



EC TYPE-EXAMINATION CERTIFICATE 1

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 13ATEX1071X Issue: 0

Cable Gland Types E** 4 Equipment:

5 Applicant: CMP Products Ltd

Address: Glasshouse Street 6

St Peters

Newcastle upon Tyne, NE6 1BS

- 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:

FN 60079-0:2012

FN 60079-1:2007

EN 60079-7:2007

FN 60079-31:2009

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- 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.
- This EC type-examination certificate relates only to the design and construction of the specified 11 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:



IM₂

Ex e I Mb Ex d I Mb

II 2G Ex e IIC Gb Ex d IIC Gb II 1D

Ex ta IIIC Da

 $Ta = -60^{\circ}C \text{ to } +130^{\circ}C \bullet$ -20°C to +200°C,

- · When fitted with the standard seal
- , When fitted with the high temperature seal

Project Number 27765 P J Walsh **Technical Advisor**

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EC TYPE-EXAMINATION CERTIFICATE

Sira 13ATEX1071X Issue 0

13 DESCRIPTION OF EQUIPMENT

The E** series Type ranges of cable glands consist of a male-threaded front entry component containing an 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 elastomeric sealing ring and a Nylon 6 ferrule, threads onto the main body and effects environmental sealing onto the cable outer sheath.

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. 25RE1FW.
- 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

BSPTBS 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

NPSMANSI/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 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.
- The use of an earthing device component specified by the cable gland type designation for use with variable speed drive (VSD) / variable frequency drive (VFD) cables.
- Alternative material of manufacture of the ferrule to be the same as the gland material.
- The use of seals suitable for flat form cables
- The use of an O ring seal between the body and the entry item to provide a deluge seal.

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EC TYPE-EXAMINATION CERTIFICATE

Sira 13ATEX1071X Issue 0

- Alternative outer seal arrangement to allow the glands to be fitted to flexible conduit.
- The option to fit a 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' to indicate that the gland is not suitable for Ex d applications when the disc is fitted.

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

Gland size	Entry thread	Entry thread 'B' version	Inner sheath (mm)	seal range Ø	SWA (mm)		SWA, STA, strip armour, pliable wire armour* & wire braid (mm)		Outer seal sheath range Ø (mm)	
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max
16	M16 x 1.5	-	3.1	8.6	0.8	1.25	0	0.8	6.1	13.2
20s/16	M20 x 1.5	M25 x 1.5	3.1	8.6	0.8	1.25	0	0.8	6.1	13.2
20s16/20s	M20 x 1.5	M25 x 1.5	3.1	8.6	0.8	1.25	0	0.8	9.5	15.9
20s	M20 x 1.5	M25 x 1.5	6.1	11.6	8.0	1.25	0	8.0	9.5	15.9
20s/20	M20 x 1.5	M25 x 1.5	6.1	11.6	8.0	1.25	0	8.0	12.5	20.9
20	M20 x 1.5	M25 x 1.5	6.5	13.9	0.8	1.25	0	0.8	12.5	20.9
20/25S	M20 x 1.5	M25 x 1.5	6.5	13.9	1.25	1.6	0	1.1	14.0	22.0
20/25	M20 x 1.5	M25 x 1.5	6.5	13.9	1.25	1.6	0	1.1	18.2	26.2
25s	M25 x 1.5	M32 x 1.5	11.1	19.9	1.25	1.6	0	1.1	14.0	22.0
25	M25 x 1.5	M32 x 1.5	11.1	19.9	1.25	1.6	0	1.1	18.2	26.2
25/32	M25 x 1.5	M32 x 1.5	11.1	19.9	1.6	2.0	0	1.2	23.7	33.9
32	M32 x 1.5	M40 x 1.5	17.0	26.2	1.6	2.0	0	1.2	23.7	33.9
32/40	M32 x 1.5	M40 x 1.5	17.0	26.2	1.6	2.0	0	1.2	27.9	40.4
40	M40 x 1.5	M50 x 1.5	22.0	32.1	1.6	2.0	0	1.2	27.9	40.4
40/50s	M40 x 1.5	M50 x 1.5	22.0	32.1	2.0	2.5	0	1.5	35.2	46.7
50s	M50 x 1.5	M63 x 1.5	29.5	38.1	2.0	2.5	0	1.5	35.2	46.7
50s/50	M50 x 1.5	M63 x 1.5	29.5	38.1	2.0	2.5	0	1.5	40.4	53.1
50	M50 x 1.5	M63 x 1.5	35.6	44.0	2.0	2.5	0	1.5	40.4	53.1
50/63s	M50 x 1.5	M63 x 1.5	35.6	44.0	2.0	2.5	0	1.5	45.6	59.4
63s	M63 x 1.5	M75 x 1.5	40.1	49.9	2.0	2.5	0	1.5	45.6	59.4
63s/63	M63 x 1.5	M75 x 1.5	40.1	49.9	2.0	2.5	0	1.5	54.6	65.9
63	M63 x 1.5	M75 x 1.5	47.2	55.9	2.0	2.5	0	1.5	54.6	65.9
63/75s	M63 x 1.5	M75 x 1.5	47.2	55.9	2.0	2.5	0	1.5	59.0	72.1
75s	M75 x 1.5	M90 x 2.0	52.8	61.9	2.0	2.5	0	1.5	59.0	72.1
75s/75	M75 x 1.5	M90 x 2.0	52.8	61.9	2.5	3.0	0	1.5	66.7	78.5
75	M75 x 1.5	M90 x 2.0	59.1	67.9	2.5	3.0	0	1.5	66.7	78.5
75/90	M75 x 1.5	M90 x 2.0	59.1	67.9	3.0	3. 5	0	1.6	76.2	90.4
90	M90 x 2.0	M100 x 2.0	66.6	79.9	3.0	3. 5	0	1.6	76.2	90.4
90/100	M90 x 2.0	M100 x 2.0	66.6	79.9	3.15	4.0	0	1.6	86.1	101.5
100	M100 x 2.0	M115 x 2.0	76.0	90.9	3.15	4.0	0	1.6	86.1	101.5
100/115	M100 x 2.0	M115 x 2.0	76.0	90.9	3.15	4.0	0	1.6	101.5	110.3
115	M115 x 2.0	M130 x 2.0	86.0	97.9	3.15	4.0	0	1.6	101.5	110.3
115/130	M115 x 2.0	M130 x 2.0	86.0	97.9	3.15	4.0	0	1.6	110.2	123.3
130	M130 x 2.0	N/A	97.0	114.9	3.15	4.0	0	1.6	110.2	123.3

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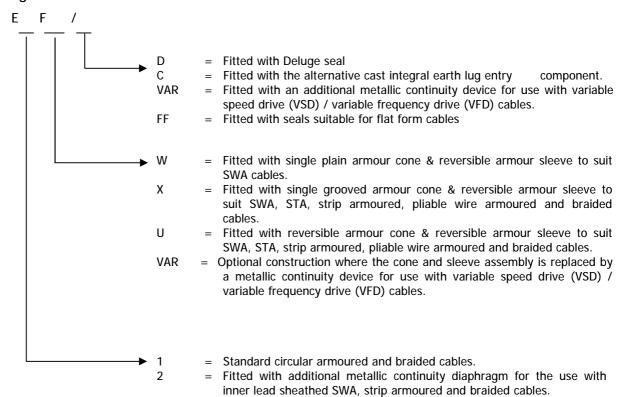
EC TYPE-EXAMINATION CERTIFICATE

Sira 13ATEX1071X Issue 0

E*-FF in these sizes only.

Gland size	Entry thread	Entry thread 'B' version	Cable inner seal sheath range-(mm)		Cable outer seal sheath range (mm)		
			Min.	Max.	Min.	Max.	
20s	M20 x 1.5	M25 x 1.5	4.0 x 6.2	6.8 x 11.7	4.4 x 7.8	6.8 x 11.7	
20	M20 x 1.5	M25 x 1.5	5.7 x 8.0	8.7 x 13.5	4.4 x 10.9	8.7 x 16.0	

Type designation code



14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	29 April 2013	R27765A/00	The release of the prime certificate.

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EC TYPE-EXAMINATION CERTIFICATE

Sira 13ATEX1071X Issue 0

- 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)
- 15.1 The E**-Type cable glands shall not be used to terminate on braided cables in group I applications.
- 15.2 The glands when used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- 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. 32B****, they shall not be used with any adaptor device.
- 15.4 When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.
- 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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Certificate Annexe

Certificate Number: Sira 13ATEX1071X

Equipment: Cable Gland Types E**

Applicant: CMP Products Ltd



Issue 0

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
GA355	1 of 1	00	29 Apr 13	E Type Series General arrangement & marking
SCH0321	1 of 1	00	13 Mar 13	Inner seal details
SCH0322	1 of 1	00	13 Mar 13	Outer seal details
SCH0323	1 of 1	00	13 Mar 13	Armour clamp details

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