

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

Brief Description

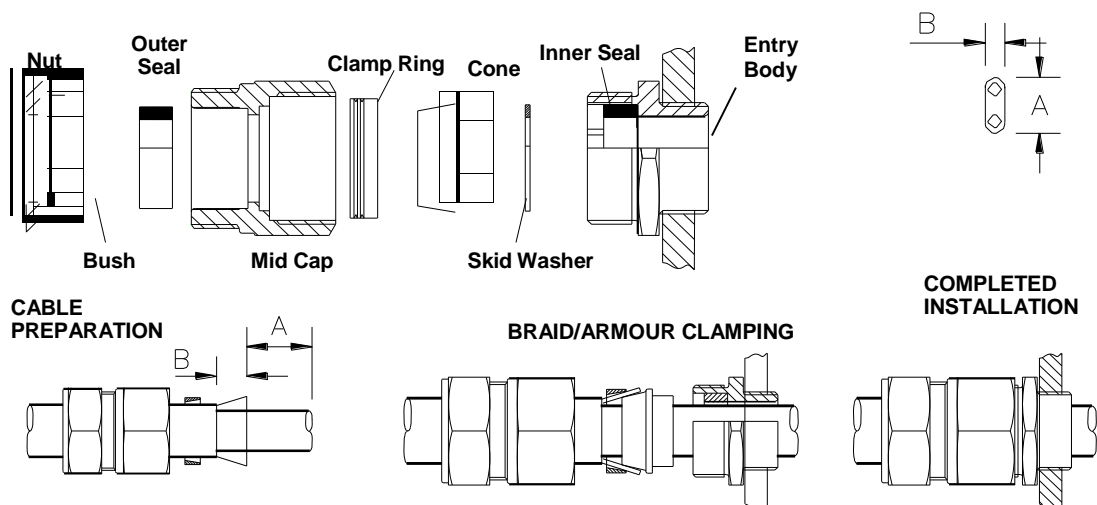
The Peppers D8X**/D8XC***/E8X**/E8XC*** range of cable glands are for use in the appropriate Hazardous Areas with flat/heat trace cable. These cable glands give environmental protection to IP66/67/68 (50 metres for 7 days). The D8X** glands provide a seal on the cable inner sheath whilst the D8XC*** 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.

警告 Warning

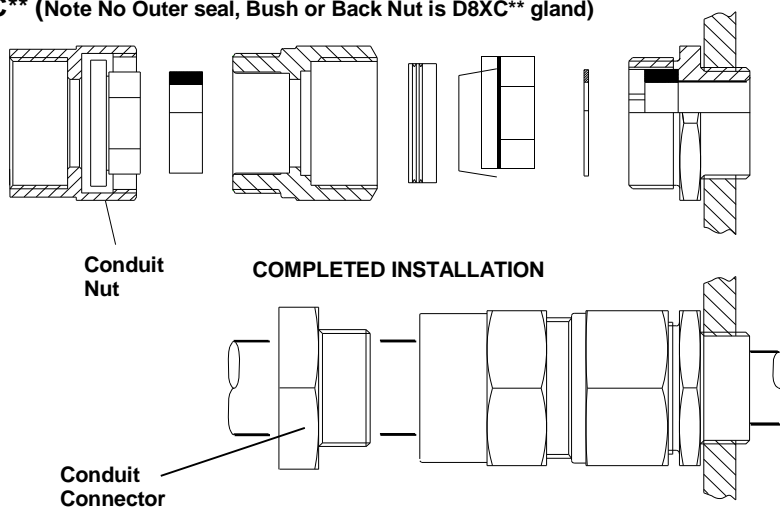
请仔细阅读这些说明。除非在我们这里的数据表中有详细说明，或经 Peppers 书面确认，否则这些产品不应在其它应用中使用。Peppers 对未按照本说明书安装或使用产品所造成的任何损坏、伤害或其他间接损失概不负责。本说明书并非针对产品的选择提供建议。进一步的指导可在本页列出的标准或现行操作规程中找到。Please read these instructions carefully. These products should not be used in applications except as detailed here or in our datasheets, unless confirmed 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 如图所示分解接头。N.B:- Split gland as shown. N.B:- Outer Seal must be separated from the Mid Cap to prevent cable twist when tightening Mid Cap.
- 2 安装入口主体，允许安装任何附件，并将螺纹完全啮合到设备中。用手拧紧，然后用扳手适当加固。Fit Entry Body, allowing for any installation accessories, and fully engage the thread into the equipment. Hand-tighten, then suitably secure with a wrench.
- 3 如图所示，将尾部螺母（和护罩，如需要）、衬套、外密封件、中部螺母和夹环滑到电缆上。确保夹环方向正确。定位夹环使识别环远离锥形形体 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 如图所示准备电缆 Prepare cable as shown in diagram.
 - A 剥离外套和编织带到适合安装的长度 Strip outer jacket and braid, length to suit installation.
 - B 露出约 20mm 长的编织带。展开芯线以适合锥形形体 Expose braid approx. 20mm long. Splay out braid to fit Cone.
- 5 将锥形形体和滑动垫圈（仅限 20R）滑到内护套上。将锥形形体放在编织带下面。将卡环滑到外露的编织带上 Slide cone and Skid Washer (20R only) onto inner sheath. Position cone under braid. Slide Clamp ring onto exposed braid.
- 6 通过内部密封件和入口主体插入电缆。Insert cable through Inner Seal and Entry Body.
- 7 用手将中部螺母拧紧至入口主体，以锁定在编织带上。拧紧后，用扳手将中部螺母进一步拧紧 1 整圈。Hand tighten the Mid Cap to Entry Body to lock onto braid. When tight, further tighten Mid Cap 1 full turn with wrench.
- 8 松开中部螺母，目视检查编织带是否牢固锁定。Loosen off Mid Cap to visually check braid is securely locked.
- 9 将中部螺母重新拧紧至入口主体上。确保密封件与电缆护套完全接触，然后再将中部螺母拧紧 1 圈 Re-tighten Mid Cap to the entry body. Ensure the seal

Peppers Cable Glands Ltd. Stanhope Road Camberley GU15 3BT UK

makes full contact with cable sheath and then tighten the Mid Cap an additional 1 turn.

- 10 将外密封件推入中部螺母，并将衬套和尾部螺母接合到中部螺母上。拧紧尾部螺母，确保密封件与电缆护套完全接触，然后再拧紧尾部螺母 1 圈 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 仅适用于 **D8XC***/E8XC*****版本。用扳手固定穿线管螺母，以防进一步拧紧，并将配套穿线管/配件固定到穿线管螺母上，以完成安装 **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.

Issue: 2
Date: 18/01/2023

www.peppers.co.uk

Doc: PA831
Page 1 of 2



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

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		
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	0.3

许可和证书 Approvals and Certification

许可 Approval	证书号码 Certificate Number	保护概念/类型 Protection Concept / Type
ATEX (2014/34/EU)	CML 19ATEX1346X	 II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	CML 19ATEX4109X	 II 3G Ex nR IIC Gc
IECEX	IECEX CML 19.0104X	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC	2021312313000447	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da IP66

安装指引 Installation Guidance

Point	建议 Advice
1	<div><div>♦ EN/IEC 60079-10 Classification of Hazardous Areas 危险区域类别</div><div>♦ EN/IEC 60079-14 Electrical Installations in Hazardous Areas 危险区域的电气装置</div></div> <div>♦ EN/IEC 60079-31 Ignitable dust – Protection by enclosure 可燃性粉尘-外壳防护</div> <div>♦ BS 6121, Part 5 Selection, Installation & Maintenance of Cable Glands 电缆接头密封套的选择、安装和维护</div>
2	只能由精通电缆密封套安装的合格电工进行安装。Installation should only be carried out by a competent electrician, skilled in cable gland installation.
3	有关合规标准的全面详情，请参阅产品证书，该证书可从我们的网站下载。Comprehensive details of the compliance standards can be found on the product certificates which
4	不得在带电的条件下进行安装。NO INSTALLATION SHOULD BE CARRIED
5	螺纹孔：产品可以直接安装到螺纹孔中。螺纹孔应符合相关适用标准，并具有引入倒角，以允许螺纹完全啮合。未能提供足够的引入倒角可能导致入口密封有问题。对于 Ex db 应用，至少需要使用 5 个完全啮合的平行螺纹。公制螺纹配有 o 形圈，可保持 IP66 和 IP68。其他并行接头螺纹将保持 IP64 的 IP 等级。使用 Peppers 密封垫圈以保持所有 IP 额定值大于 IP64。使用的任何螺纹密封剂应为不可硬化型。虽然带锥形螺纹的 Peppers 产品在安装到接头螺纹时，经测试证明无需任何额外的密封剂即可保持 IP66，但由于锥形螺纹使用的计量公差不同，如果要求 IP 等级高于 IP64，建议使用不可硬化螺纹密封剂。Threaded entries: the product can be installed directly into threaded entries. Threaded entries should comply with the relevant applicable standards and have a lead-in chamfer to allow for full engagement of the threads. Failure to provide a sufficient lead-in engaged parallel threads is required. Parallel entry threads will maintain an IP rating of IP64. A Peppers sealing washer should be used to maintain all IP ratings greater than with tapered threads, when installed into a threaded entry, have been tested to maintain if an IP rating higher than IP64 is required.
6	光孔：应大于外螺纹公称直径 0.5mm (+/-0.2mm)。产品应使用 Peppers 锁紧螺母固定，并拧紧螺纹，以确保电缆接头牢固。应使用 Peppers 密封垫圈来保持 IP 额定值。应使用 Peppers 锯齿垫圈进行额外的安装保护。Clearance holes: these shall be 0.5mm (+/-0.2mm) larger than the nominal diameter of the external entry thread. The product should be secured with a Peppers locknut and the threads tightened to ensure the cable gland is secure. A Peppers sealing washer should be used to maintain IP ratings. A Peppers serrated washer should be used for additional installation protection.
7	为保持产品的防护等级，入口孔必须垂直于外壳表面。表面应足够平整和坚硬，以支撑组件并形成 IP 接头。根据一般机器加工技术，该产品包含一圈螺纹旋出，整个长度上没有完整的螺纹，因此入口螺纹应具有适当的引入倒角，以确保保持密封。进一步的指导可以在我们的网站上的 Peppers 文件 CT0012 中找到。用户/安装人员有责任确保外壳和电缆密封套之间的接口适当密封，以满足应用要求。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 support the assembly and make the IP joint. The product incorporates a thread run out according to general machining techniques and will not have a full form thread for the entire length and as such entry threads should have a suitable lead-in chamfer to ensure a seal is maintained. Further guidance can be found in Peppers document CT0012 which can be found on our website. It is the user's/installer's responsibility to ensure that the interface between the enclosure and cable gland is suitably sealed for the required application.
8	如果需要接地连接，应使用 Peppers 接地垫片。Peppers 接地垫片经过独立测试，符合 IEC 62444 中给出的 B 类值。进一步的指导可以在我们的网站上的 Peppers 文件 CT0017 中找到。Peppers 接地垫片应安装在外壳内外的外部入口螺纹上。如果安装在内部，则必须用 Peppers 锁紧螺母和可选的 Peppers 锯齿垫圈固定。Where a bonding connection to earth is required a Peppers earth tag should be used. Peppers earth tags have been independently tested to comply with the Category B values given in IEC 62444. Further guidance can be found in Peppers document CT0017 which can be found on our website. Peppers earth tags should be fitted over the external entry thread from either inside or outside the enclosure. If fitted internally they must be secured with a Peppers locknut and optionally a Peppers serrated washer.
9	Peppers 公制外螺纹符合 ISO 965-1 和 ISO 965-3 标准，公差为 6g。Peppers 标准公制螺纹螺距为 1.5mm（适用于 M75 以下的螺纹），2.0mm（适用于 M80 及以上的螺纹）。可根据要求提供其他螺距。Peppers 外 NPT 螺纹符合 ASME B1.20.1 的要求，并根据第 8.1 条进行计量。所有螺纹符合 IEC 60079-1 第 5.3 条的螺纹接头要求。其他螺纹类型的信息可以在产品证书中找到。Peppers external metric entry threads comply with ISO 965-1 and ISO 965-3 with a 6g tolerance fit. Peppers standard metric thread pitch is 1.5mm for threads up to M75 and 2.0mm for size M80 and above. Alternative thread pitches are available upon request. Peppers external NPT threads are in accordance with ASME B1.20.1 with gauging to clause 8.1. All threads comply with the threaded joint requirements of clause 5.3 from IEC 60079-1. Information on
10	安装后，除例行检查外，不得拆卸。应根据 IEC/EN 60079-17 执行检查。检查后，应按照说明重新组装压盖，确保压紧螺母、中部螺母和尾部螺母正确拧紧，以确保电缆牢固安全。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.
11	如果需要，可以使用润滑剂来辅助装配和常规检查。润滑剂应符合现行操作规程，并应注意确保润滑剂不会与电缆接头密封套接触，因为这可能会影响性能。If required an anti-seize lubricant may be used to aid assembly and routine inspection. The lubricant should comply with the prevailing code of practice and care should be taken to ensure no lubricant comes into contact with the cable gland seals as this may impair performance.

图示标签说明。接头外示意图标签代表如下 Interpretation of Markings. Markings on the outside of this gland carry the following meanings:

电缆接头类型和尺寸 Cable Gland Type & Size D8X/E8X-a-b ccc-ddd-nn

a =	主要部件材质 B = 黄铜 S = 不锈钢 Main component material B =	ddd =	螺纹孔类型/尺寸 Entry thread type
b =	保护概念 Protection Concept F = Exdb E = Ex eb	nn =	制作年份 Year of manufacture
ccc =	接头尺寸 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 =	接头螺纹 Gland size
b =	主要部件材质 B = 黄铜 S = 不锈钢 Main component material B =	fff =	螺纹孔类型/尺寸 Entry thread type
c =	Protection Concept F = Exdb E = Ex eb	nn =	制作年份 Year of manufacture
ddd =	接头螺纹类型/尺寸 Connection thread type and size		

具体适用条件 Specific Conditions of Use

- D8X**, D8XC***, E8X** and E8XC***系列电缆接头不得用于入口/安装点温度超出-60° C 至+180° C 范围的外壳中 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.
- D8X**, D8XC***, E8X** and E8XC***系列电缆接头只能用于固定安装，此外，电缆必须有效夹紧，以防止拉扯或扭曲 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.
- D8X**, D8XC***, E8X** and E8XC***系列电缆接头，当按照制造商的说明进行安装并配有适当的外壳时，能够提供 IP66 和 IP68（50 米 7 天）的进入保护。The D8X**, D8XC***, E8X** and E8XC*** ranges of cable glands, when installed in accordance with the manufacturer's 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).
- 安装在粉尘爆炸中的螺纹接口部件螺纹无接口 o 形密封圈，螺纹入口内，应仅安装在具有以下任一特性的外壳中 The threaded entry component threads without interface o-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:
 - 平行引入线，确保至少保持 5 个螺纹完全、充分接触，这符合 EN 60079-31:2014/IEC 60079-31:2013 第 5.1.2 条的要求 parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014 / IEC 60079- 31: 2013,
 - 锥形入口，确保至少保持 3½ 螺纹完全充分接触，这符合 EN 60079-31:2014/IEC 60079-31:2013 第 5.1.2 条的要求 tapered entries that will ensure that a minimum of 3 ½ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014 / IEC 60079-31:2013

