



# UK Type Examination Certificate CML 21UKEX1251X Issue 0

## United Kingdom Conformity Assessment

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) Schedule 3A, Part 1
- 2 Equipment Cable Gland Types C\*\*
- 3 Manufacturer CMP Products Ltd
- 4 Address Unit 36 Nelson Way, Nelson Park East, Cramlington, NE23 1WH, United Kingdom
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-7:2015+A1:2018

EN 60079-31:2014

10 The equipment shall be marked with the following:

⟨Ex⟩<sub>II 2G</sub>

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Ex eb IIC Gb

Ex ta IIIC Da

Ta= -60°C to +130°C (standard seal) -20°C to +200°C (high temperature seal)





## 11 Description

The C<sup>\*\*</sup> 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 affected 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

## **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 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:

The standard material supplied is	standard material sup	plied is:
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Brass	BS EN 12164:2011/ BS EN 12168:2011 Grade CuZn39Pb3 (CW614N)
	All brass manufactured component parts can be optionally nickel plated to a maximum of 0.008mm

Alternate materials are:

Stainless steel	BS EN 10088-3:2014 Grades 316S11, 316S13, 316S31, 316S33, 316L
Mild steel	BS EN 10277-2:2008 Grades 220M07, 230M07 (EN1A) / 220M07Pb, 230M07Pb (EN1APb)
Aluminium	BS EN 573-3:2013 / BS EN 755-1-3:2008 Grade 6082 T6, 6262 T6 / BS EN 1676:2010 Grade LM25 TF
	Aluminium will contain less than 6% magnesium

## Alternative entry component thread forms:

Metric	ISO 965-1, ISO 965-3 medium fit (6g) for external threads		
ET (Conduit)	BS31:1940 (1979), Table A		
PG	DIN 40430:1971		
BSPP	BS2779:1986 class A full form for external threads		
BSPT	BS21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A		
ISO	ISO 7/1:1994, gauging to ISO 7/2 clause 6.3 for external threads		
NPT	ANSI/ASME B1.20.1-2013 gauging to clause 3.2 for external threads		
NPSM	ANSI/ASME B1.20.1-2013 gauging to clause 6.4 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 variable speed drive (VSD)/variable frequency drive (VFD) cables.

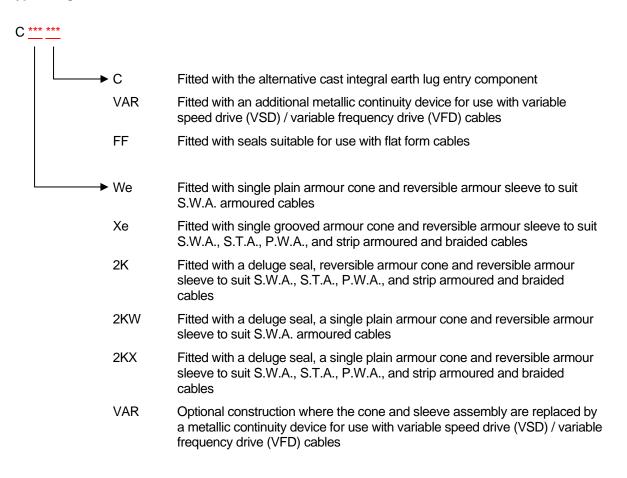
Alternative material of manufacture of the ferrule or skid washer to be the same as the gland material.

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'.

#### Type designation code:







Gland size	Entry thread	Entry thread 'B' version	Cable inner sheath Ø (mm)	SWA (mm)		SWA, STA armour, plia armour* & w (mm)	ble wire ire braid	Outer sheath (mr	range
			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	M20x1.5	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
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

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

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

C\*-FF in these sizes only.

Gland	Entry Thread	Entry thread 'B'	Cable Outer Sheath Ø (mm)		
Size		version	Min.	Max.	
20s	M20x1.5	M25x1.5	4.4 x 7.8	6.8 x 11.7	
20	M20x1.5	M25x1.5	4.4 x 10.9	8.7 x 16.0	

Notes:

- Sira 13ATEX1070X, Sira 13ATEX4076X and IECEx SIR 13.0025X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 13ATEX1070X, Sira 13ATEX4076X and IECEx SIR 13.0025X.
- Where Sira 13ATEX1070X, Sira 13ATEX4076X and/or IECEx SIR 13.0025X 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.





# 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
			Issue of the prime certificate.
0	29 July 2021	R13914AN/00	CML 18ATEX1323X, Issue 0 is attached and shall be referred to in conjunction with this certificate.

Note: Drawings that describe the equipment are listed or referred to in the Annex.

## 13 Conditions of Manufacture

None.

## 14 Specific Conditions of Use

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

- i. 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.
- 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 assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent pulling or twisting.

# **Certificate Annex**

Certificate Number	CML 21UKEX1251X
Equipment	Cable Gland Types C**
Manufacturer	CMP Products Ltd



The following documents describe the equipment defined in this certificate:

### Issue 0

For drawings describing the equipment, refer to attached certificate CML 18ATEX1323X. In addition to the drawings listed on CML 18ATEX1323X, the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
GA350	1 of 1	02	29 July 2021	CXe & CWe General Arrangement
GA351	1 of 1	02	29 July 2021	C2K General Arrangement