



# EU Type Examination Certificate CML 19ATEX1346X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment A8\*\*, A8C\*\*\*, A8RC\*\*, D8X\*\*, D8XC\*\*\*, E8X\*\* and E8XC\*\*\* Range of Cable

**Glands** 

3 Manufacturer Peppers Cable Glands Limited

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.

- 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 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.
- 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:

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Ex db IIC Gb

Ex eb IIC Gb

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### 11 Description

These cable glands are intended for use with flat profile cables.

The A8\*\* may be used with any cable type where sealing and retention is required by gripping the outer sheath (this includes armoured/screened/braided cables, the armour/screen/braid being clamped inside the terminating equipment).

The D8X\*\* and E8X\*\* have an additional clamp to grip copper braid and woven steel wire armour. The D8X\*\* seals and grips the inner sheath and the E8X\*\* seals and grips the inner and outer sheaths.

Construction materials are brass, mild steel or stainless steel. In all cases, the seal materials are silicone. Glands are available in the size range 20S, 20R and 20 with an M20 x 1.5 and M25 X 1.5 metric entry thread. Alternative equivalent size entry thread forms are available. The glands have an ingress protection rating of IP66 and IP68 (50 metres 7 days).

The A8C\*\*\* model series variant to the A8\*\* series additionally provides, via an alternative cap component, male or female connection to solid rigid conduit or flexible metallic conduit The A8RC\*\* model series variant to the A8\*\* series additionally provides, via an alternative compression bush component, male connection to galvanised steel or stainless steel, unsheathed or protective sheathed, flexible metallic conduit.

The D8XC\*\*\* model series variant to the D8X\*\* series additionally provide via an alternative cap component, male or female connection to solid rigid conduit or flexible metallic conduit.

The E8XC\*\*\* model series variant to the E8X\*\* series additionally provide, via an alternative cap component, male or female connection to solid rigid conduit or flexible metallic conduit.

Gland Type:		A8**							
Available Part N	No's.:	Α	8		*	*			
					В	F			
					S	Е			
Options:		В	Brass material						
		S	316 Stainless Steel material						
		F	Dual certified d (flameproof) & e (increased safety)						
		Е	Certified e (incr	eased safety	y) only				
Gland Type:	A8C***								
Available	Α	8	С	*	*	*			
Part No's.:				F	В	F			
				M	S	Е			
Options:	F	Female	conduit connector						





M Male conduit connector

B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

## Type A8\*\*/A8C\*\*\* Cable Glands

Gland Size	Standard Entry Threads		Outer Sheath Data						
	Motrio	NDT	М	lin	M	ax			
	Metric N	NPT	Α	В	А	В			
20S	M20	1/2"	6.3	4.0	11.7	7.0			
20	M20	1/2"	10.3	5.6	13.5	9.0			
20R	M20	1/2"	8.1	5.8	13.5	6.2			
25	M25	3/4"	10.6	4.0	16.2	7.0			

Gland Type: A8RC\*\*

Available A 8 R C \* \*
Part No's.:
B F

S E

Options: B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

## Type A8RC\*\* Cable Glands:

Gland Size	Standard Entry Threads		Outer Sheath and Conduit Data							
			Cable S	Sheath D	ata		Conduit Data	a		
	Metric	Metric NPT		Min			Typical	Max Conduit		
			Α	В	Α	В	Conduit ID	OD		
20S-1	M20	1/2"	6.3	4.0	11.2	7.0	13.0	17.1		
20S-2	M20	1/2"	6.3	4.0	11.7	7.0	15.0	19.3		
20S-3	M20	1/2"	6.3	4.0	11.7	7.0	16.9	21.5		
20-1	M20	1/2"	10.3	5.6	11.2	9.0	13.0	17.1		
20-2	M20	1/2"	10.3	5.6	13.5	9.0	15.0	19.3		
20-3	M20	1/2"	10.3	5.6	13.5	9.0	16.9	21.5		





Gland Size	Standard Threads	Entry	Outer S	Outer Sheath and Conduit Data							
			Cable S	Cable Sheath Data			Conduit Data	a			
	Metric	NPT	Min		Max		Typical	Max Conduit			
			Α	В	Α	В	Conduit ID	OD			
20R-1	M20	1/2"	8.1	5.8	11.2	6.2	13.0	17.1			
20R-2	M20	1/2"	8.1	5.8	13.5	6.2	15.0	19.3			
20R-3	M20	1/2"	8.1	5.8	13.5	6.2	16.9	21.5			
25-1	M25	3/4"	10.6	4.0	16.2	7.0	16.9	23.8			
25-2	M25	3/4"	10.6	4.0	16.2	7.0	18.7	24.8			
25-3	M25	3/4"	10.6	4.0	16.2	7.0	21.1	26.8			
25-4	M25	3/4"	10.6	4.0	16.2	7.0	20.7	27.8			

Gland Type: D8X\*\*

Available Part D 8 X \* \*
No's.:
B F
S E

Options: B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

Gland Type: D8XC\*\*\*

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Options: F Female conduit connector

M Male conduit connector

B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

### Type D8X\*\*/D8XC\*\*\* Cable Glands:

Gland	Standard Entry		Inner	Sheath	Range		Outer Sheath Range				Armour	
Size	Threads	i	M	lin	M	ax	M	lin	М	ax	Wire D	Dia.
	Metric	NPT	Α	В	Α	В	Α	В	Α	В	Min	Max
20S	M20	1/2"	6.3	4.0	11.7	7.0	7.9	4.5	11.7	7.0	0.1	0.3
20	M20	1/2"	10.3	5.6	13.5	9.0	11.0	4.5	13.5	9.0	0.1	0.3





CML 19ATEX1346X Issue 0

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20R M20 ½"	" 8.1	5.8 13.5	6.2 10.7	5.4 16.1	8.3	0.1	0.3
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Note: A = width and B = thickness

Gland Type: E8X\*\*

Available Part E 8 X \* \* No's.:

Options: B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

Gland Type: E8XC\*\*\*

Options: F Female conduit connector

M Male conduit connector

B Brass material

S 316 Stainless Steel material

F Dual certified d (flameproof) & e (increased safety)

E Certified e (increased safety) only

## Type E8X\*\*/E8XC\*\*\* Cable Glands:

Gland	Standard Entry		Inner	Sheath	Range		Outer Sheath Range				Armour	
Size	Threads	i	M	in	M	ax	M	lin	М	ax	Wire [	Dia.
	Metric	NPT	Α	В	Α	В	Α	В	Α	В	Min	Max
20S	M20	1/2"	6.3	4.0	11.7	7.0	7.9	4.5	11.7	7.0	0.1	0.3
20	M20	1/2"	10.3	5.6	13.5	9.0	11.0	4.5	13.5	9.0	0.1	0.3
20R	M20	1/2"	8.1	5.8	13.5	6.2	10.7	5.4	16.1	8.3	0.1	0.3

Note: A = width and B = thickness

Note:

The A8\*F has now been split into design variants within A8\*\* model number series.

The A8C\*\*F has now been split into design variants within A8C\*\*\* model number series.

The A8RC\*\* model number series has been introduced.

The D8X\*F has now been split into design variants within the D8X\*\* model number series.





The D8XC\*\* model number series has been introduced.

The E8X\*F has now been split into design variants within the E8X\*\* model number series.

The E8XC\*\*\* model number series has been introduced

#### Notes:

Sira 01ATEX1270X, Sira 09ATEX1221X and IECEx SIR 05.0020X are superseded by certificates CML 19ATEX1346X, CML 19ATEX4109X and IECEx CML 19.0104X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 01ATEX1270X, Sira 09ATEX1221X and IECEx SIR 05.0020X.

Where Sira 01ATEX1270X and/or Sira 09ATEX1221X and/or IECEx SIR 05.0020X 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	8 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 A8\*\*, A8C\*\*\*, A8RC\*\*, D8X\*\*, D8XC\*\*\*, E8X\*\* and E8XC\*\*\* ranges of cable glands shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -60°C to +180°C.
- The A8\*\*, A8C\*\*\*, A8RC\*\*, D8X\*\*, D8XC\*\*\*, E8X\*\* and E8XC\*\*\* of cable glands shall only be used for fixed installations, in addition, the cables must be effectively clamped to prevent pulling or twisting.
- The A8\*\*, A8C\*\*\*, A8RC\*\*, 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 fixed, are capable of providing an ingress protection of IP66 and IP68 (50 metres 7 days).
- 14.4 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:
  - 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



## **Certificate Annex**

Certificate Number CML 19ATEX1346X

**Equipment** A8\*\*, A8C\*\*\*, A8RC\*\*, D8X\*\*, D8XC\*\*\*, E8X\*\* and E8XC\*\*\*

Range of Cable Glands

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/ATX/1M	1 of 1	6	10 Oct 19	ATEX Component Entry Body Parts 1M, 1M9
PCG/ATX/1MT	1 of 1	6	10 Oct 19	ATEX Component Entry Body – NPT/BSPT Threads Parts 1MT, 1MT9
PCG/ATX/3MD	1 of 1	3	10 Oct 19	ATEX Component Cone Part 3MD
PCG/ATX/4M	1 of 1	5	10 Oct 19	ATEX Component Cap Part 4M
PCG/ATX/4MF	1 of 1	2	10 Oct 19	ATEX Instrument Component Cap Conduit Part 4MF
PCG/ATX/4MM	1 of 1	2	10 Oct 19	ATEX Instrument Component Cap Conduit Part 4mm
PCG/ATX/6M	1 of 1	6	10 Oct 19	ATEX Component Outer Cap Part 6M
PCG/ATX/6MF	1 of 1	2	10 Oct 19	ATEX Component Female Connector Cap Part 6MF
PCG/ATX/6MM	1 of 1	2	10 Oct 19	ATEX Component Male Connector Cap Part 6MM
PCG/ATX/8M	1 of 1	3	10 Oct 19	ATEX Component Compression Bush Part 8M
PCG/ATX/8MC	1 of 1	4	10 Oct 19	ATEX Component Compression Bush – Spiral Part 8MC
PCG/ATX/10M	1 of 1	5	10 Oct 19	ATEX Component Clamp Ring Parts 10MW, 10XX
PCG/ATX/11MR	1 of 1	2	10 Oct 19	ATEX Instrument Component Skid Washer Parts 11MR
PCG/ATX/12M	1 of 1	6	10 Oct 19	ATEX Component A8 Cap Part 12M
PCG/ATX/12MF	1 of 1	3	10 Oct 19	ATEX Component A8 Female Threaded Connector Cap Part 12MF
PCG/ATX/12MM	1 of 1	3	10 Oct 19	ATEX Component A8 Male Threaded Connector Cap Part 12MM
PCG/ATX/61M	1 of 1	5	10 Oct 19	ATEX Instrument Component Entry Body Part 61M
PCG/ATX/63M	1 of 1	3	10 Oct 19	ATEX Instrument Component Cone Part 63M



# **Certificate Annex**

Certificate Number CML 19ATEX1346X

**Equipment** A8\*\*, A8C\*\*\*, A8RC\*\*, D8X\*\*, D8XC\*\*\*, E8X\*\* and E8XC\*\*\*

Range of Cable Glands

Manufacturer Peppers Cable Glands Limited

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/72M	1 of 1	4	10 Oct 19	ATEX Instrument Component Seal – Slotted Parts 72MI, 72MO
PCG/ATX/74M	1 of 1	3	10 Oct 19	ATEX Instrument Component Compression Bush Parts 74MI and 74MO
PCG/ATX/75M	1 of 1	4	10 Oct 19	ATEX Instrument Component Compression Cap Part 75M
PCG/ATX/BF	1 to 2	8	10 Oct 19	ATEX Instrument Range Flat Cable Heat Trace Types E8**, E8XC***, D8XC*** & D8X**
PCG/ATX/PEXMP	1 of 1	4	10 Oct 19	Hazardous Area Approved Products Marking Plan
PCG/ATX/UF	1 to 2	11	10 Oct 19	ATEX Instrument Range Flat Cable Heat Trace Unarmoured Type A8**, A8C*** & A8RC** Series
PCG/ETDMV	1 to 1	9	10 Oct 19	Standard Thread Chart ATEX Certified Glands Using "M", "V" and "N" Components
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