Ordering Thread Conversions & Accessories

To determine ordering reference please select from the tables below in the following order:

- Product Type
- Form of protection
- Thread Form
- Thread Size
- Thread Form (if applicable)
- Thread Size (if applicable)
- Material

When selecting and installing certified electrical equipment and components in potentially Explosive Atmospheres, it is the users responsibility to ensure that the local industry codes of practice are observed and followed, for example IEC 60079-14.

Below Example:

737DTR3T25

737 Adaptor - Globally Certified - ½" (M) x ¾" (F) - Nickel Plated Brass

Product Type	Form of Protection	Option	Male Thread Form	Male Thread Size	Female Thread Form	Female Thread Size	Material
From Product Page	From Table A Below	From Table B Below	From Table C Below	From Table D Below	From Table C Below	From Table D Below	From Table E Below
737	D	B	M	3	M	2	5

Table A

Code	Form of Protection
D	Group II Globally Certified Ex d / AEx d & Ex e / AEx e
E	Group II Increased Safety Ex e / AEx e
G	General Purpose
M	Group I Mining

Table B

Code	Options
A	Type A - Externally secured non tamper-proof Ex d Stopper Plug or Type A - Insulated Adaptor*
B	Type B - Internally secured tamper-proof Ex d Stopper Plug or Type B - Insulated Adaptor*
R**	Optional equipment interface 'O' ring seal

Table C

Code	Thread Form
M	Metric
N	NPSM
T	NPT
P	PG
B	BSPP
I	Imperial (E.T.)
S	BSPT

Other variations available on request

Nominal dimensions shown in this catalog may vary due to material availability. All dimensions shown are in inches unless otherwise stated. Within the parameters of its Explosive Atmosphere certification, CMP Products reserves the right to change the design and/or dimensions of any of the products illustrated without notice. For further information please contact CMP Products.

***When ordered with the integral 'O' ring seal the across flats dimension shown may increase to accommodate the 'O' ring.*

Table D

Code	Thread Size						
	Metric "M"	NPSM "N"	NPT "T"	PG "P"	BSPP "B"	Imperial (E.T.) "I"	BSPT "S"
1A	-	-	⅜"	7	-	½"	-
1	16	½"	½"	9	½"	⅝"	½"
2	20	¾"	¾"	11	¾"	¾"	¾"
3	25	1"	1"	13.5	1"	1"	1"
4	32	1¼"	1¼"	16	1¼"	1¼"	1¼"
5	40	1½"	1½"	21	1½"	1½"	1½"
6	50	2"	2"	29	2"	2"	2"
7	63	2½"	2½"	36	2½"	2½"	2½"
8	75	3"	3"	42	3"	3"	3"
9	90	3 ½"	3 ½"	48	3½"	3½"	3 ½"
10	100	4"	4"	-	4"	4"	4"

Other thread sizes available upon request

Table E

Code	Material
-	Brass
1	Aluminium
2	Nylon
3	Mild Steel
4	Stainless Steel 316
5	Nickel Plated Brass

ADAPTOR

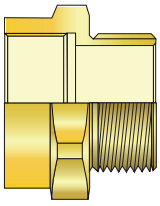
REDUCER

737

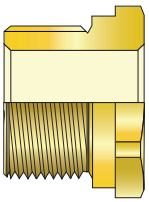
Ex e Exd Exta

737 Adaptors & Reducers, Globally Approved, Explosive Atmosphere Cable / Conduit Accessory

- Used for thread conversion
- Wide range of thread types & sizes
- General purpose / industrial version available
- Equipment interface 'O' ring seal available
- -60°C to +200°C (metallic versions)
- Globally marked, IECEx, ATEX, UL & cCSAus



CMP 737 Adaptor



CMP 737 Reducer

HOW TO ORDER

e.g. 737-D-M-2M-3-4 = Dual Certified Ex d & Ex e – M20 (M) x M25 (F) - Stainless Steel

Please refer to Ordering Guide Tables for reference definitions, denoting material variants. When ordering please notify CMP Products in your order if alternative approval markings are required.

When ordering Adaptors & Reducers always state the Male Thread size first.

Other Thread Variations are available on request. For further information on ordering please refer to page 150.

It should be noted that when using CMP Type 737 Thread Conversion Adaptors and Reducers in association with Explosion Protected electrical equipment the following basic rules must be observed in line with good engineering practice:

1. *For direct entry Ex d applications, only adaptor or reducer should be used per cable entry.*

2. *The female connection thread of a Thread Conversion Adaptor shall "step" not more than two "size" up in the case of a thread gender change. Example; M20 (M) to M32 (F) or M20 (M) to 1" NPT (F) is permitted. Whereas M20 (M) to M40 (F) or M20 (M) to 1½" NPT (F) is not permitted.*

TECHNICAL DATA

Design Specification	BS 6121:Part 1:1989, IEC 62444, EN 62444
Enclosure Protection	IK10 to IEC 62262 (20 joules) Brass & Stainless Steel Only
ATEX Certificate	SIRA13ATEX1265X
Code of Protection	Ex II 2G Ex d IIC Gb, Ex e IIC Gb, II 1D Ex ta IIIC Da Ex I M2 Ex d I Mb, Ex e I Mb (II 2G Ex e IIC Gb, II 1D Ex ta IIIC Da only on Nylon version)
Compliance Standards	EN 60079-0,1,7,31
IECEx Certificate	IECEx SIR13.0094X
Code of Protection	Ex d I Mb, Ex e I Mb, Ex d IIC Gb, Ex e IIC Gb, Ex ta IIIC Da (Ex e IIC Gb , Ex ta IIIC Da only on nylon version)
Compliance Standards	IEC 60079-0,1,7,31
cCSAus Certificate	1055233
Code of Protection	Class I, Groups A, B, C and D; IP66, 67, 68; Enclosure Type 4X; Class II groups E, F and G; Class III, Ex de II, Class I, Zone 1, AEx de II; (Not available in Nylon)
Compliance Standards	C22.2 No.0, 0.5, 30, 94,CAN/CSA E60079-0,1, 7, CAN-CSA E612411, UL50 Edition 11, UL1203 Edition 4, UL 60079-0,1,7
UL Certificate	E214221 (Reducers with NPT or Metric Threads only)
Code of Protection	Class I Groups A,B,C,D; Class II Groups E,F,G; Class III
Compliance Standards	UL 1203
EAC Certificate	TC RU C-GB.ГБ05.B00138
UkrSEPRO	UA.TR.047.C.0644-15
KCS Certificate	14-GA4BO-0249X
CCOE / PESO (India) Certificate	P333688
NEPSI Certificate	GYJ13.1142X
Compliance Standards	GB3836.1, 2, 3
INMETRO Approval	TÜV 12.1332X
RETIE Approval	03866
Marine Approvals	LRS: 01/00173 (E1), ABS: 01LD234401C/2PDA, BV: 43180/A1 BV
Continuous Operating Temperature	-60°C to +200°C (Metallic), -20°C to +60°C (Nylon)
Ingress Protection Rating**	IP66, IP67 & IP68***
Available Materials	Electroless Nickel Plated Brass, Brass, Nylon, Stainless Steel, Aluminium

*** When CMP installation accessories are used. Refer to page 7 or www.cmp-products.com for further information.*
**** IP68 tested to a minimum depth of 30 metres for 12 hours, alternate depths / durations can be provided upon request*

737 Dimension Data Tables

1. Select male thread from the left hand column of Table 'A'
2. Select the female thread size from the top of Table 'A', referenced 'A**' for Adaptor and 'R**' for Reducer
3. Using this code reference, please refer to the corresponding dimensions in Table 'B'

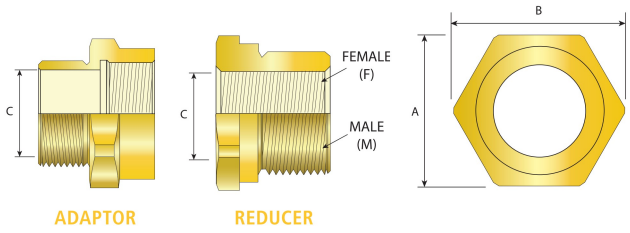


TABLE A - MALE THREAD SIZE / TABLE A - FEMALE THREAD SIZE

		METRIC										NPT									
		M16	M20	M25	M32	M40	M50	M63	M75	M90	M100	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"
METRIC	M16	A01	A04	A08								A03	A08								
	M20	R01	A05	A07	A12							A05	A11	A15							
	M25	R05	R03	A09	A14	A18						R03	A09	A16	A18						
	M32	R06	R06	R06	A17	A19	A24					R06	R06	A17	A19	A24					
	M40	R08	R08	R08	R08	A20	A29	A33				R08	R08	R08	A21	A25	A33				
	M50	R10	R10	R10	R10	R10	A28	A35	A49			R11	R11	R10	R10	A27	A32	A42	A52		
	M63		R12	R12	R12	R12	R12	A37	A48	A53		R12	R12	R12	R12	R12	A37	A44	A53		
	M75		R14	R14	R14	R14	R16	R15	A47	A55	A57		R14	R14	R14	R14	R14	A46	A55	A61	
	M90					R19	R19	R17	R19		A60							R18			
	M100							R20	R20	R20										A58	
NPT	½"	R02	A06	A07	A12							A02	A10	A15							
	¾"	R04	R04	A09	A16	A22						R04	A09	A16	A18						
	1"	R07	R07	R07	A13	A19						R07	R07	A17	A19	A24					
	1¼"	R09	R09	R09	R09	A20	A23					R09	R09	R09	A20	A25	A30				
	1½"		R10	R10	R10	R11	A26	A43				R10	R10	R10	R10	A26	A31	A41			
	2"		R12	R12	R12	R12	R12	A36	A43			R12	R12	R12	R12	R12		A39	A50		
	2½"		R14	R14	R14	R14	R13	R13	A40			R14	R14	R14	R14	R14	R14	A45	A54		
	3"		R17	R19	R19		R18	R19	R19	A56		R17		R18	R18	R18	R18	R19	A51	A59	A62
	3½"				R17		R20	R20	R20	R20				R20	R20	R20	R20	R20	R20		
	4"						R21	R21	R21						R21	R21	R21	R21	R21	R21	

TABLE B - REDUCERS

Table A Ref.	Across Flats 'A'	Across Corners 'B'
R01	24.0	26.4
R02	27.0	29.7
R03	30.0	33.0
R04	31.5	34.7
R05	31.5	34.7
R06	37.6	41.4
R07	41.0	45.1
R08	46.0	50.6
R09	50.0	55.0
R10	55.0	60.5
R11	60.0	66.0
R12	70.0	77.0
R13	79.0	86.9
R14	80.0	88.0
R15	84.0	92.4
R16	90.2	99.2
R17	95.0	104.5
R18	98.8	108.7
R19	100.0	110.0
R20	110.0	121.0
R21	123.0	135.3

TABLE B - ADAPTORS

Table A Ref.	Across Flats 'A'	Across Corners 'B'	Minimum Bore 'C'	Table A Ref.	Across Flats 'A'	Across Corners 'B'	Minimum Bore 'C'	Table A Ref.	Across Flats 'A'	Across Corners 'B'	Minimum Bore 'C'
A01	22.0	24.2	9.7	A23	55.0	60.5	32.1	A45	80.0	88.0	60.5
A02	24.0	26.4	14.0	A24	55.0	60.5	26.0	A46	80.0	88.0	65.0
A03	24.0	26.4	9.7	A25	55.0	60.5	32.0	A47	84.0	92.4	68.0
A04	24.0	26.4	10.0	A26	55.0	60.5	38.0	A48	90.2	99.2	53.0
A05	24.0	26.4	14.0	A27	55.0	60.5	43.6	A49	90.2	99.2	42.0
A06	27.0	29.7	14.0	A28	59.8	65.8	44.2	A50	95.0	104.5	49.0
A07	30.0	33.0	14.0	A29	60.0	66.0	32.1	A51	95.0	104.5	75.0
A08	30.0	33.0	9.7	A30	65.0	71.5	32.0	A52	100.0	110.0	44.2
A09	30.0	33.0	20.0	A31	65.0	71.5	38.0	A53	100.0	110.0	55.0
A10	30.5	33.6	14.0	A32	65.0	71.5	44.2	A54	100.0	110.0	60.5
A11	31.5	34.7	14.0	A33	70.0	77.0	32.0	A55	100.0	110.0	64.8
A12	36.0	39.6	14.0	A34	70.0	77.0	38.0	A56	100.0	110.0	75.0
A13	36.0	39.6	26.0	A35	70.0	77.0	44.2	A57	110.0	121.0	61.0
A14	37.6	41.4	20.0	A36	70.0	77.0	49.0	A58	110.0	121.0	75.0
A15	41.0	45.1	14.0	A37	70.0	77.0	53.0	A59	110.0	121.0	75.0
A16	41.0	45.1	20.0	A38	70.0	77.0	32.1	A60	110.0	121.0	79.3
A17	41.0	45.1	26.0	A39	79.0	86.9	49.0	A61	110.0	121.0	68.3
A18	46.0	50.6	20.0	A40	79.0	86.9	60.0	A62	117.5	129.3	75.0
A19	46.0	50.6	26.0	A41	80.0	88.0	38.0				
A20	46.0	50.6	32.1	A42	80.0	88.0	44.2				
A21	50.0	55.0	32.0	A43	80.0	88.0	49.0				

Additional sizes available upon request
Minimum reducer bore determined by female thread
Dimensions displayed in millimetres

737 Sizing Table

MALE THREAD	FEMALE THREAD																																							
Size	M16	M20	M25	M32	M40	M50	M63	M75	5/8" ET	¾"ET	1" ET	1 ¼" ET	1 ½" ET	2" ET	2 ½" ET	3" ET	PG7	PG9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48	½" NPT / NPS (M)	¾" NPT / NPS (M)	1" NPT / NPS (M)	1 ¼" NPT / NPS (M)	1 ½" NPT / NPS (M)	2" NPT / NPS (M)	2 ½" NPT / NPS (M)	3" NPT / NPS (M)	3 ½" NPT / NPS (M)	4" NPT / NPS (M)	½" BSPP	¾" BSPP	1" BSPP	1 ¼" BSPP	1 ½" BSPP	2" BSPP	2 ½" BSPP	3" BSPP
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Ex d, Ex e & Ex ta Certified Reducer

Ex d, Ex e & Ex ta Certified Adaptor

Non-Certified Adaptor

Additional sizes available upon request
For specific certification information please contact CMP Products