



## 1 EC TYPE-EXAMINATION CERTIFICATE

- 2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- 3 Certificate Number: Sira 01ATEX1272X
- 4 Equipment: Type A\*\*\*\*, A\*L\*\*, A\*LC\*\*\* and A\*RC\*\*\* range of cable glands
- 5 Applicant: Peppers Cable Glands Limited
- 6 Address: Stanhope Road Camberley Surrey GU15 3BT UK
- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:



II 2GD and/or Ex d IIC Gb Ex ta IIIC Da II 2GD Ex e IIC Gb Ex ta IIIC Da

and/or

Issue:

10

II 1 D Ex ta IIIC Da

C Ellaby Deputy Certification Manager

# **Sira Certification Service**

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Project Number 23865

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### EC TYPE-EXAMINATION CERTIFICATE

Sira 01ATEX1272X Issue 10

### 13 DESCRIPTION OF EQUIPMENT

The type A\*\*\*\*, A\*L\*\*, A\*LC\*\*\* and A\*RC\* range of cable glands is intended for use 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). Construction materials are brass, mild steel, stainless steel or aluminium alloy. Glands are available in a single or double seal configuration and utilise a silicone or neoprene seal. The single seal configuration is available with a compression nut, which will accept either male or female conduit.

Glands are available in the size range 12 to 100 mm with ISO metric entry threads of M12 to M100 respectively. Alternative thread forms are available.

The cable gland range is as follows:

Gland Type:	A*L**							
Available Part No's.:	А	*	L	*	*			
		1		В	F			
		2		S	E			
		3		А				
		4						
Options:	1	Neoprene	Seal with Le	ad Sheath (	Cable Continu	iity Washer		
	2	Neoprene	Seal					
	3	Silicone S	eal					
	4	Silicone S	eal with Lead	Sheath Ca	ble Continuity	y Washer		
	А	Aluminium						
	В	Brass material						
	S	316 Stainless Steel material						
	F	Ex d (flameproof) and Ex e (Increased Safety) approvals						
	E	Ex e (Incr	eased Safety	) approval (	only			
Gland Type:	A****							
Available Part No's.:	А	*	*	*	*			
		1	LDS	А	F			
		2	RDC	В	Е			
		3	RDF	S				
		4	RDM					
Options:	1	Neoprene	Seal with Le	ad Sheath (	Cable Continu	iity Washer		
	2	Neoprene	Seal					
	3	Silicone S	eal					

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### Sira 01ATEX1272X Issue 10

	LDS RDC RDF RDM A B S F E	Fixed Double seal Double seal with Rotating flexible conduit connector Double seal with rotating female thread conduit nut Double seal with Rotating male thread conduit nut Aluminium Brass material 316 Stainless Steel material Ex d (flameproof) and Ex e (Increased Safety) approvals Ex e (Increased Safety) approval only					
Gland Type:	A*LC***						
Available Part No's.:	А	*	LC	*	*	*	
		1		Н	А	F	
		2		F	В	Е	
		3		М	S		
		4					
Options:	1	Neoprepe	Seal with Le	ad Shoath (	able Contin	uity Washor	
options.	2	Neoprene					
	3	Silicone Se					
	4		eal with Lead	Sheath Cal	ole Continuit	v Washer	
	Н		l with fixed h			<b>,</b>	
	F	-	with fixed f			nnector	
	М	-	l with fixed n				
	А	Aluminium					
	В	Brass mate	erial				
	S	316 Stainle	ess Steel ma	terial			
	F	Ex d (flam	eproof) and	Ex e (Increa	ased Safety)	approvals	
	E	Ex e (Incre	eased Safety	) approval c	only		
Gland Type:	A*RC***						
Available Part No's.:	А	*	RC	*	*	*	
				•	-	-	

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### Sira 01ATEX1272X Issue 10

Options:

- Neoprene Seal with Lead Sheath Cable Continuity Washer
- Neoprene Seal
- 3 Silicone Seal
- 4 Silicone Seal with Lead Sheath Cable Continuity Washer
- C Single seal with rotating flexible conduit connector
- F Single seal with rotating female thread conduit connector
- M Single seal with rotating male thread conduit connector
- A Aluminium
- B Brass material
- S 316 Stainless Steel material
- F Ex d (flameproof) and Ex e (Increased Safety) approvals
- E Ex e (Increased Safety) approval only

Variation 1 - This variation introduced the following changes:

- i. To allow the batch number shown in the actual product marking to be removed.
- ii. The recognition of a number of minor, dimensional design changes.

Variation 2 - This variation introduced the following changes:

- i. The A\*L\*\*\* Range of Cable Glands to be marked IP68; this indicates that they have been tested at a depth up to 25 m for a duration of 30 mins when fitted into either threaded entries or 'Ex e' enclosures that have plain hole entries with 0.5 mm clearances.
- ii. The extension of the upper ambient service temperature limit to +85°C for cable glands that incorporate neoprene seals (60° IRHD).
- iii. The use of Nitrile Butyle Rubber (NBR) O-ring interface seals with the A\*L\*\*\* Range of Cable Glands fitted with neoprene sealing rings.
- iv. Inclusion of a new size, 16/M16 in all types, cable gland that has either neoprene or silicone sealing rings.
- v. The modification of the mid cap component.
- vi. The introduction of minor drawing changes.

Variation 3 - This variation introduced the following changes:

 Following appropriate re-assessment to demonstrate compliance with the requirements of the EN 60079 series of standards, the documents originally listed in section 9, EN 50014:1997 (amendments 1 and 2), EN 50018:2000, EN 50019:2000 and EN 50281-1-1:1998, were replaced by those currently listed, the markings in section 12 were updated accordingly.

Variation 4 - This variation introduced the following changes:

i. A clarification to the type designation of the type A\*L\*\*\* range of cable glands.

Variation 5 - This variation introduced the following changes:

- i. The recognition of minor drawing modifications; these amendments are administrative or involve changes to the design that do not affect the aspects of the product that are relevant to explosion safety.
- ii. The list of certified drawings was rationalised.

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Variation 6 - This variation introduced the following changes:

- Following appropriate reassessment to demonstrate compliance with the requirements of the i latest editions of the EN/IEC 60079 series of standards, the documents previously listed in section 9, EN 60079-0:2006, EN 61241-0:2006 and EN 61241-1:2004 were replaced by those currently listed, the markings were updated accordingly, the Special Conditions for Safe Use are also amended.
- ii. Type of protection Ex t is upgraded from EPL Db to EPL Da. Following appropriate reassessment to demonstrate compliance with the additional requirements for Ex ta, the markings were updated accordingly.
- iii. The size range of the glands has been extended to include size 12 glands and entry threads of M12, the description being modified accordingly.
- iv. The reference system used for the ranges of glands was amended to incorporate the introduction of the alternative conduit connections, the tables in the description were modified to recognise this change.
- Introduction of conduit fittings to the range was approved. The gland may be connected to rigid V. or flexible conduit.
- vi. The introduction of an alternative silicone and neoprene seal material was endorsed.
- vii. The service temperature range of the glands fitted with a neoprene seal was extended to -35°C to +90°C.
- viii. The 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).

#### DESCRIPTIVE DOCUMENTS 14

#### 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report No.	Comment
0	20 December 2001	R53A8374A	The release of prime certificate.
0			
1	17 December 2002	R53A8374B	Re-issued to permit report number R53A8374B to
			replace report number R53A8374A
2	17 December 2002	NA	The introduction of Variation 1
3	31 March 2005	R51A11551A	The introduction of Variation 2
4	04 June 2009	R51A20139A	This Issue covers the following changes:
			<ul> <li>All previously issued certification was rationalised</li> </ul>
			into a single certificate, Issue 4, Issues 0 to 3
			referenced above are only intended to reflect the
			history of the previous certification and have not
			been issued as documents in this format.
			The introduction of Variation 3.
5	26 June 2009	N/A	Re-issued to correct the Conditions For Safe Use.
6	17 July 2009	R51A20631A	The introduction of Variation 4.
7	12 November 2009	R20864A	The introduction of Variation 5.

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### EC TYPE-EXAMINATION CERTIFICATE

#### Sira 01ATEX1272X Issue 10

Issue	Date	Report No.	Comment
8	04 April 2012	R27630A/00	The removal of a special condition for safe use, the
			remaining conditions were renumbered accordingly.
9	20 December 2012	R23865A/00	The introduction of Variation 6.
10	25 March 2013	N/A	Issued to correct a typographical error, no technical
			changes.

### 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

15.1 The A\*\*\*\*, A\*L\*\*, A\*LC\*\*\* and A\*RC\* Range of Cable Glands shall not be used in enclosures where the temperature at the point of entry/mounting exceeds the following.

-35°C to +90°C for the Neoprene (black) seal variants -60°C to +180°C for the Silicone (white) seal variants

- 15.2 The cable entries are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- 15.3 The A\*\*\*\*, A\*L\*\*, A\*LC\*\*\* and A\*RC\* range 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).
- 15.4 Where glands without sealing rings are installed in protection by enclosure (Ex t) equipment for use in explosive dust atmospheres, they may only be fitted into enclosures offering a minimum of 5 full threads, in accordance with EN 60079-31:2009 clause 5.1.1.

### 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

#### 17 CONDITIONS OF CERTIFICATION

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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# **Sira Certification Service**

Rake Lane, Eccleston, Chester, CH4 9JN, England

# **Certificate Annexe**

Certificate Number:	Sira 01ATEX1272X
Equipment:	Type A****, A*L**, A*LC*** and A*RC*** range of cable glands
Applicant:	Peppers Cable Glands Limited



### Issue 0 and Issue 1

Drawing No.	Rev.	Sheet	Date	Description
PCG/ATX/A2L	1	1 of 1	20 Nov 01	ATEX Range Glands for unarmoured cable A2LF, A2LCMF, A2LCFF & A2LDSF Families
PCG/ATX/91V	1	1 of 1	09 Mar 01	ATEX Component Skid Washer – Parts 91V, 91VB, 91VBT
PCG/ETDMV	1	1 of 1	20 Sep 01	Standard thread chart ATEX certified cable glands using "M", "V" & "N" components
PCG/MATS/AL	1	1 of 1	05 Nov 01	Standard materials AL. Alloy ATEX certified plands using "M", "V" and "N" components
PCG/MATS/SB	1	1 of 1	20 Sep 01	Standard materials ATEX certified glands using "M", "V" and "N" components
PCG/ATX/81N	1	1 of 1	23 Nov 01	ATEX component entry body Part 81N
PCG/ATX/82N	1	1 of 1	26 Feb 01	ATEX component seals 82N & 82NS
PCG/ATX/82V	1	1 of 1	19 Sep 01	ATEX component seal parts 82V, 82VS
PCG/ATX/85N	1	1 of 1	06 Nov 01	ATEX component mid cap part 85N
PCG/ATX/88N	1	1 of 1	05 Nov 01	ATEX component nut part 88N
PCG/ATX/88NF	1	1 of 1	06 Nov 01	ATEX component conduit nut female part 88NF
PCG/ATX/88NM	1	1 of 1	05 Nov 01	ATEX component conduit nut, male part 88NM
PCG/ATX/91N	1	1 of 1	09 Mar 01	ATEX component skid washer – parts 91N, 91NB, 91NBT

#### Issue 2

Drawing No.	Rev.	Sheet	Date	Description
PCG/ATX/A2L	2	1 of 1	19 Aug 02	ATEX Range Glands for unarmoured cable A2LF,
				A2LCMF, A2LCFF & A2LDSF Families
PCG/ATX/81N	2	1 of 1	6 Sep 02	ATEX component entry body Part 81N
PCG/ATX/85N	2	1 of 1	9 Sep 02	ATEX component mid cap part 85N
PCG/ATX/88N	2	1 of 1	6 Sep 02	ATEX component nut part 88N
PCG/ATX/88NF	2	1 of 1	6 Sep 02	ATEX component conduit nut female part 88NF
PCG/ATX/88NM	2	1 of 1	6 Sep 02	ATEX component conduit nut, male part 88NM

#### Issue 3

Drawing No.	Rev	Sheet	Date	Description
PCG/ATX/A2L	3	1 of 1	09 Dec 04	ATEX Range Glands for unarmoured cable A2LF,
				A2LCMF, A2LCFF & A2LDSF Families
PCG/ATX/81N	3	1 of 1	26 Jan 04	ATEX component entry body Part 81N
PCG/ATX/85N	3	1 of 1	23 Jan 04	ATEX component mid cap part 85N
PCG/ATX/88N	3	1 of 1	23 Jan 04	ATEX component nut part 88N
PCG/ATX/88NF	3	1 of 1	09 Dec 04	ATEX component conduit nut female part 88NF
PCG/ATX/88NM	3	1 of 1	09 Dec 04	ATEX component conduit nut, male part 88NM
PCG/ATX/91V	2	1 of 1	11 Dec 03	Skid washer- parts 91V, 91VB, 91VBT
PCG/ATX/82V	3	1 of 1	10 Dec 03	Seals - parts 82V, 82VS
PCG/OR	1	1 of 1	17 Sep 01	Accessory component O-ring Seal

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# **Certificate Annexe**

Certificate Number: Sira 01ATEX1272X Type A\*\*\*\*, A\*L\*\*, A\*LC\*\*\* and A\*RC\*\*\* Equipment: range of cable glands Applicant: Peppers Cable Glands Limited



Issue 4

Drawing	Sheets	Rev.	Date	Title
PCG/ATX/A2L	1 of 1	4	27 Apr 09	General Arrangement
PCG/ETDMV	1 of 1	4	02 Jun 09	Standard Thread Chart
PCG/ATX/81N	1 of 1	4	15 Mar 07	Entry Body Part 81N

Issues 5 No new drawings were introduced.

#### Issue 6

Drawing	Sheets	Rev.	Date	Title
PCG/ATX/A2L	1 of 1	5	16 Jul 09	General Arrangement Sira 01ATEX1272X
PCG/LW3	1 of 1	4	30 Mar 06	Continuity Washer for Sira 01ATEX1272X

Issue 7 (The following is a rationalised list that defines all drawings that are currently applicable)

Drawing	Sheets	Rev.	Date	Title
PCG/ATX/A2L	1 of 1	7	05 Nov 09*	ATEX Range Glands for unarmoured cable A2LF, A2LCMF, A2LCFF & A2LDSF Families
PCG/ATX/91A	1 of 1	1	02 Oct 09*	ATEX Component Skid Washer – Parts 91AS, 91AB, 91ABT
PCG/ETDMV	1 of 1	5	11 Sep 09*	Standard thread chart ATEX certified cable glands using "M", "V" & "N" components
PCG/MATS/AL	1 of 1	2	15 Sep 09*	Standard materials AL. Alloy ATEX certified plands using "M", "V" and "N" components
PCG/MATS/SB	1 of 1	2	12 Oct 09*	Standard materials ATEX certified glands using "M", "V" and "N" components
PCG/ATX/81AN	1 of 1	1	15 Sep 09*	ATEX component entry body Part 81AN
PCG/ATX/81AN-NPT	1 of 1	1	02 Oct 09*	ATEX component entry body Part 81AN-NPT
PCG/ATX/82N	1 of 1	3	02 Oct 09*	ATEX component seals 82N & 82NS
PCG/ATX/82V	1 of 1	4	15 Sep 09*	ATEX component seal parts 82V, 82VS
PCG/ATX/85N	1 of 1	3	23 Jan 04	ATEX component mid cap part 85N
PCG/ATX/88N	1 of 1	4	15 Sep 09*	ATEX component nut part 88N
PCG/ATX/88NF	1 of 1	4	15 Sep 09*	ATEX component conduit nut female part 88NF
PCG/ATX/88NM	1 of 1	4	15 Sep 09*	ATEX component conduit nut, male part 88NM
PCG/OR	1 to 2	5	15 Sep 09*	Accessory component O-ring Seal
PCG/LW3	1 of 1	4	15 Sep 09*	Continuity Washer for Sira 01ATEX1272X

\* This is the Sira stamp date.

Issue 8 No new drawings were introduced.

#### Issue 9

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
PCG/ATX/A2L	1 to 2	8	04 Oct 12	ATEX Range Glands for unarmoured cable A2LF,
				A2LCMF, A2LCFF & A2LDSF Families
PCG/ATX/81AN	1 of 1	5	04 Oct 12	ATEX component entry body Part 81AN
PCG/ATX/81ANT	1 of 1	2	04 Oct 12	ATEX component entry body Part 81ANT
PCG/ATX/82N	1 of 1	5	04 Oct 12	ATEX component seals 82N & 82NS
PCG/ATX/82V	1 of 1	5	04 Oct 12	ATEX component seal parts 82V, 82VS
PCG/ATX/85N	1 of 1	4	04 Oct 12	ATEX component mid cap part 85N

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Equipment:	Type A****, A*L**, A*LC*** and A*RC*** range of cable glands
Applicant.	Peppers Cable Glands Limited



Applicant:

## Peppers Cable Glands Limited

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
PCG/ATX/87C	1 of 1	1	04 Oct 12	ATEX component Circlip
PCG/ATX/88N	1 of 1	7	04 Oct 12	ATEX component nut part 88N
PCG/ATX/88NF	1 of 1	5	04 Oct 12	ATEX component conduit nut female part 88NF
PCG/ATX/88NM	1 of 1	5	04 Oct 12	ATEX component conduit nut, male part 88NM
PCG/ATX/88NH	1 of 1	1	04 Oct 12	ATEX component hose connector, part 88NH
PCG/ATX/88NR	1 of 1	1	04 Oct 12	ATEX component rotator nut, part 88NR
PCG/ATX/89NC	1 of 1	1	04 Oct 12	ATEX component rotating conduit nut - spiral, part 89NC
PCG/ATX/89NF	1 of 1	1	04 Oct 12	ATEX component rotating conduit nut - female, part 89NF
PCG/ATX/89NM	1 of 1	1	04 Oct 12	ATEX component rotating conduit nut - male, part 89NM
PCG/ATX/91A	1 of 1	3	04 Oct 12	ATEX Component Skid Washer – Parts 91AS, 91AB, 91ABT
PCG/ATX/91V	1 of 1	4	04 Oct 12	Skid washer- parts 91V, 91VB, 91VBT
PCG/ETOR	1 of 1	7	04 Oct 12	Entry Thread O-Ring Seal Part OR
PCG/LW2	1 of 1	7	04 Oct 12	Continuity Washer LW2
PCG/LW3	1 of 1	6	04 Oct 12	Continuity Washer LW3
PCG/ETDMV	1 of 1	6	04 Oct 12	Standard Thread Chart
PCG/MATS/SB	1 of 1	3	04 Oct 12	Standard materials ATEX certified glands using "M", "V" and "N" components
PCG/MATS/AL	1 of 1	2	04 Oct 12	Standard materials Aluminium Alloy for ATEX certified glands using "M", "V" and "N" components
PCG/ETRO	1 of 1	1	04 Oct 12	Entry Thread Components Run Out Specification
PCG/ORGD	1 of 1	2	04 Oct 12	Component entry body O-ring groove detail
PCG/PRE-PLATE	1 of 1	1	04 Oct 12	Entry Thread Components Pre-Plate Thread
				Manufacturing Tolerances
PCG/PEXMP	1 of 1	1	04 Oct 12	Marking Plan

Issue 10 No new drawings were introduced.

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