



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

2 **Equipment Threaded Adaptors, Reducers, Unions, Couplers and Blanking Plugs**

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 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, in accordance with Article 9 of Directive 94/9/EC, 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 12.

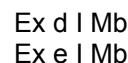
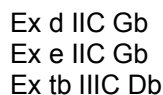
7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EC Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 94/9/EC Article 8 apply to the manufacture of the equipment or component and are separately certified.

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 60079-0:2012:A11:2013	EN 60079-1:2007
EN 60079-7:2007	EN 60079-31:2009

10 The equipment shall be marked with the following:




M D Shearman FinstMC
Managing Director



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11 Description

The Range of Threaded Adaptors, Reducers, Unions, Couplers 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	AGZZZGYYYE	Threaded Blanking Plugs	PPFGZZZER
Threaded Reducers	RGZZZGYYYE	Where: P = PLUG (Blanking element) F = TYPE S = STOPPER D = DOME HEAD H = HEX HEAD G = THREADFORM M = METRIC N = NPT B = BSP BSPT = BSPT P = PG G = EUROPE G (PARALLEL) GK = GK (TAPER) R = R (PARALLEL) RK = RK (TAPER) PF = JAPAN PF (PARALLEL) K = K mpy (TAPER) ZZZ = THREAD SIZE E = Ex COMPONENT	
Threaded Unions	UGZZZGYYYE		
Threaded Couplers	CGZZZGYYYE		
Where: A = ADAPTOR R = REDUCER U = UNION C = COUPLER G = THREADFORM M = METRIC N = NPT B = BSP BSPT = BSPT P = PG G = EUROPE G (PARALLEL) GK = GK (TAPER) R = R (PARALLEL) RK = RK (TAPER) PF = JAPAN PF (PARALLEL) K = K mpy (TAPER) ZZZ = MALE THREAD SIZE YYY = FEMAL THREAD SIZE E = Ex COMPONENT			



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Where the thread size coding is as follows:

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

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).

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 or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2m cont) ratings. The parallel threaded and NPT devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Tables 1 to 4 below:

Table 1, Metric to Metric

Male (Metric) Size	Female (Metric) Size										
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100
M16	A	A	A								
M20	R	A	A	A							
M25	R	R	A	A	A						
M32	R	R	R	A	A	A					
M40	R	R	R	R	A	A	A				
M50	R	R	R	R	R	A	A	A			
M63	R	R	R	R	R	R	A	A	A		
M75	R	R	R	R	R	R	R	A	A	A	
M80	R	R	R	R	R	R	R	R	A	A	A
M90	R	R	R	R	R	R	R	R	R	A	A
M100	R	R	R	R	R	R	R	R	R	R	A

A = Adaptor, R = Reducer



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Table 2, Metric to BSP/NPT

Male (Metric) 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"
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

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

Table 3, BSP/NPT to Metric

Male (BSP/NPT) 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



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Table 4, BSP to BSP, BSP to NPT, NPT to BSP and NPT to NPT

Male (BSP/NPT) 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"	A	A	A							
3/4"	R	A	A	A						
1"	R	R	A	A	A					
1 1/4"	R	R	R	A	A	A				
1 1/2"	R	R	R	R	A	A	A			
2"	R	R	R	R	R	A	A	A		
2 1/2"	R	R	R	R	R	R	A	A	A	
3"	R	R	R	R	R	R	R	A	A	A
3 1/2"	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

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, mild steel or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2m cont) ratings. The parallel threaded and NPT devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Tables 5 to 10 below:

Table 5, Couplings - Metric to Metric

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



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

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

Male (BSP/NPT) Size	Male (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						
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

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

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



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Table 8, Unions - Metric to Metric

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

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

Male (BSP/NPT) Size	Male (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

Female (Metric) 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"
M16	X	X	X	X						
M20	X	X	X	X	X					



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Female (Metric) 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"
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

Threaded Blanking Plugs

The Range of Threaded Blanking Plugs are designed for blanking off threaded entries in enclosures. The devices are manufactured from brass (nickel plated), stainless steel, mild steel or bronze. A non-metallic washer/gasket may be utilised on all non-tapered threads to ensure IP66/67/68 (2m cont) ratings. The parallel threaded and NPT devices maintain an IP65 rating with no washer fitted. The size and thread forms are shown in Table 11 below:

Hex. head		Dome head		Stopper (External Hex. Keyway)		Stopper (Internal. Hex. Keyway)	
Metric	BSP/NPT	Metric	BSP/NPT	Metric	BSP/NPT	Metric	BSP/NPT
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	-



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12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	15/04/2015	R517A/00	Issue of prime certificate

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

13 Conditions of manufacture

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

None

14 Special Conditions for Safe Use (Conditions of Certification)

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

- 14.1 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. Thread sealing in accordance with the requirements of IEC 60079-14 may be adopted for units with tapered threads.
- 14.2 A service temperature range of -20°C to +95°C shall not be exceeded if the supplied washers/gaskets are utilised.
- 14.3 The blanking plugs shall not be used in conjunction with any other cable or entry device.

Certificate Annex



Certificate Number CML 15ATEX1040X
Equipment Threaded Adaptors, Reducers, Unions, Couplers and Blanking Plugs
Manufacturer CCG Cable Terminations PTY LTD

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
8055-SG	1 of 1	1	14/04/2015	No. "X" CCG Sealing Gasket
AM016M100E MARKING	1 of 1	8	14/04/2015	Adaptors-Reducers-Plugs-Couplers and Unions Marking Details
AB012B012E to AB004B004E and RB034B012E to RB004B312E	1 of 1	1	14/04/2015	BSP to BSP Adaptors & Reducers Ex
AB012M020E to AB004M100E and RB012M016E to RB004M100E	1 of 1	1	14/04/2015	BSP to Metric Adaptors & Reducers Ex
AB012N020E to AB004N004E and RB034N012E to RB004N312E	1 of 1	1	14/04/2015	BSP to NPT Adaptors & Reducers Ex
AB016B012E to AB100B004E and RB025B012E to RB100B312E	1 of 1	1	14/04/2015	Metric to BSP Adaptors & Reducers Ex
AB016M016E to AM100M100E and RM020M016E to RM100M090E	1 of 1	1	14/04/2015	Metric to Metric Adaptors & Reducers Ex
AM016N012E to AM100N004E and RM020N012E to RM100N312E	1 of 1	1	14/04/2015	Metric to NPT Adaptors & Reducers Ex
AN012B012E to AN004B004E and RN034B012E to RN004B312E	1 of 1	1	14/04/2015	NPT to BSP Adaptors & Reducers Ex
AN012M020E to AN004M100E and RN012M016E to RN004M090E	1 of 1	1	14/04/2015	NPT to Metric Adaptors & Reducers Ex
AN012N012E to AN004N004E and RN034N012E to RN004N312E	1 of 1	1	14/04/2015	NPT to NPT Adaptors & Reducers Ex
CB012B012E – CB004B004E	1 of 1	2	14/04/2015	Coupling BSP Male to BSP Male Ex
CB012M016E – CB004M100E	1 of 1	1	14/04/2015	Coupling BSP Male to Metric Male Ex
CB012N012E – CB004N004E	1 of 1	1	14/04/2015	Coupling BSP Male to NPT Male Ex

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Equipment Threaded Adaptors, Reducers, Unions, Couplers and Blanking Plugs
Manufacturer CCG Cable Terminations PTY LTD

Drawing No	Sheets	Rev	Approved date	Title
CM016M016E – CM100M100E	1 of 1	2	14/04/2015	Coupling Metric Male to Metric Male Ex
CM016N012E – CM100N004E	1 of 1	1	14/04/2015	Coupling Metric Male to NPT Male Ex
CN012B012E – CN004B004E	1 of 1	2	14/04/2015	Coupling NPT Male to BSP Male Ex
CN012N012E – CN004N004E	1 of 1	2	14/04/2015	Coupling NPT Male to NPT Male Ex
CN012M016E – CN004M100E	1 of 1	2	14/04/2015	Coupling NPT Male to Metric Male Ex
PDB012E to PDB004E	1 of 1	-	14/04/2015	Plug Dome Head BSP - Ex
PDM016E to PDM100E	1 of 1	2	14/04/2015	Ex Plugs - Metric
PHB012E – PHB004E	1 of 1	-	14/04/2015	Plugs Hex Head BSP - Ex
PHM016E – PHM100E	1 of 1	1	14/04/2015	Plugs Hex Head Metric - Ex
PHN012E – PHN004E	1 of 1	-	14/04/2015	Plugs Hex Head NPT - Ex
PDN012E – PDN004E	1 of 1	-	14/04/2015	Plugs Dome Head NPT - Ex
PSB012E – PSB004E PSB012ER – PSB004ER	1 of 1	-	14/04/2015	Stopper Plug BSP - Ex
PSM016E – PSM100E PSM016ER – PSM100ER	1 of 1	1	14/04/2015	Stopper Plug Metric - Ex
PSN012E to PSN004E PSN012ER to PSN004ER	1 of 1	-	14/04/2015	Stopper Plug ½" NPT to 4" NPT Plug - Ex
UB012B012E – UB004B004E	1 of 1	1	14/04/2015	Union BSP Female to BSP Female Ex
UB012N012E – UB004N004E	1 of 1	-	14/04/2015	Union BSP Female to NPT Female Ex
UB012M016 – UB004M100E	1 of 1	1	14/04/2015	Union BSP Female to Metric Female Ex
UM016M016E – UM100M100E	1 of 1	1	14/04/2015	Union Metric Female to Metric Female Ex
UM016M012E – UM100B004E	1 of 1	1	14/04/2015	Union Metric Female to BSP Female Ex
UM016M012E – UM100N004E	1 of 1	1	14/04/2015	Union Metric Female to NPT Female Ex
UN012B012E – UN004B004E	1 of 1	-	14/04/2015	Union NPT Female to BSP Female Ex

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Equipment Threaded Adaptors, Reducers, Unions, Couplers and
Blanking Plugs
Manufacturer CCG Cable Terminations PTY LTD

Drawing No	Sheets	Rev	Approved date	Title
UN012N012E – UN004N004E	1 of 1	-	14/04/2015	Union NPT Female to NPT Female Ex
UN012M016E – UN004M100E	1 of 1	1	14/04/2015	Union NPT Female to Metric Female Ex