

## UK Type Examination Certificate CML 21UKEX1014X Issue 2

### United Kingdom Conformity Assessment

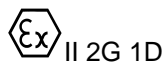
- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1
- 2 Equipment **Threaded Adaptors, Reducers, Unions, Couplers, Blanking Plugs, Insulated Adaptors, Adjustable Elbow / 'T' / 'Y' Adaptors, Swivel Adaptors, Swivel Couplers and Swivel Elbow /45° Adaptors**
- 3 Manufacturer **CCG Cable Terminations PTY LTD**
- 4 Address **33-37 Forge Road,  
Spartan Industrial Area,  
Kempton Park 1619,  
South Africa**
- 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 42 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 60079-31:2014

EN 60079-1:2014

EN IEC 60079-7:2015+A1:2018

- 10 The equipment shall be marked with the following:



II 2G 1D

Ex db IIC Gb

Ex eb IIC Gb

Ex ta IIIC Da

IP66/67/68 (2m cont)

(All product ranges except plastic blanking plugs)



II 2G 1D

Ex eb IIC Gb

Ex ta IIIC Da

IP66/67/68 (2m cont)

(Plastic blanking plugs)



I M2

Ex db I Mb

Ex eb I Mb

IP66/67/68 (2m cont)

(All product ranges except plastic blanking plugs, insulated and Posi adaptors, and any aluminium product. See Specific Conditions of Use)

*(Above is the full marking that applies to all the devices, due to limited space on the product, a summarised version appears on the actual devices)*





CML 21UKEX1014X  
Issue 2

## 11 Description

The Range of Threaded Adaptors, Reducers, Unions, Couplers, Adjustable Elbows, 'T' or 'Y' Adaptors, Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors and Blanking Plugs are designed for inserting into enclosures having threaded entries, as appropriate for the type of protection.

The following details the Model Nomenclature:

Product Name	Model Nomenclature	Product Name	Model Nomenclature	
Threaded Adaptors	AGZZZGYYYYE	Threaded Blanking Plugs	PFGZZZER	
Integral Earth Adaptors	AGZZZGYYYYE - IE	Plastic blanking plugs	3527ZZZ	
Threaded Reducers	RGZZZGYYYYE	<b>Where:</b> P = METAL PLUG (Blanking element) 3527= PLASTIC PLUG (Blanking element)  F = TYPE S = STOPPER D = DOME HEAD H = HEX HEAD G = THREADFORM M = METRIC		
Threaded Unions	UGZZZGYYYYE			
Threaded Couplers	CGZZZGYYYYE			
Insulated Adaptors	AGZZZGYYYYE -INSA			
Posi Adaptors	PAGZZZGYYYYE			
Adjustable Elbow	AELBGZZZGYYYYE			
Adjustable 'T' Adaptor	ATGZZZGYYYYE			
Adjustable 'Y' Adaptor	AYGZZZGYYYYE			
Swivel Adaptor	SAGZZZGYYYYE			
Swivel Coupler	SCGZZZGYYYYE			
Swivel Elbow Adaptor	SELBGZZZGYYYYE			
Swivel 45° Adaptor	S45GZZZGYYYYE			
Swivel Barrier Adaptor	SBAGZZZGYYYYE			
Swivel Barrier Coupler	SBCGZZZGYYYYE			
Swivel Barrier Elbow Adaptor	SBELBGZZZGYYYYE			
Swivel Barrier 45° Adaptor	SB45GZZZGYYYYE			
<b>Where:</b> A = ADAPTOR R = REDUCER U = UNION C = COUPLER PA= POSI ADAPTOR AELB = ADJUSTABLE ELBOW AT = ADJUSTABLE 'T' ADAPTOR AY = ADJUSTABLE 'Y' ADAPTOR SA = SWIVEL ADAPTOR				



CML 21UKEX1014X  
Issue 2

SC =	SWIVEL COUPLER		
SELB =	SWIVEL ELBOW ADAPTOR		
S45 =	SWIVEL 45° ADAPTOR		
SBA =	SWIVEL BARRIER ADAPTOR		
SBC =	SWIVEL BARRIER COUPLER		
SBELB =	SWIVEL BARRIER ELBOW		
SB45 =	ADAPTOR		
	SWIVEL BARRIER 45° ADAPTOR		
G =	THREADFORM	N =	NPT
	M = METRIC	B =	BSPP
	N = NPT	BSPT =	BSPT
	NPSM NPSM	NPSM =	NPSM
	=		
	B = BSPP	P =	PG
	BSPT BSPT	G =	EUROPE G (PARALLEL)
	=		
	P = PG	GK =	GK (TAPER)
	G = EUROPE G (PARALLEL)	R =	R (PARALLEL)
	GK = GK (TAPER)	RK =	RK (TAPER)
	R = R (PARALLEL)	PF =	JAPAN PF (PARALLEL)
	RK = RK (TAPER)	K =	K mpy (TAPER)
		ET =	ET
	PF = JAPAN PF (PARALLEL)	ZZZ =	THREAD SIZE
	K = K mpy (TAPER)	E =	Ex COMPONENT
	ET = ET		
ZZZ =	MALE THREAD SIZE	R =	HEX ON REVERSE FACE
YYY =	FEMALE THREAD SIZE		
E =	Ex COMPONENT		
IE =	INTEGRAL EARTH		
INSA =	INSULATED ADAPTOR		

Where the thread size coding is as follows:

Metric sizes			BSP/NPT/NPSM sizes	
016 = M16	020 = M20	100 = M100	012 = 1/2"	034 = 3/4"
025 = M25	032 = M32	110 = M110	001 = 1"	114 = 1 1/4"
040 = M40	050 = M50	120 = M120	112 = 1 1/2"	002 = 2"
063 = M63	075 = M75	130 = M130	212 = 2 1/2"	003 = 3"
080 = M80	090 = M90		312 = 3 1/2"	004 = 4"



For metric threads the pitch is:-

- M75 and smaller has 1.5mm pitch (minimum thread length 12mm) as standard with an optional pitch of 2mm (minimum thread length 16mm)
- M80 and larger has 2 mm pitch (minimum thread length 16mm) as standard with an optional pitch of 1,5mm (minimum thread length 12mm).
- Note: Intermediate metric thread sizes are allowed and use the same format of product and size coding, e.g., 033 = M33

**Threaded Adaptors and Reducers**

The Range of Threaded Adaptors and Reducers are used to convert a threaded entry from one thread size or type to another. The devices are manufactured from brass (nickel plated), stainless steel, mild steel, aluminium or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2 m cont.) ratings. The devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Tables 1 to 4:

**Table 1, Metric to Metric**

Male (Metric) Size	Female (Metric) Size													
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	M110	M120	M130
<b>M16</b>	A	A	A											
<b>M20</b>	R	A	A	A										
<b>M25</b>	R	R	A	A	A									
<b>M32</b>	R	R	R	A	A	A								
<b>M40</b>	R	R	R	R	A	A	A							
<b>M50</b>	R	R	R	R	R	A	A	A						
<b>M63</b>	R	R	R	R	R	R	A	A	A					
<b>M75</b>	R	R	R	R	R	R	R	A	A	A				
<b>M80</b>	R	R	R	R	R	R	R	R	A	A	A			
<b>M90</b>	R	R	R	R	R	R	R	R	R	A	A	A		
<b>M100</b>	R	R	R	R	R	R	R	R	R	R	A	A	A	
<b>M110</b>	R	R	R	R	R	R	R	R	R	R	R	A	A	A
<b>M120</b>	R	R	R	R	R	R	R	R	R	R	R	R	A	A
<b>M130</b>	R	R	R	R	R	R	R	R	R	R	R	R	R	A

A = Adaptor, R = Reducer



CML 21UKEX1014X  
Issue 2

Table 2, Metric to BSP/NPT

Male (Metric) Size	Female (BSP/NPT/NPSM) Size									
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
M16	A	A								
M20	A/R*	A	A							
M25	R	A/R*	A	A						
M32	R	R	A/R*	A	A					
M40	R	R	R	A/R*	A	A				
M50	R	R	R	R	A/R*	A	A			
M63	R	R	R	R	R	A/R*	A	A		
M75	R	R	R	R	R	R	A/R*	A	A	
M80	R	R	R	R	R	R	R	A/R*	A	A
M90	R	R	R	R	R	R	R	R	A/R*	A
M100	R	R	R	R	R	R	R	R	R	A
M110	R	R	R	R	R	R	R	R	R	R
M120	R	R	R	R	R	R	R	R	R	R
M130	R	R	R	R	R	R	R	R	R	R

A = Adaptor, R = Reducer; R\* = Metric to NPT reducers only

Table 3, BSP/NPT/NPSM to Metric

Male (BSP/NPT/NPSM) Size	Female (Metric) Size										
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100
1/2"	R	A	A	A							
3/4"	R	R	A	A	A						
1"	R	R	R	A	A	A					
1 1/4"	R	R	R	R	A	A	A				
1 1/2"	R	R	R	R	R	A	A	A			
2"	R	R	R	R	R	R	A	A	A		
2 1/2"	R	R	R	R	R	R	R	A	A	A	
3"	R	R	R	R	R	R	R	R	A	A	A
3 1/2"	R	R	R	R	R	R	R	R	R	A	A
4"	R	R	R	R	R	R	R	R	R	R	A

A = Adaptor, R = Reducer



CML 21UKEX1014X  
Issue 2

**Table 4, BSP to BSP, BSP to NPT, BSP to NPSM, NPT to BSP, NPT to NPT, NPT to NPSM and NPSM to NPSM**

Male (BSP/NPT/NPSM) Size	Female (BSP/NPT/NPSM) Size									
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"
½"	A	A	A							
¾"	R	A	A	A						
1"	R	R	A	A	A					
1¼"	R	R	R	A	A	A				
1½"	R	R	R	R	A	A	A			
2"	R	R	R	R	R	A	A	A		
2½"	R	R	R	R	R	R	A	A	A	
3"	R	R	R	R	R	R	R	A	A	A
3½"	R	R	R	R	R	R	R	R	A	A
4"	R	R	R	R	R	R	R	R	R	A

A = Adaptor, R = Reducer

### Integral Earth Adaptors

Integral Earth Adaptors have identical male and female threads and are fitted with an earth stud to provide an earth connection for the cable gland fitted to them. The devices are manufactured from brass (nickel plated), stainless steel, mild steel, aluminium or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2 m cont.) ratings. The devices maintain an IP65 rating with no washer fitted. The size and thread forms are M20 to M100 (metric) and ½" to 4" NPT.

### Threaded Couplings/Unions

The Range of Threaded Couplings and Unions is designed to provide an intermediate part for fitting between certified cable glands and threaded entries of the same or different form and/or sizes of threads (Male to male – Couplings and female to female – Unions). The devices are manufactured from brass (nickel plated), stainless steel, aluminium, mild steel or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2 m cont.) ratings. The devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Tables 5 to 10:



CML 21UKEX1014X  
Issue 2

Table 5, Couplings - Metric to Metric

Male (Metric) Size	Male (Metric) Size													
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	M110	M120	M130
M16	X													
M20	X	X												
M25	X	X	X											
M32		X	X	X										
M40		X	X	X	X									
M50			X	X	X	X								
M63				X	X	X	X							
M75					X	X	X	X						
M80						X	X	X	X					
M90							X	X	X	X				
M100								X	X	X	X			
M110									X	X	X	X		
M120										X	X	X	X	
M130											X	X	X	X

Table 6, Couplings - BSP to BSP, BSP to NPT, BSP to NPSM, NPT to BSP and NPT to NPT, NPT to NPSM and NPSM to NPSM

Male (BSP/NPT/NPSM) Size	Male (BSP/NPT/NPSM) Size										
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	
1/2"	X										
3/4"	X	X									
1"	X	X	X								
1 1/4"		X	X	X							
1 1/2"		X	X	X	X						
2"			X	X	X	X					
2 1/2"				X	X	X	X				
3"					X	X	X	X			
3 1/2"						X	X	X	X		
4"							X	X	X	X	



CML 21UKEX1014X  
Issue 2

Table 7, Coupling - BSP to Metric, NPSM to Metric and NPT to Metric

Male (BSP/NPT /NPSM) Size	Male (Metric) Size													
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	M110	M120	M130
1/2"	X	X	X											
3/4"	X	X	X	X	X									
1"	X	X	X	X	X	X								
1 1/4"		X	X	X	X	X	X							
1 1/2"		X	X	X	X	X	X	X						
2"			X	X	X	X	X	X	X					
2 1/2"				X	X	X	X	X	X	X				
3"					X	X	X	X	X	X	X	X	X	X
3 1/2"						X	X	X	X	X	X	X	X	X
4"							X	X	X	X	X	X	X	X

Table 8, Unions - Metric to Metric

Female (Metric) Size	Female (Metric) Size													
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	M110	M120	M130
M16	X													
M20	X	X												
M25	X	X	X											
M32	X	X	X	X										
M40	X	X	X	X	X									
M50		X	X	X	X	X								
M63			X	X	X	X	X							
M75				X	X	X	X	X						
M80					X	X	X	X	X					
M90						X	X	X	X	X				
M100							X	X	X	X	X			
M110								X	X	X	X	X		
M120									X	X	X	X	X	
M130										X	X	X	X	X





CML 21UKEX1014X  
Issue 2

**Table 9, Unions - BSP to BSP, BSP to NPT, BSP to NPSM, NPT to BSP, NPT to NPT, NPT to NPSM and NPSM to NPSM**

Female (BSP/NPT/NPSM) Size	Female (BSP/NPT) Size									
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
1/2"	X									
3/4"	X	X								
1"	X	X	X							
1 1/4"	X	X	X	X						
1 1/2"	X	X	X	X	X					
2"		X	X	X	X	X				
2 1/2"			X	X	X	X	X			
3"				X	X	X	X	X		
3 1/2"					X	X	X	X	X	
4"						X	X	X	X	X

**Table 10, Union - Metric to BSP/NPT/NPSM**

Female (Metric) Size	Female (BSP/NPT/NPSM) Size									
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
M16	X	X	X	X						
M20	X	X	X	X	X					
M25	X	X	X	X	X	X				
M32	X	X	X	X	X	X	X			
M40	X	X	X	X	X	X	X	X		
M50		X	X	X	X	X	X	X	X	
M63			X	X	X	X	X	X	X	X
M75				X	X	X	X	X	X	X
M80					X	X	X	X	X	X
M90						X	X	X	X	X
M100							X	X	X	X
M110								X	X	X
M120									X	X
M130										X



CML 21UKEX1014X  
Issue 2

### Threaded Metallic Blanking Plugs

The Range of Threaded Metallic Blanking Plugs are designed for blanking off threaded entries in enclosures. The devices are manufactured from brass (nickel plated), stainless steel, mild steel, aluminium or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2 m cont.) ratings. The devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Table below:

Hex. head		Dome head		Stopper (External Hex. Keyway)		Stopper (Internal. Hex. Keyway)	
Metric	BSP/NPT/ NPSM	Metric	BSP/NPT/ NPSM	Metric	BSP/NPT/ NPSM	Metric	BSP/NPT/ NPSM
M16	1/2"	M16	1/2"	M16	1/2"	M16	1/2"
M20	3/4"	M20	3/4"	M20	3/4"	M20	3/4"
M25	1"	M25	1"	M25	1"	M25	1"
M32	1 1/4"	M32	1 1/4"	M32	1 1/4"	M32	1 1/4"
M40	1 1/2"	M40	1 1/2"	M40	1 1/2"	M40	1 1/2"
M50	2"	M50	2"	M50	2"	M50	2"
M63	2 1/2"	M63	2 1/2"	M63	2 1/2"	M63	2 1/2"
M75	3"	M75	3"	M75	3"	M75	3"
M80	3 1/2"	M80	3 1/2"	M80	3 1/2"	M80	3 1/2"
M90	4"	M90	4"	M90	4"	M90	4"
M100	-	M100	-	M100	-	M100	-
M110	-	M110	-	M110	-	M110	-
M120	-	M120	-	M120	-	M120	-
M130	-	M130	-	M130	-	M130	-

### Threaded Non-metallic Blanking Plugs

The Range of Threaded Non-metallic Blanking Plugs are designed for inserting into enclosures having metric threaded entries, as appropriate for the type of protection. A sealing gasket is used to maintain the IP rating.

The following sizes are covered by this approval:

M20 x 1.5  
M25 x 1.5  
M32 x 1.5  
M40 x 1.5



CML 21UKEX1014X  
Issue 2

### Insulated Adaptors

The range of insulated adaptors are manufactured from a hollow cylindrical non-metallic insulated body with two metallic parts on opposite ends for male and female metric engagement with typically an enclosure and gland.

The insulated adaptor provides electrical insulation from one end to the other. The adaptor thread sizes are the same on both ends, e.g., M16 x 1.5 to M16 x 1.5. The following sizes are included in the range:

M16, M20, M25, M32, M40, M50, M63, M75, M80, M90, M100, M110, M120 & M130 (All 1.5 or 2.0 pitch, 6H/6g tolerance).

A sealing gasket is utilised on the male threaded part to maintain the IP rating.

### Posi Adaptors

The Posi adaptor has a brass core with a corrosion-protecting outer skin compression moulded around it. The Posi adaptor also has an earthing stud connected through the corrosion protection (and insulating) skin.

The Posi Adaptor is an adaptor available only in the sizes

MALE THREAD	FEMALE THREAD
M20 x 1.5 – 6g	M20 x 1.5 – 6g
M20 x 1.5 – 6g	M25 x 1.5 – 6g
M25 x 1.5 – 6g	M20 x 1.5 – 6g
M25 x 1.5 – 6g	M25 x 1.5 – 6g

### Adjustable Elbow, 'T' and 'Y' Adaptors

The Adjustable Elbow (90°), 'T' and 'Y' Adaptors are manufactured from brass or stainless steel with a male threaded portion at one end. The 90° adaptors have a single female thread, and the 'T' and 'Y' adaptors have two female threads. The 'T' adaptor has its male thread at 90° to each of the female threads and the female threads are at 180° to each other. The 'Y' adaptors have their threads spaced at 120° to each other.

90° adaptors are intended for use where space is limited and there may not be room to fit a gland and cable in the conventional manner. 'T' and 'Y' adaptors are used where two cable glands or a cable gland and another device (e.g. a breather drain plug) need to be fitted to a single entry hole.

The Adjustable 90°, 'T' and 'Y' adaptors are intended for fitting to a threaded hole for Ex db or Ex eb applications or to a plain hole, secured with a locknut, for Ex eb applications. The Adjustable Adaptors allow repositioning to align the cable in the desired direction when the adaptor is fully tightened.

The Adjustable 90°, 'T' and 'Y' Adaptors are available with Metric or BSPP male threads and either metric, NPT, ET, BSPP or BSPT female threads the same size or any size smaller than the male thread.



**CML 21UKEX1014X  
Issue 2**

On the Adjustable 'T' and 'Y' adaptors the female threads do not need to be the same size as each other.

The Adjustable Adaptors are available with thread sizes M20, M25 & M32 or equivalent size in the other thread types.

A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2 m cont.) ratings. The devices maintain an IP65 rating with no washer fitted.

### **Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors**

The Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors are manufactured from brass, bronze, aluminium or stainless steel with a male threaded portion at one end. They are made in two parts connected together with a nut, and the junction between the two parts forms a serrated flamepath. The Swivel Adaptor, Swivel Elbow and Swivel 45° Adaptors have a single male and a single female thread, and the Swivel Coupler has two male threads.

The Swivel Adaptor or Coupler can be used to connect two pieces of Ex Equipment. The Swivel Elbow and 45° Adaptors are intended for use where space is limited and there may not be room to fit a gland and cable in the conventional manner.

The Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors are intended for fitting to a threaded hole for Ex db or Ex eb applications or to a plain hole, secured with a locknut, for Ex eb applications. The Swivel Elbow / 45° Adaptors allow repositioning to align the cable in the desired direction when the adaptor is fully tightened.

The Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors are available with Metric, NPT, ET, BSPP or BSPT threads the same size or with the female thread any size smaller than the male thread. The Swivel Coupler can also have one male thread smaller than the other,

The Swivel Adaptor or Swivel Coupler are available with thread sizes from M20 to M100, or equivalent size in the other thread types. The Swivel Elbow / 45° Adaptors are available with thread sizes from M20 to M63, or equivalent size in the other thread types. The Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors can also be supplied with the male thread size one size larger. For example, a Swivel Elbow Adaptor body size that would normally have M50 male and female threads can also be supplied with an M63 male and an M50 female thread.

A non-metallic washer/gasket may be utilised on all parallel threads to ensure an IP66 rating. The devices maintain an IP65 rating with no washer fitted.

### **Swivel Barrier Adaptor, Swivel Barrier Coupler and Swivel Barrier Elbow / 45° Adaptors**

The Swivel Barrier Adaptor, Swivel Barrier Coupler and Swivel Barrier Elbow / 45° Adaptors are the same basic construction as their equivalent non-barrier versions but additionally have a resin sleeve inside the male thread. The resin sleeve forms a flamepath with its mating part and is filled with 'Quickstop Ex' or 'Vortex' resin to form a barrier around the cable conductors.



**CML 21UKEX1014X**  
**Issue 2**

#### Notes

1. All units are rated IP65 for any sealing arrangement. Units with parallel threads shall be used with the supplied washer if an IP rating of IP66/67/68 is required (IP66 for the Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors.) . NPT threads are at least IP65 as standard, but IP68 (2m) (IP66 for the Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors.) can be achieved if one of the following grease types is applied to the NPT thread before fitting:- Renolit Lubrene CA 700, Renolit LC-WP2, Renolit Lubrene LX 220 EP2, Renolit Moly LX 2 or Dow Corning 4 Electrical Compound.
2. RE-FLEx sealing cord can be used as an alternative to a standard sealing gasket to achieve IP66/68 (IP66 for the Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors.). It is intended as a retro-fit solution and must be installed according to the fitting instructions supplied with it.

#### Variation 1

This variation introduced the following modifications:

- i. The transfer of the plastic blanking plugs from CML 21UKEX3015X to this certificate
- ii. To update the certificate format, and where applicable, the description has been updated in accordance with the modifications.
- iii. To update the coding from Ex tb IIIC Db to Ex ta IIIC Da.
- iv. To update IEC 60079-7 to the latest edition.
- v. To permit changes to the Specific Conditions of Use.
- vi. To allow the use of the grease for NPT threads to achieve IP68.
- vii. Correction to standards referenced.
- viii. The addition of an Integral Earth Adaptor.
- ix. The addition of the RE-FLEx sealing cord.
- x. The addition of E.T thread option.
- xi. To update the certification drawings with minor corrections.

#### Variation 2

This variation introduced the following:

- i. The introduction of the Swivel 90°, 'T' and 'Y' Adaptors with the following modifications;
  - a. To update the name of the product from Swivel 90°, 'T' and 'Y' Adaptors to Adjustable Elbow, 'T' and 'Y' Adaptors
  - b. To update the coding from Ex tb IIIC Db to Ex ta IIIC Da.
  - c. To include ET threads.
  - d. To update EN IEC / IEC 60079-7 to the latest edition.
  - e. To allow the use of the grease for NPT threads to achieve IP68.
  - f. To update the product from a component to equipment.
- ii. The introduction of the Swivel Adaptor, Swivel Coupler, Swivel Elbow / 45° Adaptors
- iii. To update the certificate with the following modifications;
  - a. To update the description as a result of the modifications.
  - b. To permit changes to the conditions of manufacture.
  - c. To permit changes to the specific conditions of use.



CML 21UKEX1014X  
Issue 2

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	25 Jan 2021	R13654I/00	Issue of Prime Certificate
1	26 Jul 2022	R15542A/00	Introduction of Variation 1
2		R16124A/00	Introduction of Variation 2

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

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Insulated and Posi adaptors shall not be marked for Group I applications.
- ii. Products made from aluminium shall not be marked for Group I.
- iii. The products listed in this certificate with intermediate metric entry thread sizes shall be constructed by enlarging the entry thread size of the standard size product immediately below the intermediate thread size. The minimum entry wall thickness and constructional parts utilised (other than the entry thread component) shall not differ from that of the standard size used.

## 14 Specific Conditions of Use

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

### General Conditions

- i. To maintain the IP rating, the installer shall ensure that the surface of the enclosure against which the sealing gasket seals is in good condition.
- ii. The sealing arrangement of the gland into the adaptor / reducer shall conform to the gland certification and IP rating requirements (as applicable).
- iii. When supplied with a washer/gasket, the following service temperatures apply:
  - HDPE gasket – T<sub>service</sub> = -60°C to +95°C
  - Nylon gasket – T<sub>service</sub> = -60°C to +100°C
  - PTFE gasket – T<sub>service</sub> = -60°C to +160°C



CML 21UKEX1014X  
Issue 2

### Conditions for specific products

- i. A service temperature range of -20°C to +95°C shall not be exceeded for the insulated adaptor.
- ii. The tightening torque for the glands installed in the insulated adaptors may not exceed:

Thread Size and Form	Tightening torque (Nm)	Thread Size and Form	Tightening torque (Nm)
M16	40	M63 and 2"NPT	115
M20 and ½"NPT	40	M75 and 2 ½"NPT	140
M25 and ¾"NPT	55	M80	160
M32 and 1"NPT	65	M90 and 3"NPT	180
M40 and 1 ¼"NPT	80	>M90 and >3"NPT	200
M50 and 1 ½"NPT	100		

Note: Non-metric NPT size torque values also apply to the equivalent BSP, BSPT and NPSM sizes.

- iii. A service temperature range of -20°C and +95°C (HDPE sealing gasket) or -20°C and +106°C (Nylon sealing gasket) shall not be exceeded for the plastic blanking plug.
- iv. The Swivel Adaptors, Swivel Couplers and Swivel Elbow / 45° Adaptors are only to be used in Group I applications where the risk of mechanical impact is low.
- v. The Swivel Barrier products shall only be used where the temperature is between:
  - Quickstop or Vortex resin type S50 / EPA: (-50°C and +95°C)
  - Quickstop or Vortex resin type FR/846: (-60°C and +100°C)

# Certificate Annex



**Certificate Number** CML 21UKEX1014X  
**Equipment** Threaded Adaptors, Reducers, Unions, Couplers, Blanking Plugs, Insulated Adaptors, Adjustable Elbow / 'T' / 'Y' Adaptors, Swivel Adaptors, Swivel Couplers and Swivel Elbow /45° Adaptors  
**Manufacturer** CCG Cable Terminations PTY LTD

The following documents describe the equipment defined in this certificate:

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
No. "X" A2F GLAND MARKING	1 of 1	11	25 Jan 2021	ADAPTORS-REDUCERSPLUGS, COUPLERS & UNIONS MARKING DETAIL
AM016M016E-INSA TO AM130M130E-INSA	1 of 1	1	25 Jan 2021	METRIC TO METRIC INSULATED ADAPTOR Ex

## Issue 1

Drawing No.	Sheets	Rev	Approved date	Title
3527- PLUG	1 of 1	4	26 Jul 2022	No. "X" NON METALLIC ENCLOSURE PLUGS
AM016B012E - AM100B004E and RM025B012E - RM130B004E	1 of 1	1	26 Jul 2022	METRIC TO BSP ADAPTORS & REDUCERS Ex
AM016M016E TO AM130M130E AND RM020M016E TO RM130M120E	1 of 1	1	26 Jul 2022	METRIC TO METRIC ADAPTORS & REDUCERS Ex
AM016M016E-INSA TO AM130M130E-INSA	1 of 1	2	26 Jul 2022	AM016M016E-INSA TO AM130M130E-INSA
AM016M100E MARKING	1 of 1	12	26 Jul 2022	ADAPTORS-REDUCERS-PLUGS, COUPLERS & UNIONS MARKING DETAIL
AM016N012E - AM100N004E and RM025N012E TO RM130N004E	1 of 1	1	26 Jul 2022	METRIC TO NPT ADAPTORS & REDUCERS Ex
AM20M020E-IE TO AM100M100E-IE	1 of 1	-	26 Jul 2022	METRIC TO METRIC ADAPTORS - IE Ex
AN012N012E TO AN004N004E AND RN034N012E TO RN004N312E	1 of 1	4	26 Jul 2022	NPT TO NPT ADAPTORS & REDUCERS Ex
AN012N012E-INSA TO AN004N004E-INSA	1 of 1	3	26 Jul 2022	NPT TO NPT INSULATED ADAPTOR Ex



# Certificate Annex

**Certificate Number** CML 21UKEX1014X

**Equipment** Threaded Adaptors, Reducers, Unions, Couplers, Blanking Plugs, Insulated Adaptors, Adjustable Elbow / 'T' / 'Y' Adaptors, Swivel Adaptors, Swivel Couplers and Swivel Elbow /45° Adaptors



**Manufacturer** CCG Cable Terminations PTY LTD

Drawing No.	Sheets	Rev	Approved date	Title
CB012M016E - CB004M130E	1 of 1	1	26 Jul 2022	COUPLING BSP MALE TO METRIC MALE Ex
CM016M016E - CM130M130E	1 of 1	1	26 Jul 2022	COUPLING METRIC MALE TO METRIC MALE Ex
CM016N012E - CM130N004E	1 of 1	1	26 Jul 2022	COUPLING METRIC MALE TO NPT MALE Ex
PDM016E - PDM130E	1 of 1	1	26 Jul 2022	DOME HEAD PLUGS-METRIC
PHM016E - PHM130E	1 of 1	1	26 Jul 2022	PLUGS HEX HEAD METRIC - Ex
PSM016E - PSM130E and PSM016ER - PSM130ER	1 of 1	1	26 Jul 2022	STOPPER PLUG METRIC - Ex
UM016B012E - UM130B004E	1 of 1	1	26 Jul 2022	UNIONS METRIC FEMALE TO BSP FEMALE Ex
UM016M016E - UM130M130E	1 of 1	1	26 Jul 2022	UNION METRIC FEMALE TO METRIC FEMALE Ex
UM016N012E - UM130N004E	1 of 1	1	26 Jul 2022	UNIONS METRIC FEMALE TO NPT FEMALE Ex

## Issue 2

Drawing No.	Sheets	Rev	Approved date	Title
AELB - ASSY	1 of 1	2	23 Jun 2023	ADJUSTABLE ELBOW GENERAL ASSEMBLY
AT ADAPTOR ASSY	1 of 1	2	23 Jun 2023	ADJUSTABLE T ADAPTOR ASSEMBLY
AY ADAPTOR ASSY	1 of 1	2	23 Jun 2023	ADJUSTABLE Y ADAPTOR ASSEMBLY
AELB BODY	1 of 1	-	23 Jun 2023	ADJUSTABLE ELBOW BODY
AELB NUT	1 of 1	-	23 Jun 2023	ELBOW NUT
AT BODY	1 of 1	-	23 Jun 2023	ADJUSTABLE T ADAPTOR BODY
AY BODY	1 of 1	-	23 Jun 2023	ADJUSTABLE Y ADAPTOR BODY
SWIVEL MARKING - ATEX & IECEX	1 of 1	-	23 Jun 2023	SWIVEL ADAPTOR, COUPLING, 45°, ELBOW MARKING
SWIVEL NUT	1 of 1	-	23 Jun 2023	NUT FOR SWIVEL ADAPTOR, COUPLER, 45° & ELBOW
SA-I	1 of 1	-	23 Jun 2023	SWIVEL ADAPTOR MALE
S45 FEMALE	1 of 1	-	23 Jun 2023	SWIVEL 45° FEMALE

## Certificate Annex

**Certificate Number** CML 21UKEX1014X  
**Equipment** Threaded Adaptors, Reducers, Unions, Couplers, Blanking Plugs, Insulated Adaptors, Adjustable Elbow / 'T' / 'Y' Adaptors, Swivel Adaptors, Swivel Couplers and Swivel Elbow /45° Adaptors  
**Manufacturer** CCG Cable Terminations PTY LTD



Drawing No.	Sheets	Rev	Approved date	Title
S45 ASSY	1 of 1	-	23 Jun 2023	SWIVEL 45° ASSY
SB45 ASSY	1 of 1	-	23 Jun 2023	SWIVEL BARRIER 45° ASSY
SA FEMALE	1 of 1	-	23 Jun 2023	SWIVEL ADAPTOR FEMALE
SA ASSY	1 of 1	-	23 Jun 2023	SWIVEL ADAPTOR ASSEMBLY
SBA ASSY	1 of 1	-	23 Jun 2023	SWIVEL BARRIER ADAPTOR ASSY
SELB FEMALE	1 of 1	-	23 Jun 2023	SWIVEL ELBOW FEMALE
SELB ASSY	1 of 1	-	23 Jun 2023	SWIVEL ELBOW ASSY
SBELB ASSY	1 of 1	-	23 Jun 2023	SWIVEL BARRIER ELBOW ASSY
SC MALE	1 of 1	-	23 Jun 2023	SWIVEL COUPLER MALE
SC ASSY	1 of 1	-	23 Jun 2023	SWIVEL COUPLER ASSY
SBC ASSY	1 of 1	-	23 Jun 2023	SWIVEL BARRIER COUPLER ASSY
SBA-S	1 of 1	-	23 Jun 2023	SBA RESIN SLEEVE