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

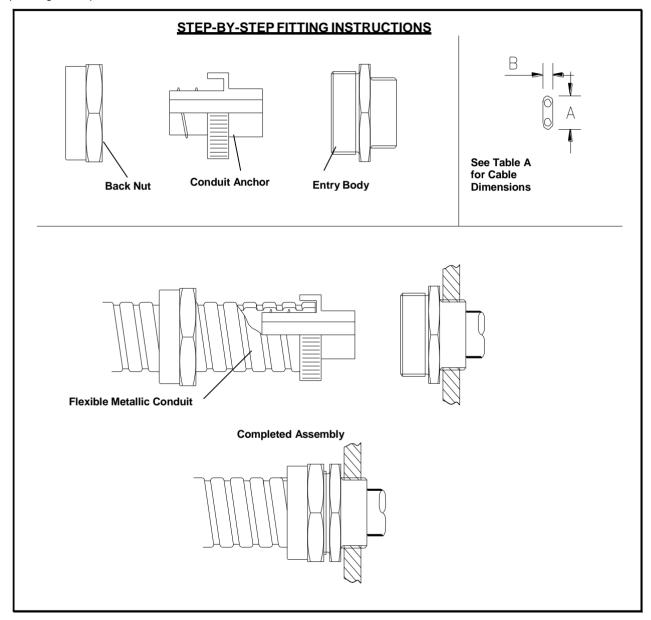
# A8RC\*\* Cable Glands for flat cable - ASSEMBLY INSTRUCTIONS

## **Brief Description**

Peppers A8RC\*\* 系列电缆接头适用于适当危险场所的扁平/热导电缆。这些电缆可以达到 IP66/67/68(50 米 7 天)防护等级。A8RC\*\* 系列电缆接头可只用于带适当的平绕或护套绕制柔性金属穿线管。The Peppers A8RC\*\* 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 A8RC\*\* range of cable glands are for use only with appropriate plain or sheathed wound flexible metallic conduit.

## 警告 Warning

请仔细阅读这些说明。除非在我们这里的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。进一步的指导可在背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.



## 装配步骤分解 STEP-BY-STEP FITTING INSTRUCTIONS

- 1 如图所示分开电缆,从入口主体移除尾部螺母和穿线管锚。无需从入口主体上拆下内密封或滑动垫圈(仅尺寸 20R)。Split the gland as shown, removing the Back Nut and Conduit Anchor from the Entry Body. There is no need to remove the inner seal or skid washer (size 20R only) from the entry body.
- 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,然后用扳手适当紧固 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 按照要求准备电缆。将电缆穿过柔性穿线管和穿线管锚。Prepare cable as required. Bring the cable through the flexible conduit and Conduit Anchor.
- 4 将尾部螺母滑到柔性穿线管上。将穿线管锚拧入柔性穿线管,直至完全接合。Slide the Back Nut over the flexible conduit. Thread the Conduit Anchor in to the flexible conduit until it is fully engaged.
- 5 通过入口主体插入电缆,将穿线管锚定位到入口主体凹槽中,并将尾部螺母接合到入口阀体上。 Insert cable through the entry body, locate the Conduit Anchor into the Entry Body recess and engage the Back Nut on to the Entry Body.
- 6 正确放置电缆。拧紧电缆接头时,密封件必须夹住电缆的外护套。Position the cable correctly. The seal must grip the outer jacket of the cable when the cable gland is tightened.
- 7 将尾部螺母拧紧到入口主体上。确保密封件与电缆护套完全接触,然后按照表 A 中的详细说明,额外转动/扭矩(以较大者为

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准)拧紧尾部螺母。Tighten Back Nut to Entry Body. Ensure the seal makes full contact with cable sheath and then tighten the Back Nut by the additional turns/torque (whichever is greater) as detailed below in Table A.

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 Doc: PA830

 Date: 18/01/2023
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Table A - Cable Size Acceptance Data (mm)

	A8RC** Outer Sheath and Conduit Data						Back Nut Assembly - Point 7	
Gland Size	Cable Sheath Data				Conduit Data		Back Nut Assembly - Point /	
	MIN		MAX		Typical	Max Conduit	Torque	Turns
	Α	В	Α	В	Conduit ID	OD	-	
20S-1	6.3	4.0	11.2	7.0	13.0	18.0	5 Nm	1
20S-2	6.3	4.0	11.7	7.0	13.9	19.5	5 Nm	1
20S-3	6.3	4.0	11.7	7.0	16.9	22.0	5 Nm	1
20-1	10.3	5.6	11.2	9.0	13.0	18.0	5 Nm	1
20-2	10.3	5.6	13.5	9.0	13.9	19.5	5 Nm	1
20-3	10.3	5.6	13.5	9.0	16.9	22.0	5 Nm	1
20R-1	8.1	5.8	11.2	6.2	13.0	18.0	5 Nm	1
20R-2	8.1	5.8	13.5	6.2	13.9	19.5	5 Nm	1
20R-3	8.1	5.8	13.5	6.2	16.9	22.0	5 Nm	1
25-1	10.6	4.0	16.2	7.0	16.9	23.8	15 Nm	1 1/2
25-2	10.6	4.0	16.2	7.0	18.7	24.8	15 Nm	1 1/2
25-3	10.6	4.0	16.2	7.0	21.1	26.8	15 Nm	1 1/2
25-4	10.6	4.0	16.2	7.0	20.7	27.8	15 Nm	1 1/2

许可 Approvals

许可 Approval	证书号码 Certificate Number	保护概念/类型 Protection Concept / Type		
ATEX	CML 19ATEX1346X	(Ex) II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da		
	CML 19ATEX4109X	⟨x⟩ 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		

Installation Guidance

Point	建议 Advice						
1	EN/IEC 60079-10						
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 in the product certificates which						
4	不得在带电的条件下进行安装 NO INSTALLATION SHOULD BE CARRIED OUT UNDER LIVE CONDITIONS.						
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 形閥,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 chamfer may lead to ingress sealing issues. For Ex db applications a minimum of 5 fully engaged parallel threads is required. Parallel entry threads will						
6	maintain an IP rating of IP64. A Peppers sealing washer should be used to maintain all IP ratings greater than IP64. Any thread sealant used should be non-hardening.  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倾倒角,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纹螺距。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 other thread types can be found in the						
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接头,确保外部螺母正确拧紧,以确保组件牢固安全 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 reassembled as instructed, ensuring the compression nut, 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条接触,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.						

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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 A8RC-a-b-ccc-ddd-nn

a =	主要部件材质 B = 黄铜 S = 不锈钢 Main component material	ddd =	螺纹孔类型/尺寸 Entry thread
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		

#### Specific Conditions of Use

- 1. A8RC\*\*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 A8RC\*\* 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.
- 2. A8RC\*\*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 A8RC\*\* ranges of cable glands shall only be used for fixed installations, in addition the cables must be effectively clamped to prevent pulling or twisting.
- 3. A8RC\*\*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 A8RC\*\* 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).
- 4. 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







