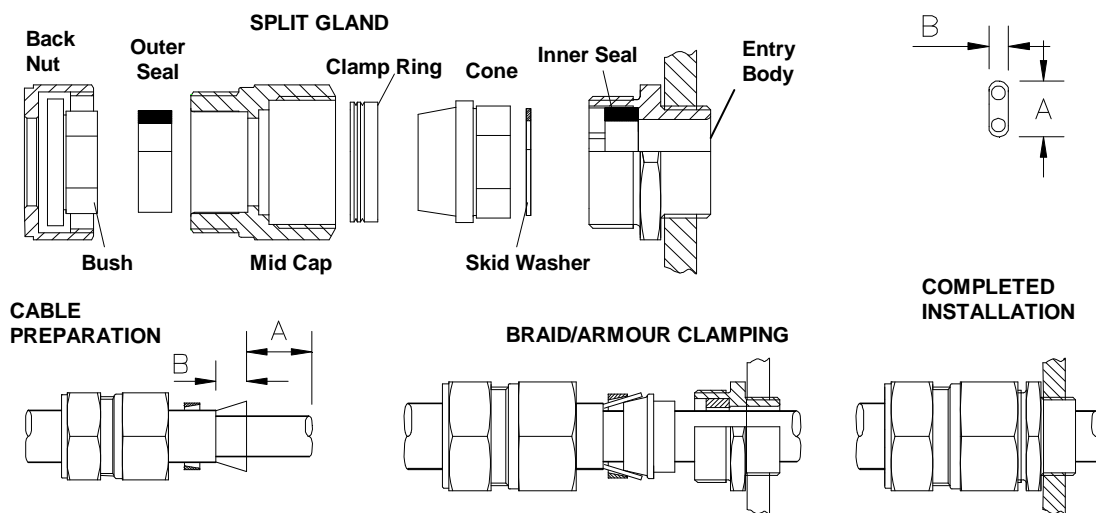
Brief Description

The Peppers D8X**/D8XC***/E8X**/E8XC*** range of cable glands are for use in the appropriate Hazardous Areas with flat/heat trace cable. These cable glands give environmental protection to IP66/67/68 (50 metres for 7 days). The D8X** glands provide a seal on the cable inner sheath whilst the D8XC*** option provides a connecting thread for mating rigid conduit or flexible conduit fittings. The E8X** glands provide a seal on the cable inner and outer sheaths whilst the E8XC*** gland provides a connecting thread for mating rigid conduit or flexible conduit fittings. A termination suitable for EMC protection can be made using braided/armoured cables with D8X**, D8XC***, E8X** and E8XC*** glands.

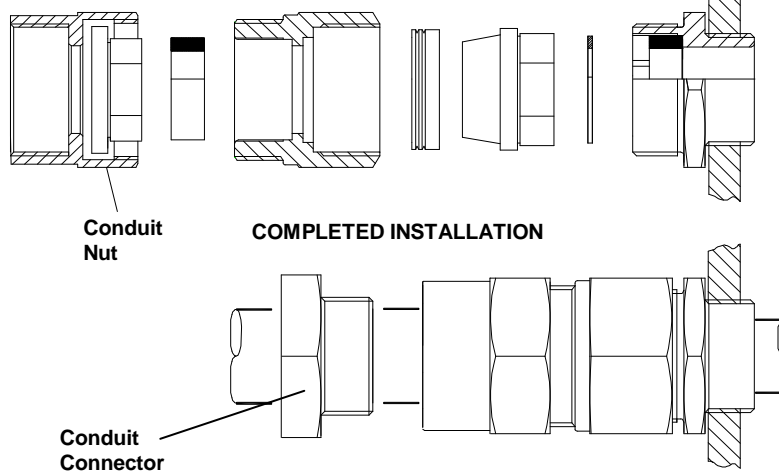
Warning
Please read these instructions carefully. These products should not be used in applications except as detailed here or in our datasheets, unless confirmed in writing by Peppers. Peppers take no responsibility for any damage, injury or other consequential loss caused where products are not installed or used according to these instructions. This leaflet is not intended to advise on the selection of product. Further guidance can be found in the standards listed overleaf or the prevailing code of practice.

STEP-BY-STEP FITTING INSTRUCTIONS

TYPES E8X / D8X** (Note: No Outer seal, Bush or Back Nut in D8X** gland)**



TYPE E8XC / D8XC** (Note No Outer seal, Bush or Back Nut is D8XC** gland)
(E8XC** version shown)**



STEP-BY-STEP FITTING INSTRUCTIONS

TYPES E8X / E8XC*** / D8X** / D8XC*** (Note: No Outer Seal, Bush or Back Nut in D8 version glands)**

- 1 Split gland as shown. N.B:- Outer Seal must be separated from the Mid Cap to prevent cable twist when tightening Mid Cap.
- 2 Fit Entry Body to enclosure. Hand-tighten, then suitably secure with a wrench.
- 3 Slide Back Nut (and shroud if required), Bush, Outer Seal, Mid Cap & Clamp Ring onto cable as shown. Ensure the Clamp is in the correct orientation. The clamp should be positioned so that the identification rings are away from the cone.
- 4 Prepare cable as shown in diagram.
 - A Strip outer jacket and braid, length to suit installation.
 - B Expose braid approx. 20mm long. Splay out braid to fit Cone.
- 5 Slide cone and Skid Washer (20R only) onto inner sheath. Position cone under braid. Slide Clamp ring onto exposed braid.
- 6 Insert cable through Inner Seal and Entry Body.
- 7 Hand tighten the Mid Cap to Entry Body to lock onto braid. When tight, further tighten Mid Cap 1 full turn with wrench.
- 8 Loosen off Mid Cap to visually check braid is securely locked.
- 9 Re-tighten Mid Cap to the entry body. Ensure the seal makes full contact with cable sheath and then tighten the Mid Cap an additional 1 turn.

D8X/D8XC***/E8X**/E8XC*** Cable Glands for flat cable – ASSEMBLY INSTRUCTIONS**

- 10** Push the Outer Seal into the Mid Cap and engage the Bush and Back Nut to Mid Cap. Tighten Back Nut ensuring that the seal makes full contact with cable sheath and then tighten the Back Nut an additional 1 turn.
- 11** For **D8XC*** / E8XC*** versions only**. Secure the Conduit Nut with a wrench, to prevent further tightening, and fasten the mating conduit/fitting to the Conduit Nut to complete the installation.

Cable Sizes (mm), Braid or armour Acceptance (mm)

TYPES D8X, D8XC***, E8X** and E8XC*****

| Gland Size | Inner Sheath | | | | Outer Sheath – Type E8 | | | | Max cable Type D8 | Wire/Braid Thickness |
|------------|--------------|-----|------|-----|------------------------|-----|------|-----|-------------------|----------------------|
| | MIN | | MAX | | MIN | | MAX | | | |
| | A | B | A | B | A | B | A | B | A | |
| 20S | 6.3 | 4.0 | 11.7 | 7.0 | 7.9 | 4.5 | 11.7 | 7.0 | 15.5 | 0.3 |
| 20 | 10.3 | 5.6 | 13.5 | 9.0 | 11.0 | 4.5 | 13.5 | 9.0 | 20.5 | 0.3 |
| 20R | 8.1 | 5.8 | 13.5 | 6.2 | 10.7 | 5.4 | 16.1 | 8.3 | 20.5 | 0.45 |

Installation Guidance

| Point | Advice |
|-------|--|
| 1 | <ul style="list-style-type: none"> EN/IEC 60079-10 Classification of Hazardous Areas EN/IEC 60079-14 Electrical Installations in Hazardous Areas EN/IEC 60079-31 Ignitable dust – Protection by enclosure BS 6121, Part 5 Selection, Installation & Maintenance of Cable Glands |
| 2 | Installation should only be carried out by a competent electrician, skilled in cable gland installation. |
| 3 | NO INSTALLATION SHOULD BE CARRIED OUT UNDER LIVE CONDITIONS. |
| 4 | Threaded entries: the product can be installed directly into threaded entries. Threaded entries should comply with clause 5.3 of IEC/EN 60079-1 and have a lead-in chamfer to allow for full engagement of the threads. For Ex d applications a minimum of 5 fully engaged parallel threads is required. Parallel entry threads will maintain an IP rating of IP64. A sealing washer should be used to maintain all IP ratings greater than IP64. Any thread sealant used should be non-hardening. |
| 5 | Clearance holes: these may be 0.1 to 0.7mm larger than the major diameter of the male thread. The product should be secured with a lock nut and the threads tightened to ensure the cable gland is secure. A sealing washer should be used to maintain IP ratings. A serrated washer should be used for additional installation protection. |
| 6 | To maintain the Ingress Protection rating of the product, the entry hole must be perpendicular to the surface of the enclosure. The surface should be sufficiently flat and rigid to make the IP joint. The surface must be clean and dry. It is the users/installers responsibility to ensure that the interface between the enclosure and cable gland is suitably sealed for the required application. |
| 7 | Whilst Peppers products with tapered threads, when installed into a threaded entry, have been tested to maintain IP66 without any additional sealant, due to the differing gauging tolerances associated with the use of tapered threads it is recommended to use a non-hardening thread sealant if an IP rating higher than IP64 is required. |
| 8 | Once installed do not dismantle except for routine inspection. An inspection should be conducted as per IEC/EN 60079-17. After inspection the gland should be re-assembled as instructed, ensuring the mid cap and back nut are correctly tightened to ensure the cable is secure. |

Approvals and Certification

| Approval | Certificate Number | Protection Concept / Type |
|----------|-----------------------|--|
| ATEX | Sira 01ATEX1270X | Ex II 1D 2G Ex d IIC Gb / Ex e IIC Gb / Ex ta IIIC Da |
| | Sira 09ATEX1221X | Ex II 3G Ex nR IIC Gc |
| IECEX | IECEX SIR 05.0020X | Ex d IIC Gb / Ex e IIC Gb / Ex ta IIIC Da |
| GOST-R | POCC GB.ГБ06.В01316 | Ex d IICU / Ex e IIU / Ex nR IIU (D8X*F & E8X*F only) |
| EAC | RU C-GB. ГБ06.В.00098 | Ex d IICU / Ex e IIU / Ex nR IIU (D8X*F & E8X*F only) |
| UKRAINE | UA.TR.047.C.0408-13 | Ex d IIC X / Ex e II X (D8X*F & E8X*F only) |
| INMETRO | NCC 13.2187 X | Ex d IIC Gb / Ex e IIC Gb / Ex ta IIIC Da (D8X*F & E8X*F only) |
| NEPSI | GYJ111306X | Ex d IIC / Ex e II (D8X*F & E8X*F only) |

Interpretation of Markings. Markings on the outside of this gland carry the following meanings:

Cable Gland Type & Size D8X/E8X-a-b ccc-ddd-nn

| | | | |
|-------|---|-------|----------------------------|
| a = | Main component material B = brass S = stainless steel | ddd = | Entry thread type and size |
| b = | Protection Concept F = Exd E = Ex e | nn = | Year of manufacture |
| ccc = | Gland size | | |

Cable Gland Type & Size D8XC/E8XC-a-b-c-ddd-eee-fff-nn

| | | | |
|-------|---|-------|----------------------------|
| a = | Connection Thread F = Female Connection Thread M = Male Connection Thread | eee = | Gland size |
| b = | Main component material B = brass S = stainless steel | fff = | Entry thread type and size |
| c = | Protection Concept F = Exd E = Ex e | nn = | Year of manufacture |
| ddd = | Connection thread type and size | | |

Special Conditions for Safe Use

- The D8X**, D8XC***, E8X** and E8XC*** ranges of cable glands shall not be used in enclosures where the temperature, at the point of contact, is outside the range of -60°C to +180°C.
- The D8X**, D8XC***, E8X** and E8XC*** ranges of cable glands shall only be used for fixed installations, in addition the cables must be effectively clamped to prevent pulling or twisting.
- The D8X**, D8XC***, E8X** and E8XC*** ranges of cable glands, when installed in accordance with the manufacturers instructions and with an appropriate enclosure on which they are fitted, are capable of providing an ingress protection of IP66 and IP68 (50 metres 7 days).
- Where glands without sealing rings are installed in protection by enclosure (Ex t) equipment for use in explosive dust atmospheres, they shall only be fitted into enclosures offering a minimum of 5 full threads, in accordance with EN 60079-31: 2009 clause 5.1.1.