



#### EU Type Examination Certificate CML 19ATEX3347X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **ACDP Breather Drain**
- 3 Manufacturer **Peppers Cable Glands Limited**
- Stanhope Road. 4 Address Camberley, Surrey, **GU15 3BT United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, 6 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.
- This EU Type Examination certificate relates only to the design and construction of the 8 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 60079-31:2014

10 The equipment shall be marked with the following:

⟨έ<u>x</u>⟩<sub>IM2</sub>

⟨<u>Ex</u>⟩<sub>II 2 G</sub>

<u>ξx</u>/μ<sub>1 Π</sub>

Ex ta IIIC Da

Ex eb I Mb

Ex eb IIC Gb

A C Smith **Technical Operations Director** 





### 11 Description

The breather drain plug is designed to allow moisture emission from Ex e and Ex ta enclosures and to allow air within the enclosure to breathe with the surrounding atmosphere. The device body may be manufactured from aluminium, brass or stainless steel with a 10 mm long metric or NPT thread. The body is machined to house a sintered bronze or stainless steel filter. Drainage channels through the body allow for the passage of moisture through the filter.

The device may be screwed into the wall of an enclosure or into a through hole, being secured by a castellated locknut.

Parallel threaded Breather Drains may be fitted with or without an O-ring seal, see below for approved seals. When fitted with an O-ring seal and screwed into the wall of an enclosure or into a through hole, being secured with a castellated locknut, they will maintain IP66 degree of protection.

Tapered threaded Breather Drain may be fitted with or without an O-ring seal, see below for approved seals. When fitted with an O-ring seal and secured into a through hole, they will maintain IP66 degree of protection.

#### **Design Options**

Extended Thread Length:

The breather drain plug may be machined with a long thread. Long threads have two additional drainage channels machined into the thread.

The breather drain may have the following threads:			
M12	M25	3/8" NPT	
M16	M32	1⁄2" NPT	
M20		1⁄4" or 3⁄4" NPT	

Alternatively, the breather drains may be provided with the following, but not limited to, alternative thread forms of an equivalent size:

- 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





'O' ring seals materials fitted to male thread forms may be provided in the following materials to suit the application:		
Nitrile O-ring	Fluorosilicone O-ring	
Neoprene O-ring	Viton O-ring	
Silicone O-ring	EPDM O-ring	

Materials of Manufacture and Marking:

The breather drain plugs may be manufactured from the following materials:

Brass grade CW614N (CuZn 38Pb4)/ CZ121 4Pb	I M2 / II 1D 2G
Brass grade Ecobrass C69300	I M2 / II 1D 2G
Stainless Steel 1.4401/ 316 S31	I M2 / II 1D 2G
Stainless Steel 1.4404/ 316 S11	I M2 / II 1D 2G
Stainless Steel 1.4301/ 304	I M2 / II 1D 2G
Aluminium AW6082/ AW 6262/ 6082T6	II 1D 2G

The products may additionally be metallic plated with either: Nickel, Zinc or Anodised (0.008 mm thick max.) to suit the application.

## Product Type Ref:

The product type is derived from the following options:

#### A-B-C-D-E-F-G

A	Product type ACDP =	Breather drain		
В	IP Seal code	IP Seal code		
	0 =	No seal fitted	-100°C to 400°C	
	1 =	Nitrile O-ring	-30°C to 100°C	
	2 =	Neoprene O-ring	-35°C to 90°C	
	3 =	Silicone O-ring	-60°C to 200°C	
	4 =	Fluorosilicone O-ring	-55°C to 200°C	
	5 =	Viton O-ring	-20°C to 180°C	
	6 =	EPDM O-ring	-50°C to 110°C	
С	Material of manufacture			
	A =	Aluminium		
	B =	Brass		
	S =	Stainless-Steel		
D	Certification order code			





Е	Plating	
	OO =	Not plated
	NP =	Nickel plated
	ZP =	Zinc
	AN =	Anodized
F	Thread size	
	Metric =	M12/M16/M20/ M25/ M32
	NPT =	1/4"/ 3/8" / 1/2"/ 3/4"
G	Lock nut	
	X =	No lock nut
	S =	Stainless Steel Option

#### Notes:

- J Sira 09ATEX3321X and IECEx SIR 09.0132X are superseded by certificates CML 19ATEX3347X and IECEx CML 19.0105X.
- ) The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 09ATEX3321X and IECEx SIR 09.0132X.
- ) Where Sira 09ATEX3321X and/or IECEx SIR 09.0132X 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 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 The breather/drains are only suitable for bottom entry applications within associated Ex eb and Ex ta enclosures.
- 14.2 The products are approved for a temperature range at their point of mounting based upon the interface seal and material combinations of construction:
  - No seal fitted (-100°C to +400°C)
  - ) Nitrile O-ring (-30°C to +100°C)
    - Neoprene O-ring (-35°C to +90°C)

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- J Silicone O-ring (-60°C to +200°C)
- J Fluorosilicone O-ring (-55°C to +200°C)
- J Viton O-ring (-20°C to +180°C)
- EPDM O-ring (-50°C to +110°C)
- 14.3 When no seal is fitted and the breather drain is installed in an increased safety (Ex e) enclosure, the user shall ensure that a minimum degree of protection IP54 is maintained.
- 14.4 When used in explosive dust atmospheres, the breather drain shall be fitted with sealing a ring except when installed into a tapered threaded hole. In this case the short threaded versions 10 mm (1/4" NPT, 3/8" NPT) or 13 mm (1/2" NPT, 3/4" NPT) shall be used to ensure that a minimum of 3 full threads of contact will be maintained. This is in accordance with clause 5.3.2 of EN 60079-31: 2014.
- 14.5 The M12 and ¼" NPT threaded breather drains made of brass and intended for mining (Group I) applications shall be installed in areas where they are subject to low risk of mechanical impact or are protected from mechanical damage.



# **Certificate Annex**

Certificate Number	CML 19ATEX3347X Issue 0
Equipment	ACDP Breather Drain
Manufacturer	Peppers Cable Glands Limited

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

#### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
PCG/ACFD	1 of 1	3	10 Oct 19	Accessory Component Filter Disc
PCG/ATX/ACDP	1 of 1	4	10 Oct 19	ATEX Range Accessories ACDP Breather Drains
PCG/ATX/BDL	1 of 1	7	10 Oct 19	ATEX Range Component Breather Drain Body Long Thread
PCG/ATX/BDS	1 of 1	7	10 Oct 19	ATEX Range Component Breather Drain Body Short Thread
PCG/ATX/PEXMP	1 of 1	4	10 Oct 19	Hazardous Area Approved Products Marking Plan
PCG/ETOR	1 of 1	12	10 Oct 19	Accessory Component Entry Thread O- ring Seal Part OR
PCG/ORGD	1 of 1	7	10 Oct 19	Component Male Threaded Entry Component O-ring Groove Detail
PCG/LNC	1 of 1	5	10 Oct 19	Component Lock Nut, Castellated Part ACBLNC, ACSLNC, ACALNC
PCG/MATS/AL	1 of 1	3	10 Oct 19	Standard Materials AL Alloy ATEX Certified Glands Using "M", "V" AND "N" Components
PCG/MATS/SB	1 of 1	5	10 Oct 19	Standard Materials ATEX Certified Glands Using "M", "V" AND "N" Components
PCG/ETRO	1 of 1	3	10 Oct 19	Entry Thread Components Run Out Specification