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

Certificate No.:	IECEx SIR 06.0043X issue No.:2	History: Issue No. 2 (2007-6-25) Issue No. 1 (2007-1-23)
Status:	**Current**	
Date of Issue:	**2007-06-25**	Page 1 of 4

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

Electrical Apparatus: **E** Type Range of Cable Glands**
Optional accessory:

Type of Protection: **Flameproof, Increased Safety and Dust**

Marking: **Ex d IIC/Ex e II /Ex nR II or Ex d I/Ex e I or**
Ex d IIC or Ex d I or
Ex e II or Ex e I or
Ex nR II
Ex tD A21 IP66

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

Position: Certification Manager

Signature:
(for printed version)

Date: 2007-06-25

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.

Certificate issued by:

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

sira CERTIFICATION

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Date of Issue: **2007-06-25** Issue No.: **2**

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

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 manufacture'rs 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:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 60079-15 : 2005-03 Edition: Ed 3	Electrical apparatus for explosive gas atmospheres Part 15: Contruction, test and Marking of Type of Protection "n" electrical apparatus
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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

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 E** series Type ranges of cable glands consist of a male-threaded front entry component containing an Evoprene Super G621 elastomeric sealing ring and a Nylon 6 skid washer which effect flameproof sealing onto the cable inner sheath and is intended to screw into an entry point of its associated enclosure in accordance with relevant codes of practice. The flameproof seal is actuated by an adjoining coupling component. The coupling component is attached to a main body. Their mating thread may be fitted with an optional 'O' ring seal to provide increased ingress protection. Clamping of the armoured or braided cable is effected by a combination of the coupling component, main body and the different optional armour cone and armour sleeve combinations being fastened together. An outer seal nut, containing an Evoprene Super G621 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 Annex for more details

CONDITIONS OF CERTIFICATION: YES as shown below:

The E** type cable glands shall only be used where the temperature, at the point of entry, is between -60°C to +130°C.
The E** type cable glands terminated on braided cables are not suitable for group I applications.
All body components of the E** 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.
The E** type cable glands are fitted with one specific size of FLP sealing ring per gland size as supplied.
The E** type cable glands used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
The E** 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.

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

Original dated 2006-09-20	
Issue 1 dated 2007-01-23	
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	**dated 2007-06-25**
2	The introduction of Ex nR II and Ex tD coding The recognition of alternative armour cone diameters The removal of the manufacturer's address from the product marking The use of the E** Cable glands with pliable wire armour cables

Annexe: 06.0043X Annex.pdf

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. 25RE**.
- 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 specified by the cable gland type designation. 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.
- The use of metallic continuity diaphragm component specified by the cable gland type designation for use when terminating lead sheathed cables.
- Alternative material of manufacture of the ferrule to be the same as the gland material.

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

Gland size	Entry thread	Inner seal sheath range Ø		SWA		STA, strip armour, pliable wire armour* & wire braid		Outer seal sheath range Ø	
		Min (mm)	Max (mm)	Min (mm)	Max (mm)	Min (mm)	Max(mm)	Min(mm)	Max (mm)
20s/16	M20 x 1.5	3.1	8.6	0.9	1.00	0	1.0	6.1	11.5
20s	M20 x 1.5	6.1	11.6	0.9	1.25	0	1.0	9.5	15.9
20s/20	M20 x 1.5	6.1	11.6	0.9	1.25	0	1.0	12.5	20.9
20	M20 x 1.5	6.5	13.9	0.9	1.25	0	1.0	12.5	20.9
20/25	M20 x 1.5	6.5	13.9	0.9	1.25	0	1.0	18.2	26.2
25s	M25 x 1.5	11.1	19.9	1.25	1.6	0	1.0	14.0	22.0
25	M25 x 1.5	11.1	19.9	1.25	1.6	0	1.0	18.2	26.2
32	M32 x 1.5	17.0	26.2	1.6	2.0	0	1.0	23.7	33.9
32/40	M32 x 1.5	17.0	26.2	1.6	2.0	0	1.0	27.9	40.4
40	M40 x 1.5	22.0	32.1	1.6	2.0	0	1.0	27.9	40.4

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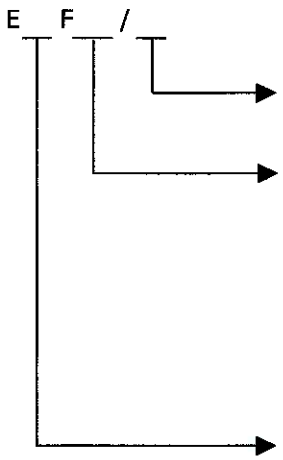
Gland size	Entry thread	Inner seal sheath range Ø		SWA		STA, strip armour, pliable wire armour* & wire braid		Outer seal sheath range Ø	
		Min (mm)	Max (mm)	Min (mm)	Max (mm)	Min (mm)	Max(mm)	Min(mm)	Max (mm)
40/50s	M40 x 1.5	22.0	32.1	1.6	2.0	0	1.0	35.2	46.7
50s	M50 x 1.5	29.5	38.1	2.0	2.5	0	1.0	35.2	46.7
50s/50	M50 x 1.5	29.5	38.1	2.0	2.5	0	1.0	40.4	53.1
50	M50 x 1.5	35.6	44.0	2.0	2.5	0	1.0	40.4	53.1
50/63s	M50 x 1.5	35.6	44.0	2.0	2.5	0	1.0	45.6	59.4
63s	M63 x 1.5	40.1	49.9	2.0	2.5	0	1.0	45.6	59.4
63s/63	M63 x 1.5	40.1	49.9	2.0	2.5	0	1.0	54.6	65.9
63	M63 x 1.5	47.2	55.9	2.0	2.5	0	1.0	54.6	65.9
63/75s	M63 x 1.5	47.2	55.9	2.0	2.5	0	1.0	59.0	72.1
75s	M75 x 1.5	52.8	61.9	2.0	2.5	0	1.0	59.0	72.1
75s/75	M75 x 1.5	52.8	61.9	2.0	2.2	0	1.0	66.7	78.5
75	M75 x 1.5	59.1	67.9	2.0	2.5	0	1.0	66.7	78.5
75/90	M75 x 1.5	59.1	67.9	2.0	2.5	0	1.6	76.2	90.4
90	M90 x 2.0	66.6	79.9	3.15	3.15	0	1.6	76.2	90.4
90/100	M90 x 2.0	66.6	79.9	3.15	3.15	0	1.6	86.1	101.5
100	M100 x 2.0	76.0	90.9	3.15	4.0	0	1.6	86.1	101.5
100/115	M100 x 2.0	76.0	90.9	3.15	4.0	-	-	101.5	110.3
115	M115 x 2.0	86.0	97.9	3.15	4.0	-	-	101.5	110.3
115/130	M115 x 2.0	86.0	97.9	3.15	4.0	-	-	114.2	123.3
130	M130 x 2.0	97.0	114.9	3.15	4.0	-	-	114.2	123.3

* - 'X' and 'U' variants; see below

Type designation code



C = Fitted with the alternative cast integral earth lug entry component.

W = Fitted with single plain armour cone & reversible armour sleeve to suit SWA cables.

X = Fitted with single grooved armour cone & reversible armour sleeve to suit STA, strip armoured, pliable wire armoured and braided cables.

U = Fitted with reversible armour cone & reversible armour sleeve to suit SWA, STA, strip armoured, pliable wire armoured and braided cables.

1 = Standard circular armoured and braided cables.

2 = Inner seal fitted with additional metallic continuity diaphragm for the use with inner lead sheathed SWA, strip armoured and braided cables.

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