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 13.0025X issue No.:0

Certificate history:

Status: **Current**

Date of Issue: **2013-05-03** Page 1 of 3

Applicant: **CMP Products Ltd**
Glasshouse Street
St Peters
Newcastle upon Tyne
NE6 1BS
United Kingdom

Electrical Apparatus: **Cable Gland Types C****
Optional accessory:

Type of Protection: **Flameproof, Increased Safety, Restricted Breathing and Dust Protection by Enclosure**

Marking:

Ex e IIC Gb	Ex ta IIIC Da
Ex nR IIC Gc NOT CWe or CXe	
Ta =	-60°C to +130°C Note 1
	-20°C to +200°C Note2

Note 1 When fitted with the standard seal
Note 2 When fitted with the high temperature seal

Approved for issue on behalf of the IECEx Certification Body: P J Walsh

Position: Technical Advisor

Signature: (for printed version) P J Walsh.

Date: 2013-05-03

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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Manufacturer: **CMP Products Ltd**
Glasshouse Street
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Newcastle upon Tyne
NE6 1BS
United Kingdom

Additional 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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR13.0066/00

Quality Assessment Report:

GB/SIR/QAR07.0009/04

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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. Clamping of the armour 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.
For Design Options refer to the Annexe.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The glands when used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
2. When the cable glands are supplied with an entry thread that is one size up from the nominal gland size, designated with the letter 'B' after the gland size, e.g. 32**B******, they shall not be used with any adaptor device.
3. When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.

Annexe: IECEx SIR 13.0025X Issue 0 Annexe.pdf

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.25RC2K.

The C2K can be supplied with a cone type dedicated to SWA cable and known as the C2KW, or with a cone dedicated to braid or tape armours and known as the C2KX.

- Materials of manufacture:
  Brass to EN12168:1998 Grade CuZn39Pb (CW614N)
  Mild steel to BS EN 10088-3:2005 Grade 220M07Pb
  Stainless steel to BS EN 10088-3:2005 Grade 316S11, 316S13, 316S31 or 316S33
  Aluminium alloy not inferior to grade 6082 to EN755,1-3:1996 or LM25 to BS EN 1676:2010 (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
  BSPT BS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A
  ISO ISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads
  NPT ANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads
  NPSM ANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads
- The option to manufacture glands with entry threads that are one size up from the nominal quoted gland size.
- 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.
- The use of an earthing device component specified by the cable gland type designation for use with with variable speed drive (VSD) / variable frequency drive (VFD) cables.
- Alternative material of manufacture of the ferrule or skid washer to be the same as the gland material.
- Alternative outer seal arrangement to allow the glands to be attached to flexible conduit.
- The gland and seal sizes are determined by the entry thread and cable range take sizes:
- The option to fit a flat blanking disc between the outer seal and the main body to maintain a minimum IP66 rating. The disc is to be marked 'EX e only'.

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.	Max.
16	M16 x 1.5	-	8.7	0.8	1.25	0	0.8	6.1	13.2
20s/16	M20 x 1.5	M25 x 1.5	8.7	0.8	1.25	0	0.8	6.1	13.2
20s	M20 x 1.5	M25 x 1.5	11.7	0.8	1.25	0	0.8	9.5	15.9
20	M20 x 1.5	M25 x 1.5	14.0	0.8	1.25	0	0.8	12.5	20.9
25s	M25 x 1.5	M32 x 1.5	20.0	1.25	1.6	0	1.1	14.0	22.0
25	M25 x 1.5	M32 x 1.5	20.0	1.25	1.6	0	1.1	18.2	26.2
32	M32 x 1.5	M40 x 1.5	26.3	1.6	2.0	0	1.2	23.7	33.9
40	M40 x 1.5	M50 x 1.5	32.2	1.6	2.0	0	1.2	27.9	40.4

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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.	Max .
50s	M50 x 1.5	M63 x 1.5	38.2	2.0	2.5	0	1.5	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	110.2	123.3

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

C*-FF in these sizes only.

Gland Size	Entry Thread	Entry thread 'B' version	Cable Outer Sheath (mm)	
			Min.	Max.
20s	M20 x 1.5	M25 x 1.5	4.4 x 7.8	6.8 x 11.7
20	M20 x 1.5	M25 x 1.5	4.4 x 10.9	8.7 x 16.0

Type designation code

C

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

VAR = Fitted with an additional metallic continuity device for use with variable speed drive (VSD) / variable frequency drive (VFD) cables.

FF = Fitted with seals suitable for use with flat form cables

We = Fitted with single plain armour cone & reversible armour sleeve to suit S.W.A armoured cables.

Xe = Fitted with single grooved armour cone & reversible armour sleeve to suit SWA, S.T.A., P.W.A. and Strip armoured and braided cables..

2K = Fitted with a deluge seal, reversible armour cone & reversible armour sleeve to suit S.W.A, S.T.A, P.W.A. and Strip armoured and braided cables.

2KW = Fitted with a deluge seal, a single plain armour cone & reversible armour sleeve to suit S.W.A armoured cables.

2KX = Fitted with a deluge seal, a single plain armour cone & reversible armour sleeve to suit SWA, S.T.A., P.W.A. and Strip armoured and braided cables.

VAR = Optional construction where the cone and sleeve assembly is replaced by a metallic continuity device for use with variable speed drive (VSD) / variable frequency drive (VFD) cables.

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