1 # EC-TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3 EC-Type Examination Certificate Number : **BAS01ATEX2271X**

4 Equipment or Protective System: **TYPE CR** CABLE GLANDS**

5 Manufacturer: **PEPPERS CABLE GLANDS LIMITED**

6 Address: **Camberley, Surrey, GU15 3BT**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

00(C)1048 dated 15 March 2002

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + Amds 1 & 2 EN 50018: 2000 EN 50019: 2000 EN 50281-1-1: 1998

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

12 The marking of the equipment or protective system shall include the following:-

Ex II 2 GD EEx d IIC EEx e II

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File No: EECS 0809/01/015

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.

HSE Health & Safety Executive

Electrical Equipment Certification Service
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pp I M CLEARE
DIRECTOR
4 April 2002

13 **Schedule**

14 **EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX2271X**

15 **Description of Equipment or Protective System**

The Type CR Cable Glands** may be supplied in the size range M16 to M100, or with the equivalent size NPT, NPSM, BSPT, BSPP, PG or ET entry thread form. They are intended for use with an effectively filled and circular armoured cable and comprise the following components:-

a. An entry component
b. An elastomeric inner sealing ring
c. An metal inner skid washer
d. A compression nut
e. An armour clamping cone
f. A tapered clamp ring
g. A middle nut
h. An elastomeric outer sealing ring
i. A nylon outer skid washer
j. A back nut

Additional assembly options are described by the following designation coding:-

CR**

1 - Neoprene Seals
3 - Silicone Seals

B - Brass
S - Stainless Steel
R - Reduced Bore

16 **Report No.**

BASEEFA Certification Report No. 00(C)1048

17 **Special Conditions For Safe Use**

1. These glands are not suitable for use with group IIC flameproof enclosures having a volume greater than 2000cc.

2. Glands fitted with neoprene sealing rings (black) are suitable for use within an operating temperature range of -20°C to +80°C.

   Glands fitted with silicone sealing rings (white) are suitable for use within an operating temperature range of -60°C to +180°C.

3. When the gland is used with increased safety and/or dust protected equipment, the entry thread shall be suitably sealed to maintain the ingress protection rating of the associated enclosure.

13 **Schedule**

14 **EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX2271X**

18 **Essential Health and Safety Requirements**

Essential Health and Safety Requirements not covered by Standards listed at (9)		
Clause	**Subject**	**Compliance**
1.0.2	Analysis of possible operating faults	BASEEFA Report No. 00(C)1048
1.0.3	Special checking and maintenance conditions	No special requirements
1.2.2	Components for incorporation or replacement	BASEEFA Report No. 00(C)1048
1.2.5	Additional means of protection	Not applicable
1.2.7	Protection against other hazards	BASEEFA Report No. 00(C)1048
2.1.	Category 1	Not applicable
2.2.1	Category 2G	BASEEFA Report No. 00(C)1048
2.2.2	Category 2D	BASEEFA Report No. 00(C)1048
2.3.	Category 3	Not applicable
3.	Requirements for protective systems	Not applicable

19 **DRAWINGS**

Number	Issue	Date	Description
PCG/ATX/CR	1	05/12/01	General Arrangement, Type CR1B Cable Gland
PCG/MATS/SB	1	20/9/01	Material Specifications
PCG/ETDMV	1	20/9/01	Thread Specifications
PCG/ATX/1V	1	20/3/02	Entry Component
PCG/ATX/82V	1	19/09/01	Inner Seal
PCG/ATX/91V	1	09/03/01	Inner Skid Washer
PCG/ATX/8V	1	04/10/01	Compression Nut
PCG/ATX/3V	1	07/11/01	Armour Clamp Cone
PCG/ATX/10V	1	07/11/01	Armour Clamp Ring
PCG/ATX/5V	1	20/3/02	Middle Nut
PCG/ATX/2M	1	19/09/01	Outer Seal
PCG/ATX/11M	1	07/11/01	Outer Skid Washer
PCG/ATX/6M	1	07/11/01	Back Nut

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BASEEFA List Keywords
2CABLEGL

EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER	BAS01ATEX2271X	Dated	4 April 2002
SIRA VARIATION NUMBER	1 (ONE)	Dated	2 May 2003

VARIATION TO EQUIPMENT

To permit:

1 The use of CR1* (neoprene) range of cable glands within an operating temperature range of 85°C; this change necessitates the amendment of special condition for safe use clause 17.2.

2 The use of the CR** range of cable glands on a revised inner sheath cable range.

3 The use of the CR** range of cable glands for installations with an ingress protection rating of IPX8.

4 The serial/batch number to be removed from the product marking and relocated on the packaging.

5 The introduction of additional minor dimensional and text changes to drawings.

6 The use of the CR** range of cable glands with unarmoured, braided or screened cables and the application of a new special condition for safe use clause 17.4.

7 The removal of seal temperature marking on the seals

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
PCG/ATX/CR	1 of 1	2	10 Feb 2003	General arrangement
PCG/ATX/5V	1 of 1	2	16 Jan 2003	Middle cap component
PCG/ATX/82V	1 of 1	2	9 Apr 2003	Inner seal component
PCG/ATX/2M	1 of 1	2	9 Apr 2003	Outer seal component

AMENDED SPECIAL CONDITION FOR SAFE USE

17.2 Glands fitted with neoprene sealing rings (black) shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -20°C to +85°C.

Glands fitted with silicone sealing rings (white) shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of –60°C to +180°C.

ADDITIONAL SPECIAL CONDITION FOR SAFE USE

17.4 If the CR** range of cable glands only grip the outer sheath of the cable and do not clamp the cable armour or if they are used to terminate unarmoured, braided or screened cables, then they shall only be used for fixed installations, hence, the cables shall be effectively clamped to prevent pulling or twisting.

File No 51A10029

Report No. R51A10029A

C Ellaby
Certification Officer

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