

Issue No. 0 (2019-03-05)

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx CML 18.0181X	Issue No: 0	Certificate history:

Status: Current

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Date of Issue: 2019-03-05

Applicant: CMP Products Ltd.

Unit 36 Nelson Way, Nelson Park East, Cramlington,

Northumberland, NE23 1WH

United Kingdom

Equipment: Cable Gland Types E**

Optional accessory:

Type of Protection: Flameproof, Increased Safety, Type of Protection "n", Dust

Marking:

Ex eb I Mb Ex eb IIC Gb Ex ta IIIC Da

Ex db | Mb Ex db | C Gb

Ex nR IIC Gc

 $Ta = -60^{\circ}C \text{ to } +130^{\circ}C^{*}$

 $Ta = -20^{\circ}C \text{ to } +200^{\circ}C^{**}$

* When fitted with the standard seal

 $\ensuremath{^{**}}$ When fitted with the high temperature seal

Approved for issue on behalf of the IECEx

Certification Body:

Position: Certification Officer

Signature:

Date:

(for printed version)

March 5, 2019

A Snowdon MIET

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:



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Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Certificate No: IECEx CML 18.0181X Issue No: 0

Date of Issue: 2019-03-05

Manufacturer: CMP Products Ltd

Unit 36 Nelson Way, Nelson Park East, Cramlington,

Northumberland, NE23 1WH

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 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 : 2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-15 : 2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:5.0

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

Edition:5.0

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/CML/ExTR18.0255/00

Quality Assessment Report:

GB/CML/QAR19.0001/00



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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 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.

Notes:

- Sira certificate IECEx SIR 13.0026X is superseded by CML certificate IECEx CML 18.0181X.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by IECEx SIR 13.0026X.
- Where IECEx SIR 13.0026X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Refer to Annex for full description.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for Specific Conditions of Use.

Annex:

Certificate Annex IECEx CML 18.0181X Iss 0.pdf

Annexe to: IECEx CML 18.0181X, Issue 0

Applicant: CMP Products Ltd

Apparatus: Cable Glands Types E**



Description

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 affected 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 option for metric threaded cable entry spigots of all cable gland model series to be manufactured with a thread pitch between 0.7mm and 2.0mm.
- 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

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 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.
- 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 seal sheath range Ø (mm)		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	0.8	1.25	0	0.8	9.5	15.9
20s/20	M20 x 1.5	M25 x 1.5	6.1	11.6	0.8	1.25	0	0.8	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



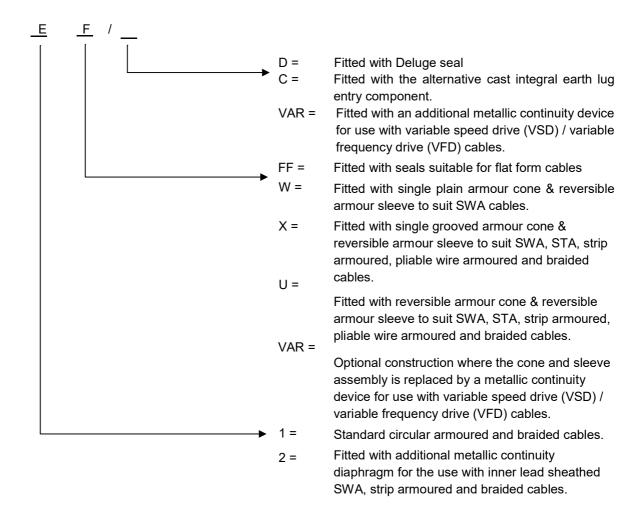
Gland size	Entry thread	Entry thread 'B' version	Inner seal sheath range Ø (mm)		SWA (mm)		SWA, STA, strip armour, pliable wire armour* & wire braid (mm)		Outer seal sheath range Ø (mm)	
			Min	Max	Min	Max	Min	Max	Min	Max
63s/63	M63 x 1.5	M75 x 1.5	40.1	49.9	2.0	2.5	0	1.5	54.6	65.9
63	M63 x 1.5	M75 x 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



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:





Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment:

- i. The E**-Type cable glands shall not be used to terminate on braided cables in group I applications
- ii. The glands when used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- iii. 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.
- iv. When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.