



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX SIR 06.0042X** issue No.:5  
Status: **Current**  
Date of Issue: **2011-02-08** Page 1 of 4

Certificate history:  
Issue No. 5 (2011-2-8)  
Issue No. 4 (2009-11-25)  
Issue No. 3 (2008-12-1)  
Issue No. 2 (2007-6-25)  
Issue No. 1 (2007-1-23)

Applicant: **CMP Products Limited**  
Glasshouse Street  
St Peters, Newcastle-upon-Tyne  
Tyne and Wear NE6 1BS  
United Kingdom

Electrical Apparatus: **C\*\* Type Range of Cable Glands**  
Optional accessory:

Type of Protection: **Increased safety and Dust**

Marking: **Ex e II**  
**Ex tD A21 IP66**

Approved for issue on behalf of the IECEx Certification Body: **D R Stubbings BA MIET**

Position: **Certification Manager**

Signature:  
(for printed version)

Date:

2011-02-08

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**SIRA Certification Service**  
Rake Lane  
Eccleston  
Chester  
CH4 9JN  
United Kingdom

**sira**  
CERTIFICATION



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Manufacturer: **CMP Products Limited**  
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Tyne and Wear NE6 1BS  
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Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-7 : 2006-07</b> Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-1 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "ID"

*This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

GB/SIR/ExTR06.0061/00  
GB/SIR/ExTR07.0002/00  
GB/SIR/ExTR07.0042/00  
GB/SIR/ExTR08.0126/00  
GB/SIR/ExTR09.0185/00  
GB/SIR/ExTR10.0317/00

Quality Assessment Report:

GB/SIR/QAR06.0011/00



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The C\*\* series Type ranges of cable glands consist of a male-threaded front entry component, which is intended to screw into an entry point of its associated enclosure in accordance with relevant codes of practice. The front entry component to main body mating thread may be fitted with an optional 'O' ring seal to provide increased ingress protection. Clamping of the armoured or braid is effected by a combination of the front entry component, main body and the different optional armour cone and armour sleeve combinations being fastened together. An outer seal nut, containing an elastomeric sealing ring and a Nylon 6 ferrule, threads onto the main body and effects environmental sealing onto the cable outer sheath.

Cable clamping is achieved with the outer seal arrangement.

Refer to the attached Annex for more information.

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. The C\*\* type cable glands shall only be used where the temperature, at the point of entry, is between -60° C to +130°C.
2. All body components of the C\*\* type cable glands are to be fully tightened using all available threads of engagement until against their adjoining component part shoulder to maintain Ingress protection rating IP66.
3. The C\*\* type cable glands used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
4. The C\*\* type of cable gland entry component threads may need additional sealing to maintain the ingress protection rating as applicable to the associated equipment in which it will be attached.
5. When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Issue 1 – this Issue introduced the following changes:

- 1 The introduction of an alternative, outer sealing arrangement; the compression nut length and consequently body length are reduced, in addition, the internal, tapered ferrule is replaced by a flat ferrule

### Issue 2 – this Issue introduced the following changes:

- 1 The introduction of Ex tD coding  
The removal of the manufacturer's address from the product marking  
The recognition of alternative armour cone diameters  
The use of the C\*\* range of glands with pliable wire armour cables

### Issue 3 – this Issue introduced the following changes:

- 1 The inclusion of steel wire armour cable (s.w.a) in the cone/clamping description.  
The use of alternative armour cones machined for varying armour wire diameters.  
The Inclusion of 'size-up' entry threads

### Issue 4 – this Issue introduced the following changes:

- 1 The recognition of an alternative outer seal arrangement to allow the fitting of the C\*\* glands to flexible conduit , including a new Special Condition For Safe use  
The addition of the size 16 gland to the C\*\* range

### Issue 5 – this Issue introduced the following changes:

- 1 Following appropriate re-assessment to demonstrate compliance, the originally listed standard IEC 60079-7:2001 was replaced by IEC 60079-7:2006.

**Annexe to:** IECEx SIR 06.0042X Issue 5  
**Applicant:** CMP Products Ltd  
**Apparatus:** C\*\* Type Range of Cable Glands



**Description (continued):**

**Design options**

- The front entry component may be manufactured with a profiled groove to captivate an 'O' ring seal which locates on the mating face with the associated enclosure. This option having the gland type designation prefixed with the letter R, e.g. 25RC\*\*.
- Alternative materials of manufacture:
  - Brass to BS2874:1986 Grade CuZn39Pb (CW614N)
  - Mild steel to BS970 Pt1:1991 Grade 220M07Pb
  - Stainless steel to BS970 Pt1:1991 Grades 316S11, 316S13, 316S31 or 316S33
  - Aluminium alloy to BS1474:1987 Grade 6082 or BS1490 Grade LM25 TF (Not Group I)
- Alternative entry component thread forms:
  - Metric ISO 965-1, ISO965-3 medium fit (6g) for external threads
  - ET(Conduit) BS 31:1940 (1979), Table A
  - PG DIN 40430:1971
  - BSPP BS 2779:1973 class A full form for external threads
  - BSPTBS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A
  - ISOISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads
  - NPTANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads
  - NPSMANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads
- The use of alternative armour clamping components. The various arrangements vary the cable gland suitability for differing armour or braided type cables.
- The use of a component having an alternative profile allowing an integral earthing facility. The type designation identifying the cable gland being fitted with this option.
- Alternative material of manufacture of the ferrule to be the same as the gland material.
- The recognition of an alternative outer seal arrangement to allow the fitting of the C\*\* glands to flexible conduit.

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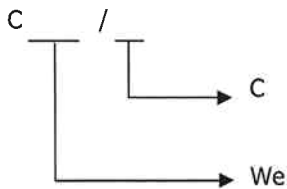


The gland and seal sizes are determined by the entry thread and cable range take sizes:

Gland size	Entry thread	Entry thread 'B' version	Cable inner sheath Ø (mm)	SWA (mm)		SWA, STA, strip armour, pliable wire armour* & wire braid (mm)		Outer seal sheath range Ø (mm)	
				Max.	Min.	Max.	Min.	Max.	Min.
16	M16 x 1.5	-	8.7	0.9	1.00	0	1.0	6.1	11.5
20s/16	M20 x 1.5	M25 x 1.5	8.7	0.9	1.00	0	1.0	6.1	11.5
20s	M20 x 1.5	M25 x 1.5	11.7	0.9	1.25	0	1.0	9.5	15.9
20	M20 x 1.5	M25 x 1.5	14.0	0.9	1.25	0	1.0	12.5	20.9
25s	M25 x 1.5	M32 x 1.5	20.0	1.25	1.6	0	1.0	14.0	22.0
25	M25 x 1.5	M32 x 1.5	20.0	1.25	1.6	0	1.0	18.2	26.2
32	M32 x 1.5	M40 x 1.5	26.3	1.6	2.0	0	1.0	23.7	33.9
40	M40 x 1.5	M50 x 1.5	32.2	1.6	2.0	0	1.0	27.9	40.4
50s	M50 x 1.5	M63 x 1.5	38.2	2.0	2.5	0	1.0	35.2	46.7
50	M50 x 1.5	M63 x 1.5	44.1	2.0	2.5	0	1.0	40.4	53.1
63s	M63 x 1.5	M75 x 1.5	50.0	2.0	2.5	0	1.0	45.6	59.4
63	M63 x 1.5	M75 x 1.5	56.0	2.0	2.5	0	1.0	54.6	65.9
75s	M75 x 1.5	M90 x 2.0	62.0	2.0	2.5	0	1.0	59.0	72.1
75	M75 x 1.5	M90 x 2.0	68.0	2.5	3.0	0	1.0	66.7	78.5
90	M90 x 2.0	M100 x 2.0	80.0	3.0	3.5	0	1.6	76.2	90.4
100	M100 x 2.0	M115 x 2.0	91.0	3.15	4.0	0	1.6	86.1	101.5
115	M115 x 2.0	M130 x 2.0	98.0	3.15	4.0	0	1.6	101.5	110.3
130	M130 x 2.0	N / A	115.0	3.15	4.0	0	1.6	114.2	123.3

\* - 'Xe' and '2K' versions only

**Type designation code**



- C = Fitted with the alternative cast integral earth lug entry component.
- We = Fitted with single plain armour cone & reversible armour sleeve to suit SWA cables.
- Xe = Fitted with single grooved armour cone & reversible armour sleeve to suit STA, strip armoured, braided & pliable wire armoured cables.
- 2K = Fitted with reversible armour cone & reversible armour sleeve to suit SWA, STA, strip armoured, braided and pliable wire armoured cables.

C type glands may be fitted with armour cones with alternative diameters to allow the clamping of smaller or larger armour wires.