



EU Type Examination Certificate CML 19ATEX1171X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **LT-C* Range of Barrier Cable Glands**
- 3 Manufacturer **Peppers Cable Glands Ltd**
- 4 Address **Stanhope Road,
Camberley, Surrey,
GU15 3BT
United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V. , Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

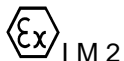
EN IEC 60079-0:2018

EN IEC 60079-7:2015/A1:2018

EN 60079-1:2014

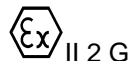
EN 60079-31:2014

- 10 The equipment shall be marked with the following:



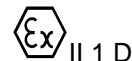
Ex db I Mb

Ex eb I Mb



Ex db IIC Gb

Ex eb IIC Gb



Ex ta IIIC Da



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11 Description

When used in accordance with relevant codes of practice, the LT-C* Range of Barrier Cable Glands allow circular and non-circular cable or conductors to enter into an enclosure without compromising the explosion protection that it provides. The glands are intended for use on liquid tight, flexible, metallic conduit that is wired with circular, unarmoured cables that are provided with or without braids or screens. The LT-C* Range of Barrier Cable Glands fitted with sealing rings, when installed in threaded holes or clearance holes with a lock nut and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66 and IP68 to 100 metres for 7 days. They are manufactured from stainless steel or brass and comprise from front (enclosure side) to rear (incoming cable side) the following component parts:

-) Entry body to tighten into an associated enclosure which is fitted with an optional interface o-ring seal on metric threaded variants. The front and rear of the body having male threads.
-) Front ferrule that fits into the entry body. The ferrule body is one part of a two part chamber where a two-part "elastomeric" epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face, when fitted into the entry body, makes an unthreaded cylindrical flamepath.
-) O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule.
-) Rear ferrule anchor, second part of a two part compound chamber, unthreaded flamepath between the entry body and front ferrule.
-) Conduit olive that is compressed and seals the associated liquid tight conduit onto the rear external spiral feature of the rear ferrule via the outer cap.
-) Outer cap that has female thread at the front and secures the olive against the rear ferrule, in turn ensuring the front ferrule is in place within the entry body when tightened onto the rear of the entry body.

The following table details typical thread sizes and cable/conduit that can be accommodated within the LT-C Barrier Glands

Gland Size	Standard Trade Size		Max Diameter Over Cores	Max No. of Cores	Max Cable Inner Sheath mm	Typical Conduit I/D mm	Conduit Outer Sheath mm
	Metric	NPT					
20S-1	M20	½"	5.0	9	5.0	6.2 – 7.1	11.4 – 12.9
20S-2	M20	½"	7.8	20	7.8	9.8 – 10.3	14.2 – 15.6
20-1	M20	½"	10.4	35	10.4	12.1 – 13.0	17.0 – 19.1
20-2	M20	½"	12.5	40	13.3	15.8 – 16.3	20.8 – 22.3
25-1	M25	¾"	17.8	60	18.0	20.8 – 21.3	26.0 – 27.8
32-1	M32	1"	23.5	80	23.6	26.0 – 27.1	32.7 – 34.5
40-1	M40	1 ¼"	28.8	130	31.8	34.8 – 35.8	41.1 – 43.3
50-1	M50	2"	37.0	200	37.0	40.0 – 40.6	47.3 – 49.4
63-1	M63	2 ½"	48.0	300	48.0	50.5 – 51.9	59.4 – 61.4
75-1	M75	3"	59.3	325	59.3	62.9 – 63.9	72.1 – 74.1
75-2	M75	3"	60.8	425	68.0	77.9 – 78.7	87.8 – 90.0



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Design Options:

1. As detailed on drawing number PCG/ETDUL, glands can be manufactured with alternative entry thread and hexagon dimensions.
2. These glands are typically manufactured with Metric or NPT threaded entries; however, as detailed on drawing number PCG/ETDMV other thread types are available.
3. These glands have the option to be plated.
4. Type LT-C* Barrier Gland for Liquid Tight Conduit
5. Parallel threaded glands with thread length increased to 10mm are suitable for increased safety application.
6. The cable gland types in the description, may be manufactured with a size larger than the standard size on the entry component.
7. The cable glands type in the description may manufactured to the following standards:
 -) NPSM to ANSI/ASME B1.20.1:1983, gauging to clause 9
 -) BSPT to BS 21:1985 (ISO 7/1) standard threads only clause 5.4, gauging to clause 5A, system A
 -) BSPP to BS 2779:1986 (ISO 228/1) class A full form external threads
 -) PG to DIN 40430:1971
 -) ET to BS 31:1940 (1979) Table A

Notes:

Sira 14ATEX1303X and IECEx SIR 14.0106X are superseded by certificates CML 19ATEX1171X and IECEx CML 19.0049X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 14ATEX1303X and IECEx SIR 14.0106X.

Where Sira 14ATEX1303X and/or IECEx SIR 14.0106X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	08 Oct 2019	R12627A/00	The issue of the prime certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

None.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 These glands shall not be used in enclosures where the temperature, at the point of entry/mounting, is outside of the range -60°C to +135°C.



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- 14.2 When required to maintain the ingress protection, parallel threaded glands will be suitably sealed using a method that is applicable to the associated equipment to which they will be attached. This will be in accordance with the relevant installation code of practice.
- 14.3 The Ingress Protection rating that is required to ensure compliance with the standards used in this certificate was determined by testing the devices fitted into a representative enclosure having a smooth flat mounting surface. In practice, the interface between the male thread of the glands and their associated enclosure cannot be defined; therefore, it is the user's responsibility to ensure that the appropriate Ingress Protection level is maintained at these interfaces.
- 14.4 When installed in an explosive dust atmosphere, glands that are not fitted with interface o-ring seals shall only used with enclosures that have either:
-) 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.
 -) 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.
- 14.5 These cable glands are manufactured with a cylindrical flameproof joint between the entry body and the front ferrule. This joint is not intended for repair.
- 14.6 After initial assembly, the Outer Cap shall be released to enable inspection of the Olive Seal. There shall be no gap between the Olive Seal and the Ferrule Anchor. This ensures that all internal components are correctly sited and prevents the possibility of generating a source of ignition due to the release of an internal ignition. If there is a gap between the Olive Seal and the Ferrule Anchor, the Olive Seal shall be replaced. Consult the manufacturer.



Certificate Annex

Certificate Number CML 19ATEX1171X
Equipment LT-C* Range of Barrier Cable Glands
Manufacturer Peppers Cable Glands Limited

The following documents describe the equipment or component defined in this certificate:

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Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/31UL	1 of 1	2	10 Oct 19	UL Component Barrier Gland Standard Entry Body Part 31UL
PCG/ATX/32UL	1 of 1	1	10 Oct 19	UL Component Front Ferrule Part 32UL
PCG/ATX/34C	1 of 1	2	10 Oct 19	ATEX Component Ferrule Anchor Part 34C
PCG/ATX/36C	1 of 1	2	10 Oct 19	ATEX Component Outer CAP part 36C
PCG/ATX/37C	1 of 1	1	10 Oct 19	ATEX Component Olive Seal Parts 37C
PCG/ATX/LTC	1 of 1	4	10 Oct 19	ATEX Barrier Gland Range for Liquid Tight Flexible Conduit LT-C Cable Gland
PCG/ATX/PEXMP	1 of 1	4	10 Oct 19	Hazardous Area Approved Products – Marking Plan
PCG/ETDMV	1 of 1	9	10 Oct 19	Standard Thread Chart ATEX Certified Glands Using “M”, “V” & “N” Components
PCG/ETOR	1 of 1	12	10 Oct 19	Accessory Component Entry Thread O-ring Seal Part OR
PCG/ETRO	1 of 1	3	10 Oct 19	Entry Thread Components Run Out Specification Parts: 1M, 1MIE, 1V, 31UL, 31V, 61M, 81AN, AR & SP
PCG/MATS/SB	1 of 1	5	10 Oct 19	Standard Materials ATEX Certified Glands Using “M”, “V”, and “N” Components
PCG/MATS/UL	1 of 1	2	10 Oct 19	Standard Materials for UL Certified Glands
PCG/OR	1 of 1	15	10 Oct 19	Accessory Component – O-ring Seal CR & UL Barrier Cable Glands & RA Range Internal O-ring Seals
PCG/ORGD	1 of 1	7	10 Oct 19	Component Male Threaded Entry Component O-ring Groove Detail