

**Type Examination Certificate    CML 21UKEX4259X    Issue 0****United Kingdom Conformity Assessment**

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended)
- 2 Equipment    **Cable Gland Types Triton T3\*\* and TE\*\***
- 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, 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 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 60079-0:2018                      IEC 60079-15:2017

- 10 The equipment shall be marked with the following:



II 3G

Ex nR IIC Gc

Ta= -60°C to +130°C (standard seal)

-20°C to +200°C (high temperature seal)



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## 11 Description

The Triton T3CDS series is a range of displacement type cable glands, each comprises of a hollow threaded entry component containing an elastomeric compensating displacement seal (CDS) system with associated ferrule, a skid washer, flameproof sealing ring with compensator, a reversible clamping sleeve and armour cone are provided for termination of various armour types. The flameproof sealing assembly is actuated by an inner seal nut. The entry component is fitted with an O-ring seal to provide increased ingress and deluge protection. Clamping of the armoured or braided cable is affected by a combination of the 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. The glands are intended for use with appropriately sized SWA, P.W.A., strip armoured, tape armoured or braided cables. The design is such that a constant pressure is maintained on the displacement seal by the use of the compensation ferrule.

T3CDS series suffixed 'R' or alternatively named TE1FU series – Identical to the above but incorporating an external shorter gland body to provide a reduced overall length.

T3CDS/PB - Identical to the T3CDS Type but incorporating a continuity washer and are suitable for use with lead sheathed cables.

### 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. 25RT3CDS.

### Materials of manufacture:

The standard material supplied is:

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
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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 Not for use with Group I mining Aluminium will contain less than 6% magnesium



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**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 option to have an alternative entry component profile that incorporates an earth lug.

Single or double-sided cone with an identically dimensioned plain taper each side for SWA type cables.

Single or double-sided cone with an identically dimensioned grooved taper each side for SWA, P.W.A., strip armoured, tape armoured or braided type cables.

Cable glands may be fitted with armour cones with alternative diameters to allow the clamping of smaller or larger armour wires and braided cables.

The use of seals suitable for flat form cables

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.



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**Type designation:**

T3CDS \* \* \* \*

→PB	Alternative cone assembly incorporating an additional metallic continuity diaphragm for the use with inner lead sheathed SWA and braided cables
VAR	Optional 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
→“Blank”	Standard gland arrangement with reversible armour cone
W	Fitted with single plain armour cone to suit S.W.A. cables
X	Fitted with single grooved armour cone to suit S.W.A., S.T.A., strip armoured, pliable wire armoured and braided cables
R	Alternative type number to the TE1FU types
L	Longer intermediate body

TE 1 F \* \* \* \* \*

→VAR	Optional 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
→“Blank”	Standard gland arrangement with reversible armour cone
PB	Fitted with additional metallic continuity diaphragm for use with inner lead sheathed S.W.A., strip armoured and braided cables.
→W	Fitted with single plain armour cone to suit S.W.A. cables
X	Fitted with single grooved armour cone to suit S.W.A., S.T.A., strip armoured, pliable wire armoured and braided cables
U	Fitted with a universal cone to suit S.W.A., S.T.A., strip armoured, pliable wire armoured and braided cables



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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)		SWA, STA, strip armour, pliable wire armour & wire braid (mm)		SWA (mm)		Outer seal sheath range Ø (mm)	
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
16	M16x1.5	---	3.1	8.7	0	0.8	0.8	1.25	6.1	13.2
20S16	M20x1.5	M25x1.5	3.1	8.7	0	0.8	0.8	1.25	6.1	13.2
20S16/20S	M20x1.5	M25x1.5	3.1	8.7	0	0.8	0.8	1.25	9.5	15.9
20S	M20x1.5	M25x1.5	6.1	11.7	0	0.8	0.8	1.25	9.5	15.9
20	M20x1.5	M25x1.5	6.5	14.0	0	0.8	0.8	1.25	12.5	20.9
25S	M25x1.5	M32x1.5	11.1	20.0	0	1.1	1.25	1.6	14.0	22.0
25	M25x1.5	M32x1.5	11.1	20.0	0	1.1	1.25	1.6	18.2	26.2
32	M32x1.5	M40x1.5	17.0	26.3	0	1.2	1.6	2.0	23.7	33.9
40	M40x1.5	M50x1.5	22.0	32.2	0	1.2	1.6	2.0	27.9	40.4
50S	M50x1.5	M63x1.5	29.5	38.2	0	1.5	2.0	2.5	35.2	46.7
50	M50x1.5	M63x1.5	35.6	44.1	0	1.5	2.0	2.5	40.4	53.1
63S	M63x1.5	M75x1.5	40.1	50.0	0	1.5	2.0	2.5	45.6	59.4
63	M63x1.5	M75x1.5	47.2	56.0	0	1.5	2.0	2.5	54.6	65.9
75S	M75x1.5	M90x2.0	52.8	62.0	0	1.5	2.5	3.0	59.0	72.1
75	M75x1.5	M90x2.0	59.1	68.0	0	1.6	2.5	3.0	66.7	78.5
90	M90x2.0	M100x2.0	66.6	80.0	0	1.6	3.15	4.0	76.2	90.4
100	M100x2.0	M115x2.0	76.0	91.0	0	1.6	3.15	4.0	86.1	101.5
115	M115x2.0	M130x2.0	86.0	98.0	0	1.6	3.15	4.0	101.5	110.3
130	M130x2.0	---	97.0	115.0	0	1.6	3.15	4.0	110.2	123.3

T3 series suffixed 'FF' or TE series suffixed '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	M20x1.5	M25x1.5	4.0 x 6.2	6.8 x 11.7	4.4 x 7.8	6.8 x 11.7
20	M20x1.5	M25x1.5	5.7 x 8.0	8.7 x 13.5	4.4 x 10.9	8.7 x 16.0

T3CDSL series which includes the longer intermediate body 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)		SWA, STA, strip armour, pliable wire armour & wire braid (mm)		SWA (mm)		Outer seal sheath range Ø (mm)	
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
63	M63x1.5	---	47.2	56.0	0	1.5	2.0	2.5	54.6	65.9



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## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	29 July 2021	R13914AV/00	Issue if the prime certificate. CML 18ATEX4318X, 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 21UKEX4259X  
**Equipment** Cable Gland Types Triton T3\*\* and TE\*\*  
**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 18ATEX4318X. In addition to the drawings listed on CML 18ATEX4318X, the following drawings include the additional marking required for this Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
GA356	1 of 1	04	29 July 2021	TE1FU GENERAL ARRANGEMENT
GA357	1 of 1	06	29 July 2021	TRITON CDS GENERAL ARRANGEMENT