



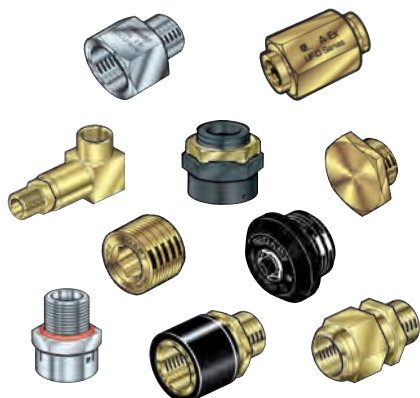
Thread Conversion Products and Cable Installation Solutions

Equipment for Hazardous Areas and
Potentially Explosive Environments

COOPER Safety



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Extensive Product Range

The Redapt product range includes thread converting adaptors and reducers, stopping plugs, breather drains and other products and accessories to support hazardous area certified installation solutions. Our products have international approvals including ATEX, IECEx and CSA and our Quality Assurance System is approved to BS EN ISO:9001 2008 to ensure consistent product quality. Redapt are now also able to offer a range of shrouds and flexible conduit with associated accessories to provide an even wider range of installation solutions.



Customer Focused Service

Redapt has been established for over 35 years as one of the world's leading suppliers of hazardous area certified products for thread conversion and cable installation. Since 2010, Redapt has also been a subsidiary of Cooper Industries plc, a global leader in the manufacturing of electrical products and energy safety solutions.

With a reputation for delivering the highest possible standards of both product quality and customer service, Redapt are committed to providing a level of service that matches the high expectations of our customers. We recognize that our products are often required on an urgent basis to enable the completion of cable installations and to support this commitment we carry a comprehensive stock of our full range of products – all sizes, all material, all available on a fast turnaround. In addition we are able to provide full technical support, not only on our products, but most importantly its application.



Custom Design Capability

Redapt also offer a bespoke design service to provide solutions for specialist requirements. We have extensive experience in providing such solutions, especially across the oil and gas and petrochemical industry sectors. Machined or cast components can be manufactured in metallic or plastic nylon materials, with the option of providing samples and prototypes on a quick turnaround basis from our onsite workshop facilities.



Our Customers

Redapt products are used in a wide variety of industries. Our customers include Oil & Gas operators in areas such as refining, offshore exploration, land based drilling, mining and power generation. Others include petrochemical and pharmaceutical companies, engineering contractors and hazardous equipment manufacturers. Redapt products are also approved for industries where dust may present a hazard, including agriculture, food processing and synthetics.

Product Selection Guide

When selecting Ex certified accessories for use in hazardous areas, it is important to ensure that the product selected not only performs the task required, i.e. adapting the thread, but must also **maintains the overall integrity of the equipment** into which it will be fitted.

To help with the selection of Redapt products we have prepared the following as a guide. However, when selecting equipment for use in hazardous areas, the appropriate national or international standards or codes of practice must be considered.

Product Approvals (see page 6)

Redapt products are manufactured to comply with the relevant standards for which they are designed. This means Redapt products meet with the exacting standards found within hazardous area environments. To assist in ease of use, the Redapt range of Adaptors, Reducers, Stopping Plugs and Breather Drains are approved Exd I&IIC & Exe I&IIC and tested to IP66 68.

Equipment Certificates, Ex Thread Adaptors and Ex Stopping Plugs

Redapt Adaptors & Reducers with metric female threads (Ex Adaptors) and full range of Stopping Plugs (Ex Stopping Plugs) are certified as apparatus and granted Equipment Certificates. This means that they can be fitted into Ex apparatus enclosures without further certification.

Component Certificates

Redapt Adaptors & Reducers with non-coaxial threads, 90 degree Adaptors, 90 degree Swivel Adaptors and Breather Drains are certified as components and as such require further approval before they can be fitted to Ex apparatus enclosures. This applies to all products that have a 'U' at the end of the certificate number.

Worldwide Compatability

Keeping pace with the rapidly changing approvals and to ensure worldwide compatibility, Redapt have the following approvals: North American Ex approvals for both methods of hazardous location classification, Zones and Divisions in addition to our existing CENELEC approvals. Redapt can therefore offer Adaptors & Reducers Exd I&IIC & Exe I&IIC and/or Class I Division 1 ABCD, or Exe II, Class I Division 2 etc.

Ingress Protection (see page 7)

To ensure that the ingress protection of the equipment is maintained, the accessories need to satisfy the same level of protection as the equipment. The Redapt Exd I&IIC & Exe I&IIC range of Adaptors, Reducers, Stopping Plugs and Breather Drains are fitted with an integral 'O' ring seal and have been independently tested to IP66 68.

Material

To ensure the long term integrity of the installation, care should be taken in selecting the product material, in particular taking into account any corrosive atmosphere present and/or the potential for corrosion brought about by mating dissimilar metals. As standard we supply brass, which is suitable for most applications. In certain atmospheres, most notably ammonia, or to avoid bi-metallic corrosion and electrolytic action it may be advisable to select an alternative material or request plated brass.

Thread Fit, Gauging and Length

Parallel threads are gauged to a medium fit (6g, 6H) and are manufactured to provide a minimum of 8 full threads, unless otherwise specified. Tapered threads are gauged and dimensioned to provide for 5 fully engaged threads, unless otherwise specified.

Part Numbering System (see page 8)

When ordering or inquiring after Adaptors and Reducers, the male thread size should always be quoted first, followed by the female.

Dimensions

It is advisable to check the dimensions of the product to ensure that it can be installed into the equipment without fouling. Dimensions are given in the catalogue for regular metric size products; for other dimensions or information, please contact us. **Please note that dimensions are subject to change.**

Product Marking

To ensure clarity the relevant product information is marked on the product, and/or shown on the packaging and/or within the installation instructions.

European Directives

Products approved within the ATEX Directive will be shipped with detailed installation instructions. The CE mark is applied to the packaging and confirms that Redapt products meet with the essential health and safety requirements of the applicable European Directives.

Redapt products are outside the scope of the Electromagnetic Compatibility Directive (EMC) as they are passive.

Product Type			Certifying Approvals							
										
			IECEX	ATEX Gas & Dust	ATEX Mining (M2 only)	North America	Russia	USA	Global	USA
Adaptors and Reducers (Metallic)			✓	✓	✓	✓	✓			
Adaptors and Reducers (Nylon)			✓	✓		✓	✓			
Swivel Adaptors			✓	✓	✓					
'Y' Adaptors and 'T' Adaptors			✓	✓	✓					
90 Degree Adaptors			✓	✓		✓	✓			
Male-Male and Female-Female (IECEX only) Adaptors			✓	✓		✓	✓			
Insulated Adaptors			✓	✓			✓			
Cable Gland Stopper Boxes				✓			✓			
Unions				✓		✓	✓			
Stopping Plugs (Metallic)			✓	✓	✓	✓	✓			
Stopping Plugs (Nylon)			✓	✓		✓	✓			
Breather Drains Exde			✓	✓	✓					
Breather Drains Exe			✓	✓	✓	✓	✓			
Earth Lead Adaptors			✓	✓		✓	✓			
Threaded Earth Plates				✓			✓			
Flexible Conduit Stopper Boxes				✓						
Myers™ Scru-Tite® and Grounding Hubs						✓		✓	✓	✓
Flexible Coupling			✓	✓				✓	✓	

Product Approvals



ATEX Directive Compliance



The ATEX Directive (94/9/EC) applies to equipment and protective systems intended for use in potentially explosive atmospheres within Europe. The directive outlines the Conformity Assessment Procedures and Product Classification for Ex products. All Ex products placed on the market after 30th June 2003 within Europe must comply with these requirements.

Redapt complies with ATEX having had an EC type-examination carried out on our Ex product range and our Production QA assessed and approved. This is in line with the requirements for Ex products for use in Gas Groups I&II.



North American Approval



The Canadian Standards Association (CSA) develop standards, test and certify products for use in Canada and internationally. CSA International is recognised by the U.S. Occupational Safety and Health Administration (OSHA) under the Nationally Recognised Testing Laboratory (NRTL) scheme and are able to test and certify products for use in hazardous locations within the U.S.A. as well as Canada. Traditionally Ex products used within North America have been designed and tested for compliance within the 'Class and Division System'. Recent updates of both electrical codes (NEC & CEC) have incorporated the 3 zone concept of area classification or 'Zone System' for Class I.

Redapt products have been assessed and certified for use throughout North America in both the 'Class and Division System' and the 'Zone System'.



IEC Ex Approval



The International Electrotechnical Commission (IEC) have developed the IECEx International Certification Scheme in an attempt to harmonise national standards used throughout the world with the aim of producing an approval that is recognised globally. The IECEx scheme is based on the 3 zone concept of area classification. Collaboration between IEC and CENELEC has created virtually identical sets of standards that in time will become identical.

Redapt products have not been approved specifically under the IECEx scheme, however the products are compliant with the requirements of the scheme via both the CENELEC EN600701 Ex approvals and CSA E79 Ex approvals.



GOST-R Approval



The explosion proof components are to be used in accordance with the explosion proof mark, requirements of GOST R 51330.13, current "Electrical plant arrangement rules" (PUE, art. 7.3), "Technical maintenance rules for electrical plants" (PTEEP, art. 3.4), other normative documents regulating application of electrical equipment in explosive areas, and the manufacturer's instruction manual.

Applicable explosive areas and condition of use, categories and groups of explosive air mixtures with gases and vapours are in accordance with GOST R 51330.9, GOST R 51330.11 and requirements of "Electrical plants arrangement rules" (PUE, art. 7.3).

Notes

Equipment Certificates, Ex Thread Adaptors and Ex Stopping Plugs

Redapt Adaptors & Reducers with metric female threads (Ex Adaptors) and full range of Stopping Plugs (Ex Stopping Plugs) are certified as apparatus and granted Equipment Certificates. This means that they can be fitted to Ex apparatus enclosures without further certification (see installation instructions).

Component Certificates

Products certified as components require further approval before they can be fitted to Ex apparatus enclosures. A certificate number ending with the 'U' suffix denotes a component certificate (see installation instructions).

Aluminium Products

Aluminium versions of AD-U, RD-U, PD-U, PA-D, PB-D Series and GF Nylon and Aluminium versions of DP-E Series are not suitable for Group I applications.

Temperature Classification

Redapt products do not carry a Temperature Class or 'T' rating as they are passive and do not generate any heat.

Hazardous area standards generally state a minimum IP rating of IP54 or NEMA 3. However, it is essential when selecting Redapt products to ensure that the product will maintain the IP or NEMA rating of the equipment and the integrity of the installation.

The following table contains definitions detailing the environmental protection levels that Redapt products are capable of maintaining:

IP Codes are based on the IEC Standard Dust/Water 50269 – Degrees of protection provided by enclosures 1st Numeral – Protection against solid objects 2nd Numeral – Protection against water	
IP 54	<ul style="list-style-type: none"> • Dust protected. Prevents ingress of dust sufficient to cause harm. • Protected from splashing water from any direction.
IP 66	<ul style="list-style-type: none"> • Dust tight. No ingress of dust possible. • Protected against heavy seas or powerful jets of water. Prevents ingress sufficient to cause harm.
IP 67	<ul style="list-style-type: none"> • Dust tight. No ingress of dust possible. • Protected against harmful ingress of water when immersed between a depth of 150mm to 1m.
IP 68	<ul style="list-style-type: none"> • Dust tight. No ingress of dust possible. • Protected against submersion. Suitable for continuous immersion in water at stated depth. (Depth stated for Redapt products = 2m)

North American and Canadian markets define environmental protection as CSA and NEMA Enclosure Types	
Type 3	<ul style="list-style-type: none"> • Type 3 enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust and damage from external ice formation.
Type 4	<ul style="list-style-type: none"> • Type 4 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against wind blown dust and rain, splashing water, hose directed water and damage from external ice formation.
Type 4X	<ul style="list-style-type: none"> • Type 4X enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, wind blown dust and rain, splashing water, hose directed water and damage from external ice formation.
Type 6	<ul style="list-style-type: none"> • Type 6 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during occasional temporary submersion at a limited depth and damage from external ice formation.
Type 6P	<ul style="list-style-type: none"> • Type 6P enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during prolonged submersion at a limited depth and damage from external ice formation.

Integral 'O' Rings Available		
Silicone	Nitrile	Neoprene
Fluorosilicone	EPDM	Viton

Part Numbering System

Page no	Product	Digits 1 & 2
Adaptors & Reducers		
12-15	AD	Adaptor
12-15	RD	Reducer
16	TA	Swivel - Inline Male x Female
16	TC	Swivel - Inline Female x Female
16	TD	Swivel - Inline Male x Male
16	TP	Swivel - 90° Male x Female
16	TQ	Swivel - 90° Female x Female
16	TR	Swivel - 90° Male x Male
17	AY	'Y' Adaptor
17	AT	'T' Adaptor
18	AR	90° Adaptor
19	AM	Male x Male Adaptor
19	AF	Female x Female Adaptor
20-21	AI	Insulated Adaptor
Stopping Plugs		
22-23	PD	Dome Head Plug
24	PA	Type A Plug
24	PB	Type B Plug
25	PH	Hex Head Plug
25	PX	Hollow Hex Head Plug
Breather Drains		
26	DP	Breather Drain (Exe)
27	BD	Breather Drain (Exde)
Accessories		
28	SB	Stopper Box (Rigid Conduit)
30	UN	Union (MxF)
30	UF	Union (FxF)
30	AE	Earth Lead Adaptor
31	EP	Pear Earth Tag
31	ET	Threaded Earth Plate
32	LN	Locknut
32	LE	Earthing Locknut
33	N	Nipples - speak to Sales for coding
33	CO	Couplers
33	MB	Bushes - Male Bush Long
33	MS	Bushes - Male Bush Short
33	FB	Bushes - Female Bush
34	SR	Serrated Washer
34	SW	IP Sealing Washer
36	FX	Stopper Box (Flexible Conduit)

Certification	Digit 3
U	Exd I&IIC & Exe I&IIC
D	Exd I&IIC
E	Exe I&IIC
Z	Industrial

Material	Digit 4
1	Brass
2	Mild Steel
3	Stainless Steel
4	Glass Filled Nylon
5	Aluminium
6	Nylon 6
7	Red Fibre

Plating	Digit 5
0	Unplated
1	Electroless Nickel
2	Zinc
6	Chromatise

Example:

Digits 1&2 - Digit 3 - Digit 4 - Digit 5 - Digits 6&7 - Digits 8&9

AD - U - 1 - 1 - 29 - 04

Adaptor - Exd/e - Brass - Nickel - ½" NPT - M20
Certified Plated (Male) (Female)

Always Quote Male Thread First

Male Thread – Digits 6 & 7, Female Thread – Digits 8 & 9								
Note: threadform codes below to be used for both male and female threads								
Metric	ET Imperial Conduit	NPT	NPSM	ISO Pipe Parallel (BSPP)	ISO Pipe Taper (BSPT)	PG		
03 M16	17 ⅝" ET	29 ½" NPT	42 ½" NPSM	55 ½" BSPP	68 ½" BSPT	79 PG7		
04 M20	18 ¾" ET	30 ¾" NPT	43 ¾" NPSM	56 ¾" BSPP	69 ¾" BSPT	80 PG9		
05 M25	19 1" ET	31 1" NPT	44 1" NPSM	57 1" BSPP	70 1" BSPT	81 PG11		
06 M32	20 1¼" ET	32 1¼" NPT	45 1¼" NPSM	58 1¼" BSPP	71 1¼" BSPT	82 PG13.5		
07 M40	21 1½" ET	33 1½" NPT	46 1½" NPSM	59 1½" BSPP	72 1½" BSPT	83 PG16		
08 M50	22 2" ET	34 2" NPT	47 2" NPSM	60 2" BSPP	73 2" BSPT	84 PG21		
09 M63	23 2½" ET	35 2½" NPT	48 2½" NPSM	61 2½" BSPP	74 2½" BSPT	85 PG29		
10 M75	24 3" ET	36 3" NPT	49 3" NPSM	62 3" BSPP	75 3" BSPT	86 PG36		
11 M80x2.0		37 3½" NPT	50 3½" NPSM	63 3½" BSPP	76 3½" BSPT	87 PG42		
12 M85x2.0		38 4" NPT	51 4" NPSM	64 4" BSPP	77 4" BSPT	88 PG48		
13 M90x2.0								
14 M100x2.0								
15 M110x2.0								
BZ M120x2.0								

Shroud Product Coding (p.35)

Please note the product coding for shrouds differs slightly from the main coding

Digits 1 & 2 Product		Digit 3 Certification		Digit 4 Material		Digit 5 Colour		Digits 6 & 7 Thread Size		Digits 8 & 9 Defaults to '00'		Digits 10 to 13 Shroud size	
SH	Shroud	Z	Industrial*	R	PVC (Standard)	B	Black	01	M10	00		S005	5
				Q	PVC (Low Smoke & Fume - LSF)	G	Grey	02	M12			S05A	5A
				N	PVC (Flame Retardant - FR)	R	Red	03	M16			S006	6
				V	PCP	W	White	04	M20			S007	7
						L	Blue	05	M25			S008	8
								06	M32			S08B	8B
								07	M40			S009	9
								08	M50			S010	10
								09	M63			S011	11
												S012	12
												S12E	12E
												S013	13

* All shrouds are industrial

Examples

<i>Digits 1 to 3</i>	-	<i>Digit 4</i>	-	<i>Digit 5</i>	-	<i>Digits 6 & 7</i>	-	<i>Digits 8 & 9</i>	-	<i>Digits 10 to 13</i>
SHZ	-	R	-	B	-	04	-	00	-	S005
Shroud	-	Standard PVC	-	Black	-	M20	-	Default	-	Shroud size 5
SHZ	-	V	-	R	-	07	-	00	-	S008
Shroud	-	PCP	-	Red	-	M40	-	Default	-	Shroud size 8

Flexible Conduit Product Coding (p.37-38)

Please note the product coding for Flexible Conduit differs from the main coding

Digit 1 to 4 Product codes - Flexible conduit		Digit 5* Colour (for FEZR only)		Digits 6 & 7 Thread Size of Conduit		Digits 8 & 9 Defaults to '00'		Digits 10 to 13** Reel size	
FAZ3	Galv. Steel conduit with rubber cover and st. steel overbraid	B	Black	01	M10	00		S010	10 metres
FDZH	Galv. Steel conduit with rubber cover	G	Grey	02	M12			S025	25 metres
FEZR	Galv. Steel conduit with pvc cover	O	Orange	03	M16			S050	50 metres
FFZR	Galv. Steel conduit with Galv. steel braid and pvc cover			04	M20				
FGZR	Stainless Steel conduit with pvc cover			05	M25				
				06	M32				
FYZ3	Stainless steel fixing clip			07	M40				
FZZR	Plated steel with pvc liner fixing clip			08	M50				
				09	M63				

* Digit 5 represents colour, although only the FEZR conduit is available in other colours. Other conduit types/clips use 'B' for Black as default.

** Digits 10 to 13 not used for fixing clips.

Examples

<i>Digits 1 to 3</i>	-	<i>Digit 4</i>	-	<i>Digit 5</i>	-	<i>Digits 6 & 7</i>	-	<i>Digits 8 & 9</i>	-	<i>Digits 10 to 13</i>
FAZ	-	3	-	B	-	04	-	00	-	S010
Galv. Steel conduit with rubber cover and st. steel overbraid	-		-	Black	-	M20	-	Default	-	10m
FEZ	-	R	-	G	-	07	-	00	-	S050
Galv. Steel conduit with pvc cover	-		-	Grey	-	M16	-	Default	-	50m

Thread Dimension Charts

ISO Metric

BS 3643 1.5mm Pitch

Size	Major Dia.	TPI
M16	15.97	16.93
M20	19.97	16.93
M25	24.97	16.93
M32	31.97	16.93
M40	39.97	16.93
M50	49.97	16.93
M63	62.97	16.93
M75	74.97	16.93

2.0mm Pitch

Size	Major Dia.	TPI
M80	79.97	12.70
M85	84.97	12.70
M90	89.97	12.70
M100	99.97	12.70
M110	109.97	12.70
M120	119.97	12.70

NPT

ANSI/ASME B1.20.1

Size	Pipe Dia.	TPI
½"	21.34	14
¾"	26.67	14
1"	33.40	11.5
1¼"	42.16	11.5
1½"	48.26	11.5
2"	60.33	11.5
2½"	73.03	8
3"	88.90	8
3½"	101.60	8
4"	114.30	8

PG

DIN 40430 (Withdrawn)

Size	Major Dia.	TPI
PG7	12.50	20
PG9	15.20	18
PG11	18.60	18
PG13.5	20.40	18
PG16	22.50	18
PG21	28.30	16
PG29	37.00	16
PG36	47.00	16
PG42	54.00	16
PG48	59.30	16

Alternate ISO Pipe Thread Designations

UK	BSP Parallel or Taper BS2279 (BS21)
Europe	G (Parallel) GK (Taper) R (Parallel) RK (Taper)
Japan	PF (Parallel) JIS B 303
CIS	K mpy (Taper)

BSP ISO Pipe Thread

ISO R/7; UNI 6125

Size	Major Dia.	TPI
⅝"	16.66	19
½"	20.96	14
¾"	26.44	14
1"	33.25	11
1¼"	41.91	11
1½"	47.80	11
2"	59.61	11
2½"	75.18	11
3"	87.88	11

ET Imperial Conduit

BS31

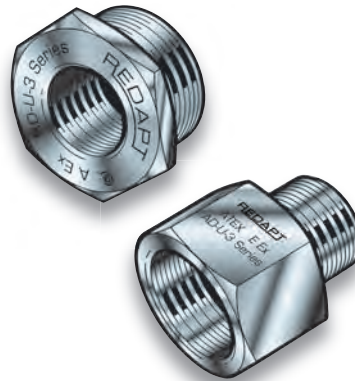
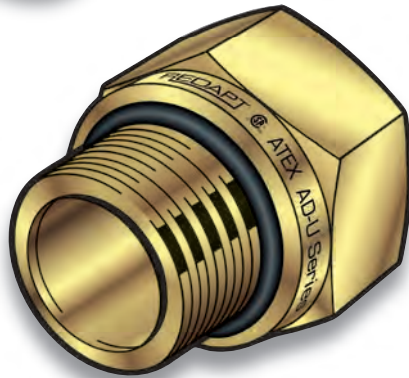
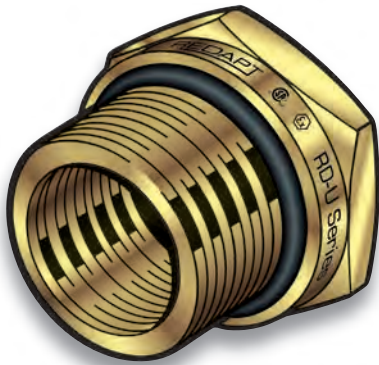
Size	Major Dia.	TPI
⅝"	15.88	18
¾"	19.05	16
1"	25.40	16
1¼"	31.75	16
1½"	38.10	14
2"	50.80	14
2½"	63.50	14
3"	76.20	14

Thread Dimension Substitution Chart

Metric	NPT (or NPS)	PG	BSP ISO Pipe	ET
M16	—	7, 9	—	⅝"
M20	½"	11, 13.5	½"	¾"
M25	¾"	16	¾"	1"
M32	1"	21	1"	1¼"
M40	1¼"	29	1¼"	1½"
M50	1½"	36	1½"	2"
M63	2"	42, 48	2"	2½"
M75	2½"	—	2½"	3"
M90x2.0	3"	—	3"	—
M100x2.0	3½"	—	—	—
M110x2.0	—	—	—	—
M120x2.0	—	—	—	—



Metallic Adaptors and Reducers



316 Stainless Steel versions

Redapt AD-U & RD-U Series Adaptors and Reducers provide a method of matching electrical threadforms on Ex Equipment while maintaining certification. Adaptors are used where the thread size of the cable gland or connection device is larger than, or of an equivalent size to the entry thread of the enclosure. Reducers are used to reduce the entry thread of an enclosure to accept a cable gland or connection device with a smaller thread.

A captive 'O' ring seal is located within a recess on the face of the product helping protect the 'O' ring from environmental damage, ensuring the 'O' ring is not displaced during installation and to optimise ingress protection.

Please Note:

- Tapered male thread options are not normally supplied c/w 'O' ring seal; thread sealant may be used to maintain the desired level of ingress protection. If an 'O' ring seal is required (Clearance holes) this can be available as an option.
- 316 Stainless Steel versions do not feature a marking band. This reduces the overall length of Reducers by 5mm, it does not affect the overall length of Adaptors.

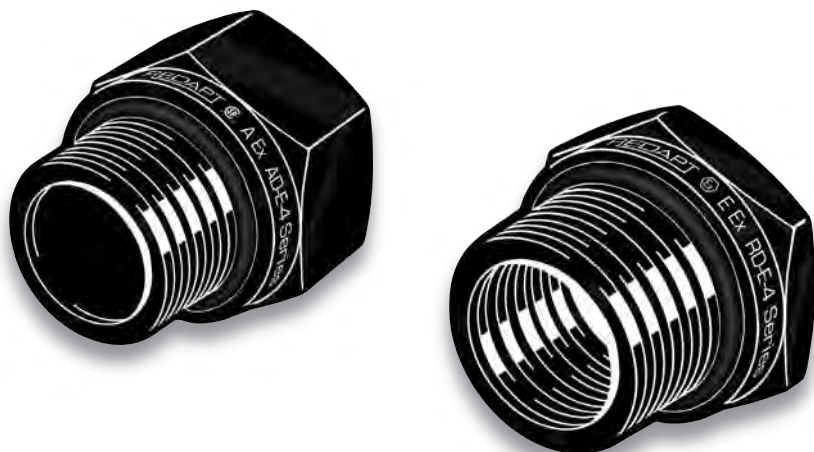
Approvals:	ATEX	SIRA 00ATEX1094X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0016X (not Aluminium products)
Ingress Protection:	IP66 68, CSA Enclosure Type (NEMA) 4X 6P	
Application Temperature Range:	Available on request	
Threadforms:	Metric, NPT, PG, ISO Pipe (BSP), ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium, Mild Steel	
'O' Ring Material:	Nitrile (others available)	
Plating:	Electroless Nickel, Zinc, others on application	
Part Number:	Please refer to page 8 for Part Numbering System	



Available thread sizes and corresponding bore size

Metric	Bore	NPT	Bore	ISO Pipe	Bore	ET	Bore	PG	Bore
M16	10.00			3/8"	10.00	5/8"	10.00	PG7	8.00
M20	14.00	1/2"	15.00	1/2"	15.00	3/4"	14.00	PG9	10.00
M25	18.00	3/4"	19.00	3/4"	19.00	1"	18.00	PG11	13.50
M32	24.00	1"	25.00	1"	25.00	1 1/4"	24.00	PG13.5	14.00
M40	32.00	1 1/4"	32.00	1 1/4"	32.00	1 1/2"	32.00	PG16	16.00
M50	41.00	1 1/2"	38.00	1 1/2"	38.00	2"	41.00	PG21	21.00
M63	53.00	2"	49.00	2"	49.00	2 1/2"	53.00	PG29	29.00
M75	64.00	2 1/2"	60.00	2 1/2"	60.00	3"	64.00	PG36	38.00
M80x2.0	69.00	3"	75.00	3"	75.00			PG42	45.00
M85x2.0	73.00	3 1/2"	88.00	3 1/2"	88.00			PG48	50.00
M90x2.0	78.00	4"	100.00	4"	100.00				
M100x2.0	88.00								
M110x2.0	98.00								
M120x2.0	108.00								

Glass Filled Nylon Adaptors and Reducers

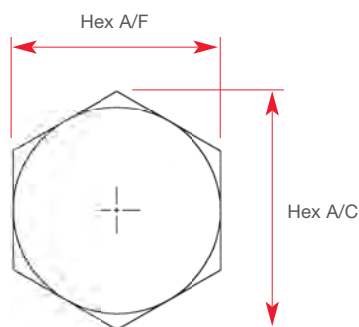
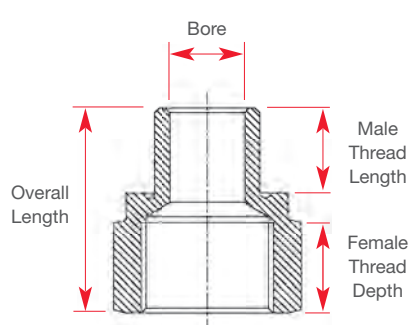


Redapt AD-E-4 & RD-E-4 Series Glass Filled Nylon Adaptors and Reducers provide a method of matching electrical threadforms on Ex Equipment while maintaining increased safety certification.

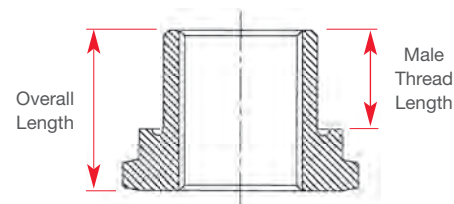
Adaptors are used where the thread size of the cable gland or connection device is larger than, or of an equivalent size to the entry thread of the enclosure.

Reducers are used to reduce the entry thread of an enclosure to accept a cable gland or connection device with a smaller thread.

Adaptor



Reducer



Please see pages 14 & 15 for dimension tables

Approvals:	ATEX	SIRA 00ATEX3091X (Equipment)
	CSA	1248014
	GOST	POCC GB.Г606.B00688
	IECEX	SIR 12.0038X
Ingress Protection:	IP66 68, CSA Enclosure Type (NEMA) 4X 6P	
Application Temperature Range:	Available on request	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Glass Filled Nylon	
'O' Ring Material:	Nitrile (others available)	
Part Number:	Please refer to page 8 for Part Numbering System	



Available thread sizes and corresponding bore size

Metric	Bore	NPT	Bore	ISO Pipe	Bore	ET	Bore	PG	Bore
M16	9.30			3/8"	9.30	5/8"	9.30	PG9	9.00
M20	11.00	1/2"	12.00	1/2"	12.00	3/4"	11.00	PG11	10.00
M25	16.00	3/4"	13.00	3/4"	13.00	1"	16.00	PG13.5	11.50
M32	21.00	1"	18.00	1"	18.00	1 1/4"	21.00	PG16	13.50
M40	31.00	1 1/4"	33.00	1 1/4"	33.00	1 1/2"	31.00	PG21	19.00
M50	40.00	1 1/2"	38.00	1 1/2"	38.00	2"	40.00	PG29	28.00
								PG36	37.00
								PG42	44.00

Adaptors and Reducers Selection Guide

STEP 1 – To obtain the correct reference number select the male size from the left hand column, then refer horizontally across the page to the female size. i.e. M32 (Male) x M40 (Female) = 208. Reference numbers in red are Adaptors, other references are Reducers.

		Female Size																																														
Male	Metric													NPT										PG																								
Metric	M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	M90	M100	M110	M120	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	PG7&9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48															
M16	201	201	M32 Male x M40 Female = 208													216											201	201	201																			
M20	301	202	203														217	218											301	202	202	202	204															
M25	303	303	257	206														303	219	221											303	303	303	257	204													
M32	305	305	305	206	208														305	305	221	223											305	305	305	305	207	258										
M40	307	307	307	307	208	209														307	307	307	223	224											307	307	307	307	307	208	209							
M50	309	309	309	309	309	259	211														309	309	309	309	225	226											309	309	309	309	309	309	210	210	211			
M63	310	310	310	310	310	310	211	212														310	310	310	310	310	226	227											310	310	310	310	310	310	310	310	211	
M75	311	311	311	311	311	311	311	212	261	213	213														311	311	311	311	311											311	311	311	311	311	311	311	311	311
M80	311	311	311	311	311	311	311	261	261	214	214																																					
M85	312	312	312	312	312	312	312	214	214	214	214																																					
M90	312	312	312	312	312	312	312	312	214	214	214	215														312	312	312	312	312	312	312	229	230	231													
M100	313	313	313	313	313	313	313	313	313	313	313	215	215	262	263	313	313	313	313	313	313	313	313	313	230	231																						
M110	325	325	325	325	325	325	325	325	325	325	325	325	262	262	263																																	
M120	326	326	326	326	326	326	326	326	326	326	326	326	263	263																																		

	Female Size																															
Male	Metric										NPT											PG										
NPT	M16	M20	M25	M32	M40	M50	M63	M75	M90	M100	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	PG7&9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48		
1/2"	314	232	234								245	246											314	232	232	232	261					
3/4"	315	315	234	235							315	246	247										315	315	315	234	235					
1"	316	316	316	236	237						316	316	248	249									316	316	316	316	236	237				
1 1/4"	317	317	317	317	237	238					317	317	317	249	250								317	317	317	317	317	237	238			
1 1/2"	318	318	318	318	318	238	240				318	318	318	318	250	251							318	318	318	318	318	318	238	239	240	
2"	319	319	319	319	319	319	240	241			319	319	319	319	319	251	252						319	319	319	319	319	319	319	319	240	
2 1/2"	320	320	320	320	320	320	320	242	243		320	320	320	320	320	320	253	254					320	320	320	320	320	320	320	320	320	
3"	321	321	321	321	321	321	321	321	243	244	321	321	321	321	321	321	321	254	255				321	321	321	321	321	321	321	321	321	
3 1/2"	322	322	322	322	322	322	322	322	322	244	322	322	322	322	322	322	322	322	255	256			322	322	322	322	322	322	322	322	322	
4"	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	256	264		323	323	323	323	323	323	323	323	323	
5"	-	-	-	-	-	-	-	-	-	-	327	327	327	327	327	327	327	327	327	327	-	-	-	-	-	-	-	-	-	-		

	Female Size																								
Male	Metric								NPT							PG									
PG	M16	M20	M25	M32	M40	M50	M63	M75	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	PG7&9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48	
PG7&9	201	201							216							201	201	201							
PG11	202	202	203						217	218						301/202	202	202	202						
PG13.5	301	202	203						217	218						301	202	202	202	203					
PG16	302	203	203						218	218	221					302	302	203	203	257					
PG21	304	304	205	206	208				304	220	221					304	304	304	304	205	258				
PG29	306	306	306	306	208	209			306	306	223	223	224			306	306	306	306	306	208	209			
PG36	308	308	308	308	308	209	211		308	308	308	224	224			308	308	308	308	308	308	209	210	211	
PG42	324	324	324	324	324	210	211		324	324	324	324	324	226		324	324	324	324	324	324	324	210	211	
PG48	310	310	310	310	310	310	211	211	310	310	310	310	310	226	227	310	310	310	310	310	310	310	310	211	

STEP 2 – Having obtained the reference number, go to the relevant column within the dimension tables to obtain the Adaptor or Reducer's dimensions. Please note that these dimensions refer to metallic products only.

Adaptors

Metric x Metric, Metric x PG, PG x Metric, PG x PG																				
Reference Numbers	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	257	258	259	
Hex Across Flats	23.4	27	30.5	33	36	37.6	37.6	47.2	55.9	61.2	70.1	90.2	106.4	106.4	114.3	23.4	31.3	41.3	57.2	
Hex Across Corners	26.8	31	35	38	41.5	43.2	43.2	53.4	64.3	70.4	81.8	103.7	122.4	122.4	131.4	26.8	36.1	47.7	66	
Male Thread Length	16	16	16	16	16	16	16	16	16	16	16	16	16	20	20	16	16	16	16	
Female Thread Length	17	17	17	17	17	17	17	17	17	17	17	17	22	22	22	20	17	17	17	
Total Length	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	39.5	39.5	39.5	39.5	45	49	49	42	38.5	38.5	39.5	
Metric x NPT, PG x NPT																				
Reference Numbers	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	261	262	263		
Hex Across Flats	27	30.5	32	37.6	37.6	41.3	47.2	55.9	57.2	70.1	80	106.4	106.4	114.3	127	90.2	120.7	139.7		
Hex Across Corners	31	35	36.7	43.2	43.2	47.5	53.4	64.3	66	81.8	92	122.4	122.4	131.4	147	104.1	139.4	161.3		
Male Thread Length	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	20	20		
Female Thread Length	20	20	20	20	25	25	25	25	25	25	35	35	35	35	35	22	22	22		
Total Length	42	42	42	42	47	47	47	48	48	48	58	58	62	62	62	48	48	49		
NPT x Metric, NPT x PG																				
Reference Numbers	232	233	234	235	236	237	238	239	240	241	242	243	244	260						
Hex Across Flats	23.4	28.6	30.5	37.6	37.6	44.5	55.9	61.2	70.1	90.2	90.2	106.4	114.3	90.2						
Hex Across Corners	26.8	32.9	35	43.2	43.2	51.1	64.3	70.4	81.8	103.7	103.7	122.4	131.4	103.7						
Male Thread Length	20	20	20	20	25	25	25	25	25	25	35	35	35	16						
Female Thread Length	17	17	17	17	17	17	17	17	17	17	17	22	22	35						
Total Length	43	43	43	43	48	48	49	49	49	49	59	64	64	58						
NPT x NPT																				
Reference Numbers	245	246	247	248	249	250	251	252	253	254	255	256	264							
Hex Across Flats	23.4	30.5	37.6	37.6	47.2	55.9	70.1	80	80	106.4	114.3	127	158.8							
Hex Across Corners	26.8	35	43.2	43.2	53.4	64.3	81.8	92	92	122.4	131.4	146	183.3							
Male Thread Length	20	20	20	25	25	25	25	25	35	35	35	35	35							
Female Thread Length	20	20	25	25	25	25	25	40	40	42	43	44	47							
Total Length	46	46	51	56	56	57	57	70	80	80	80	80	81							

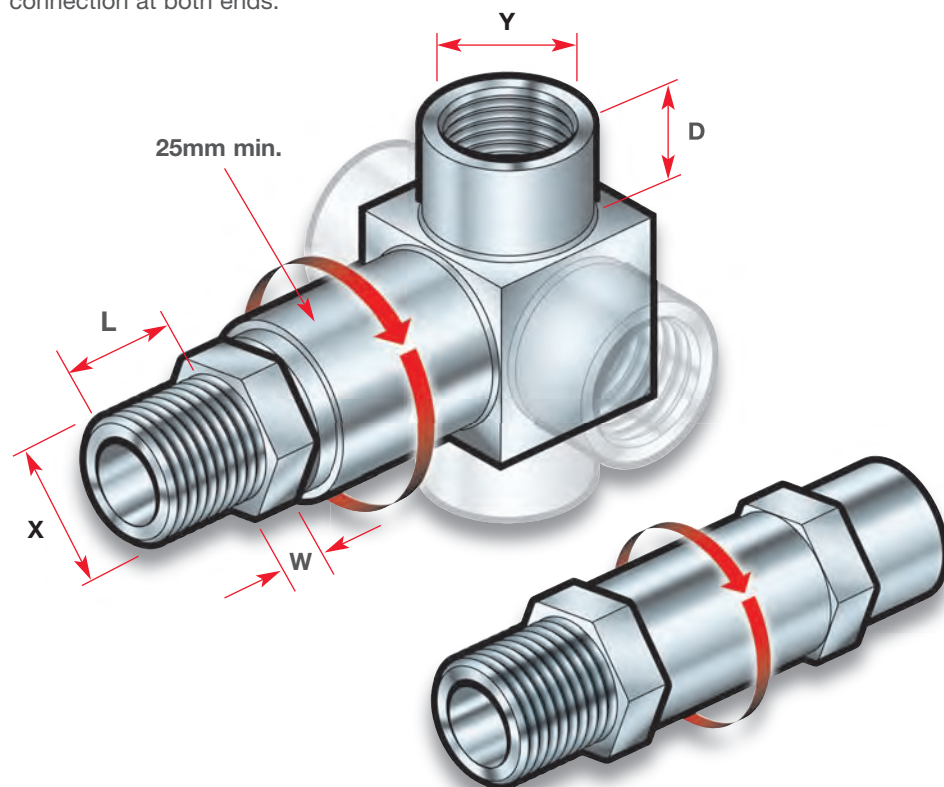
Reducers

Metric and PG																
Reference Numbers	301	302	303	304	305	306	307	308	309	310	311	312	313	324	325	326
Hex Across Flats	27	30.5	31.8	36	37.6	44.5	47.2	55.9	57.2	70.1	90.2	106.4	114.3	61.2	120.7	127
Hex Across Corners	31	35	36.7	41.5	43.2	51.1	53.4	64.3	66	81.8	103.7	122.4	131	70.7	139.4	146.6
Male Thread Length	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Total Length	26	26	26	26	26	26	26	27	27	27	27	28	28	27	28	28
NPT																
Reference Numbers	314	315	316	317	318	319	320	321	322	323	327					
Hex Across Flats	23.4	27.9	34.9	44.5	52.1	61.2	80	90.2	106.4	120.7	146					
Hex Across Corners	26.8	32.1	40.2	51.1	59.9	70.4	92	103.7	122.4	138.8	168.6					
Male Thread Length	20	20	25	25	25	26	35	35	35	35	35					
Total Length	30	30	35	35	35	36	46	46	46	47	47					

Swivel Adaptors – Inline and 90 Degree

The Redapt T Series Swivel Adaptor has all the advantages of the standard inline and fixed 90° Adaptors, with the addition of the “swivel feature”.

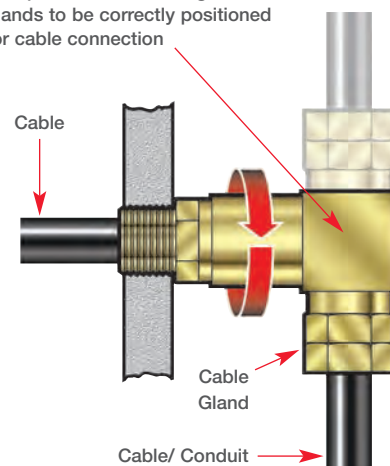
The 90° Swivel Adaptor has been designed to allow a full 360° choice of cable entry/exit positions. This enables the installer to run the cable in any direction which greatly improves ease of installation in confined or difficult situations. The cable entry/exit can be aligned without the over or under torque compromise imposed by the direction of cable. The inline type allows independent connection at both ends.



The temperature range of -50°C to +200°C is governed by the use of an internal silicone “O” ring which maintains the integrity of the product ensuring that it conforms to the over pressure requirement of the latest standard.

90° Swivel Adaptor

This part rotates enabling the cable glands to be correctly positioned for cable connection

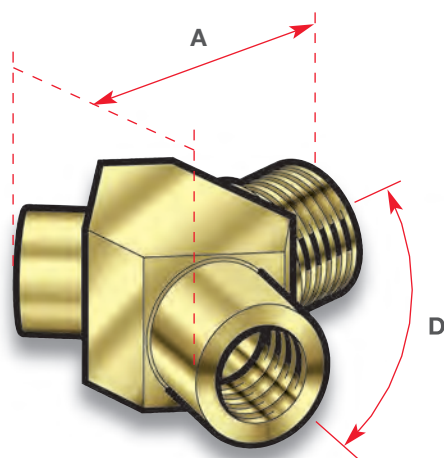


Approvals:	ATEX	SIRA 10ATEX1275U
	CSA	
	GOST	
	IECEX	SIR 10.0123U (90 degree)
	IECEX	SIR 12.0016X (inline)
Ingress Protection:	IP66, CSA Enclosure Type	
Application Temperature Range:	-50°C to +200°C	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
‘O’ Ring Material:	Silicone	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Product Codes	
TA	Inline Male/Female
TC	Inline Female/Female
TD	Inline Male/Male
TP	90° Male/Female
TQ	90° Female/Female
TR	90° Male/Male

Dimensions of Metric Versions

Male Thread (X)	Female Thread (Y)	L	W	L	D	Min Wall
M20	M20	17.00	4.00	17.00	17.00	2.25
M25	M20-M25	17.00	4.00	17.00	17.00	2.75
M32	M20-M32	17.00	5.00	17.00	17.00	3.00
M40	M20-M40	17.00	5.00	17.00	17.00	3.00
M50	M20-M50	17.00	5.00	17.00	17.00	3.00
M63	M20-M63	17.00	5.00	17.00	17.00	3.25
M75	M20-M75	17.00	5.00	17.00	17.00	3.25



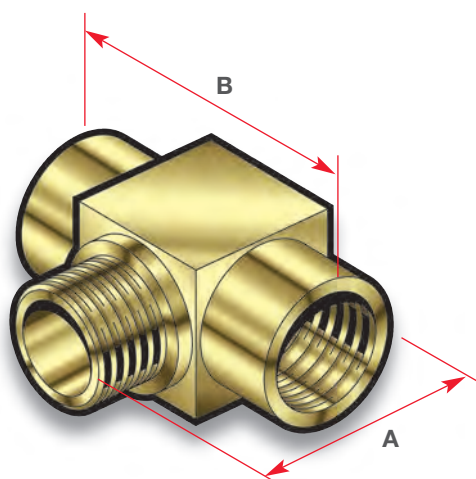
The Redapt AY-U 'Y' Adaptor provides a means of connection where protrusion space and pre machine entries are limited, whilst at the same time giving the opportunity to change thread to a different range or reduce sizes.

Approvals:	ATEX	SIRA 10ATEX1228U
	IECEX	SIR 09.0086U
Ingress Protection:	IP66	
Threadforms:	Metric	
Materials:	Brass CZ121, 316 Stainless Steel, Mild Steel	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	A	Angle Between Entries (D)
M20	70.00	120° each
M25	80.00	120° each
M32	85.00	120° each

'T' Adaptors



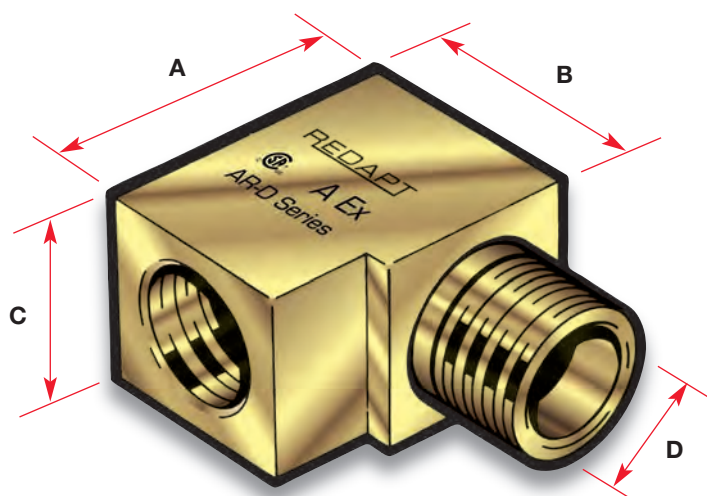
The Redapt AT-U 'T' Adaptor provides an opportunity for two entries, and also to change thread to different sizes, connecting at a 90 degree angle.

Approvals:	ATEX	SIRA 10ATEX1228U
	IECEX	SIR 09.0086U
Ingress Protection:	IP66	
Threadforms:	Metric	
Materials:	Brass CZ121, 316 Stainless Steel, Mild Steel	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Male Size	Female Size Range	A	B
M16	M12-M20	45.00	55.00
M20	M12-M25	51.00	60.00
M25	M12-M32	57.00	65.00
M32	M12-M40	66.00	72.00
M40	M12-M50	75.00	80.00
M50	M12-M63	86.00	90.00
M63	M12-M75	101.50	105.00
M75	M12-M90	119.00	120.00

90 Degree Adaptors



Redapt AR-D Series 90° Adaptors provide a method of facilitating a cable gland or conduit termination entry where spacing precludes conventional entry. These adaptors are also available where the male thread is replaced with a female thread.

Please note that where the thread in the equipment into which the 90° Adaptor is fitted is a tapered form, care should be taken to ensure that the threads are fully engaged to maintain Ex integrity.

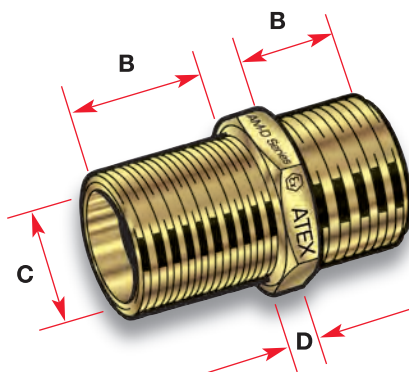


Approvals:	ATEX	SIRA 99ATEX1195U
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 05.0042U
Ingress Protection:	IP64, CSA Enclosure Type (NEMA) 3 To maintain higher levels of ingress protection additional sealing may be required, available on request.	
Application Temperature Range:	-40°C to +180°C	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	Bore (D)	Male Length	Height (A)	Length (B)	Width (C)
M16 x M16	10.00	16.00	32.00	27.00	23.00
M20 x M20	14.00	16.00	38.00	29.00	25.40
M25 x M25	18.00	16.00	44.00	35.00	32.00
M32 x M32	24.00	16.00	50.00	44.00	40.00
M40 x M40	32.00	16.00	60.00	52.00	48.00
M50 x M50	41.00	16.00	72.00	65.00	60.00
M63 x M63	53.00	16.00	85.00	77.00	73.00
M75 x M75	64.00	16.00	98.00	94.00	87.00

Male to Male Adaptors



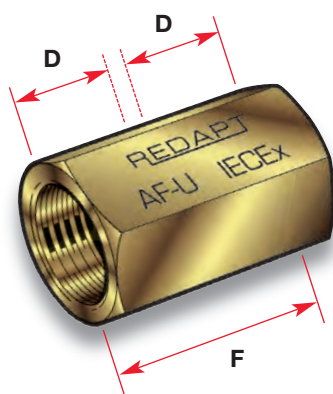
Redapt AM-D Series Male x Male Adaptors provide a method of matching female threadforms of the same size or of dissimilar size and threadform, while maintaining Ex certification. **Ex Male x Male Adaptors are not certified for connecting Exd Enclosures.**

Approvals:	ATEX	SIRA 99ATEX1114X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0016X
Ingress Protection:	IP64, CSA Enclosure Type (NEMA) 3	
Application Temperature Range:	-50°C to +180°C	
Threadforms:	Metric, NPT, PG, BSP, ET	
Materials:	Brass CZ121, 316 Stainless Steel	
Plating:	Electroless Nickel and Zinc	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	B (min)	C	D	A/F
M16	15.00	11.00	5.00	23.37
M20	15.00	14.00	5.50	23.37
M25	15.00	18.00	5.50	30.48
M32	15.00	24.00	5.50	37.59
M40	15.00	32.00	5.50	47.24
M50	15.00	41.00	6.00	55.88
M63	15.00	53.00	6.00	70.10
M75	15.00	64.00	6.50	80.01

Female to Female Adaptors



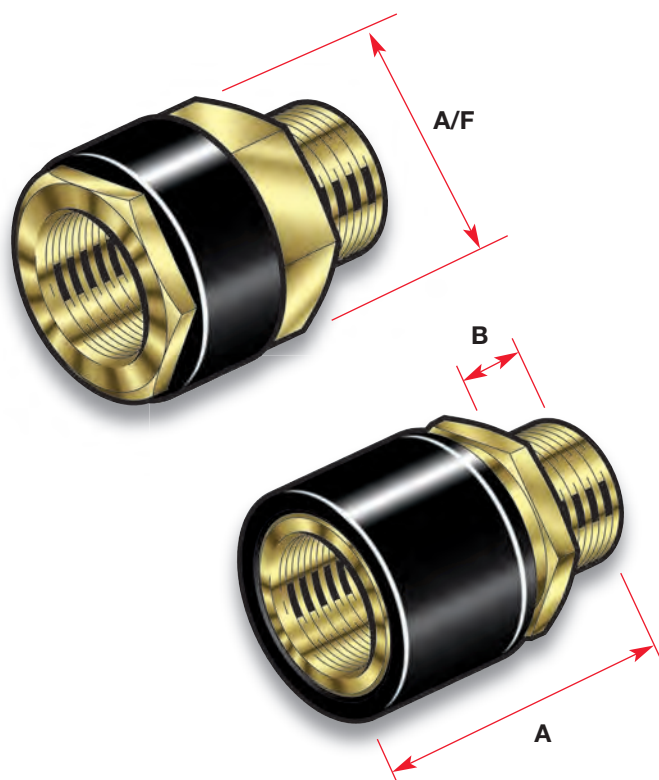
Redapt AF-U Series Female x Female Adaptors provide a method of matching male threadforms of the same size or of dissimilar size and threadform, while maintaining Ex certification.

Approvals:	IECEX	SIR 12.0016X
Ingress Protection:	IP64	
Application Temperature Range:	-50°C to +180°C	
Threadforms:	Metric, NPT, BSP, PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel	
Plating:	Electroless Nickel and Zinc	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	D max	F max	A/F
M16	16.00	37.50	23.37
M20	16.00	37.50	23.37
M25	16.00	37.50	30.48
M32	16.00	37.50	37.59
M40	16.00	37.50	47.24
M50	16.00	37.50	55.88
M63	16.00	37.50	70.10
M75	16.00	37.50	80.01

Insulated Adaptors



Redapt AI-D Series Insulated Adaptors provide a method of insulating a cable gland or connection device from the equipment into which it has been fixed.

This is achieved by inserting a glass filled nylon dielectric between the metallic male thread entering the equipment and the metallic female thread receiving the cable gland or connection device.



Approvals:	ATEX	SIRA 00ATEX1073U, SIRA 11ATEX1219X
	CSA	
	GOST	POCC GB.ГБ06.В01060
	IECEX	SIR 11.0099X
Ingress Protection:	IP54, CSA Enclosure Type (NEMA) 3 To maintain higher levels of ingress protection additional sealing is required, available on request.	
Application Temperature Range:	-20°C to +60°C	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
Insulating Material:	Glass Filled Nylon	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	A/F	Total Length (A)	Male Length (B)
M20	37.59	60.00 (min)	15.00 (min)
M25	41.15	60.00 (min)	15.00 (min)
M32	47.24	60.00 (min)	15.00 (min)
M40	56.39	60.00 (min)	15.00 (min)
M50	70.10	60.00 (min)	15.00 (min)
M63	80.01	60.00 (min)	15.00 (min)
M75	90.17	60.00 (min)	15.00 (min)

Application

To avoid relying on the contact between cable termination & equipment enclosure for grounding the cable armour, an insulated adaptor can be fitted to both ends of the cable with a grounding device (i.e. earth tag/lug) fitted between the adaptor and the termination. The armour current can then be taken from the grounding device to ground in a controlled, positive manner that can be inspected easily.

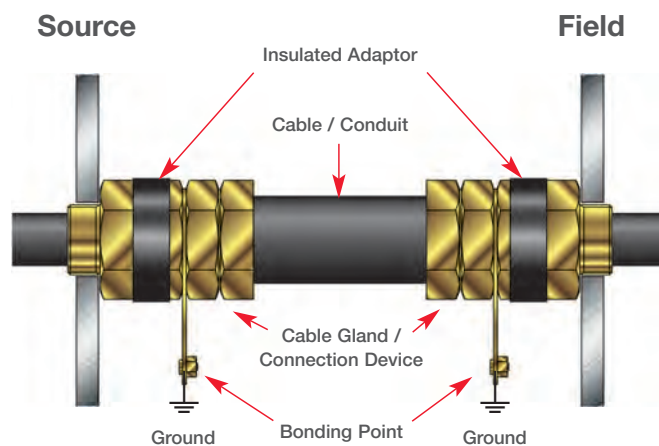
Single Point Grounding

In many applications it is sufficient to ground the cable armour at one end. For single point grounding the insulated adaptors would again be used at both ends of the cable but with the earth tag fitted only to the end where grounding is required.

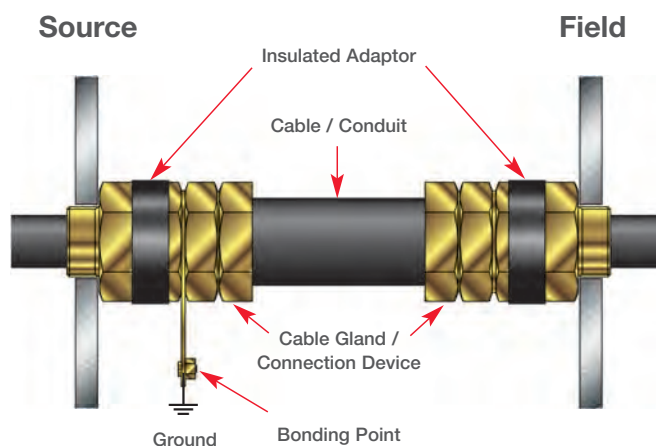
Single Point Grounding can:

- reduce the circulating currents that can cause heating of high capacity cables.
- reduce the risk of damage to electronic equipment within the enclosure in the event of a short circuit to ground through the enclosure.
- reduce the problems of electrical noise on the armour affecting the clean earth required for some sensitive instruments.

STANDARD APPLICATION

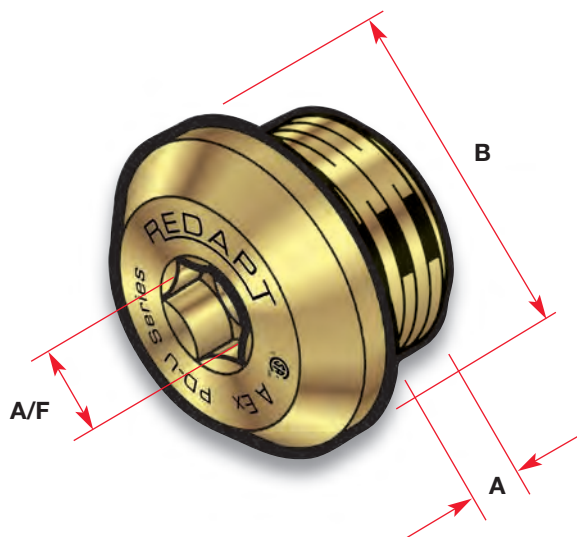


SINGLE POINT GROUNDING



Metallic Dome Head Stopping Plugs

Redapt PD-U Series Dual Certified Dome Head Stopping Plugs provide a method of filling unused entries in Ex equipment, maintaining the certification and integrity of the equipment.



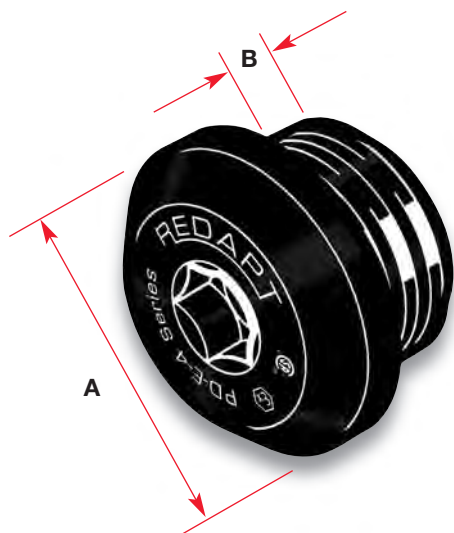
Approvals:	ATEX	SIRA 00ATEX1094X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0016X (not Aluminium products)
Ingress Protection:	IP66 68, CSA Enclosure Type (NEMA) 4X 6P	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium, Mild Steel	
'O' Ring Material:	Nitrile (others available)	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	Thread Length (A)	Hex (Allen) Key A/F	Diameter (B)
M16	15.00	10.00	22.00
M20	15.00	10.00	27.00
M25	15.00	10.00	31.75
M32	15.00	10.00	40.00
M40	15.00	10.00	47.63
M50	15.00	10.00	57.15
M63	15.00	10.00	69.85
M75	15.00	10.00	82.55

Glass Filled Nylon Dome Head Stopping Plugs

Redapt PD-E-4 Series Glass Filled Nylon Dome Head Stopping Plugs provide a method of filling unused entries in increased safety equipment, maintaining the certification and integrity of the equipment.

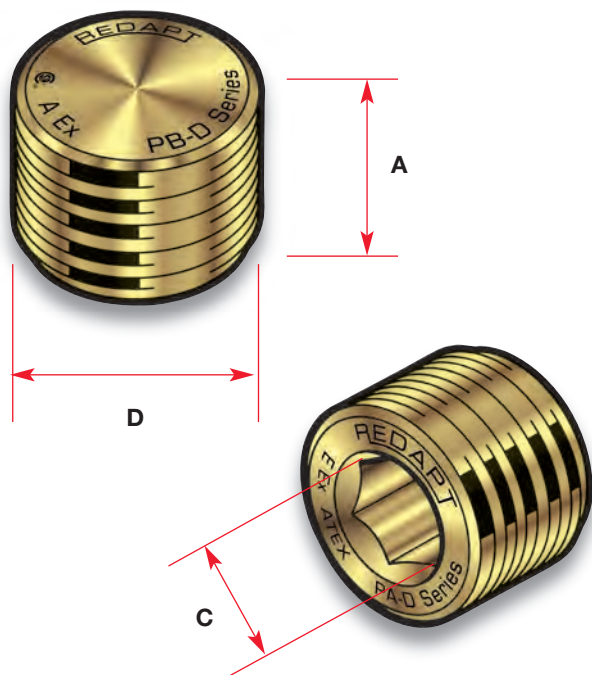


Approvals:	ATEX	SIRA 00ATEX3091X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0038X
Ingress Protection:	IP66 68, CSA Enclosure Type (NEMA) 4X 6P	
Application Temperature Range:	Available on request	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Glass Filled Nylon	
'O' Ring Material:	Nitrile (others available)	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions		
Size	Diameter (A)	Thread Length (B)
M16	20.50 (min)	10.00 (min)
M20	24.50 (min)	10.00 (min)
M25	29.50 (min)	10.00 (min)
M32	36.50 (min)	10.00 (min)
M40	44.50 (min)	10.00 (min)
M50	54.50 (min)	10.00 (min)
M63	67.50 (min)	10.00 (min)
M75	79.50 (min)	10.00 (min)

Parallel threads have 10mm minimum length or to specification.
Tapered threads to provide for 5 fully engaged threads.

Type A and Type B Stopping Plugs



Redapt PA-D (Type A) and PB-D (Type B) Stopping Plugs provide a method of filling unused threaded entries in Ex equipment, maintaining the certification and integrity of the equipment. PA-D Stopping Plugs have an externally accessible hexagon recess, the hexagon recess on the PB-D Stopping Plugs are internally accessible.

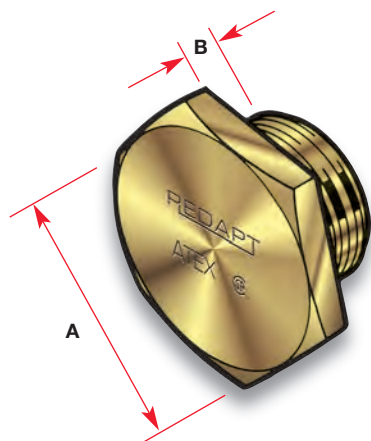


Approvals:	ATEX	SIRA 99ATEX1113X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0016X (not Aluminium products)
Ingress Protection:	IP64, CSA Enclosure Type (NEMA) 3	
Application Temperature Range:	-50°C to +180°C	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium, Mild Steel	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	Overall Length (A)	Hex Recess (C)	Diameter (D)
M16	17.90	8.00	16.30
M20	17.70	10.00	20.30
M25	17.70	10.00	25.30
M32	17.60	10.00	32.30
M40	16.80	10.00	40.20
M50	17.50	10.00	50.20
M63	17.30	14.00	63.10
M75	17.30	14.00	75.00

Hex Head Stopping Plugs



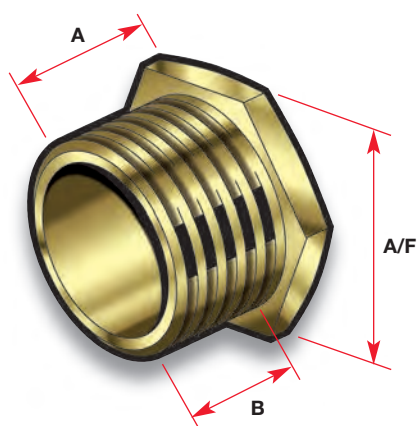
Redapt PH-E Series Increased Safety Hexagon Head Stopping Plugs provide a method of filling unused entries in Ex equipment, maintaining the certification and integrity of the equipment.

Approvals:	ATEX	SIRA 00ATEX3092X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
Ingress Protection:	IP6X, (IP66 requires 'O' ring), CSA Enclosure Type (NEMA) 3	
Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	A/F	Thread Length (B)
M16	20.00 (min)	12.00 (min)
M20	24.00 (min)	12.00 (min)
M25	29.00 (min)	12.00 (min)
M32	36.00 (min)	12.00 (min)
M40	44.00 (min)	12.00 (min)
M50	54.00 (min)	12.00 (min)
M63	67.00 (min)	12.00 (min)
M75	79.00 (min)	12.00 (min)

Hollow Hex Head Stopping Plugs



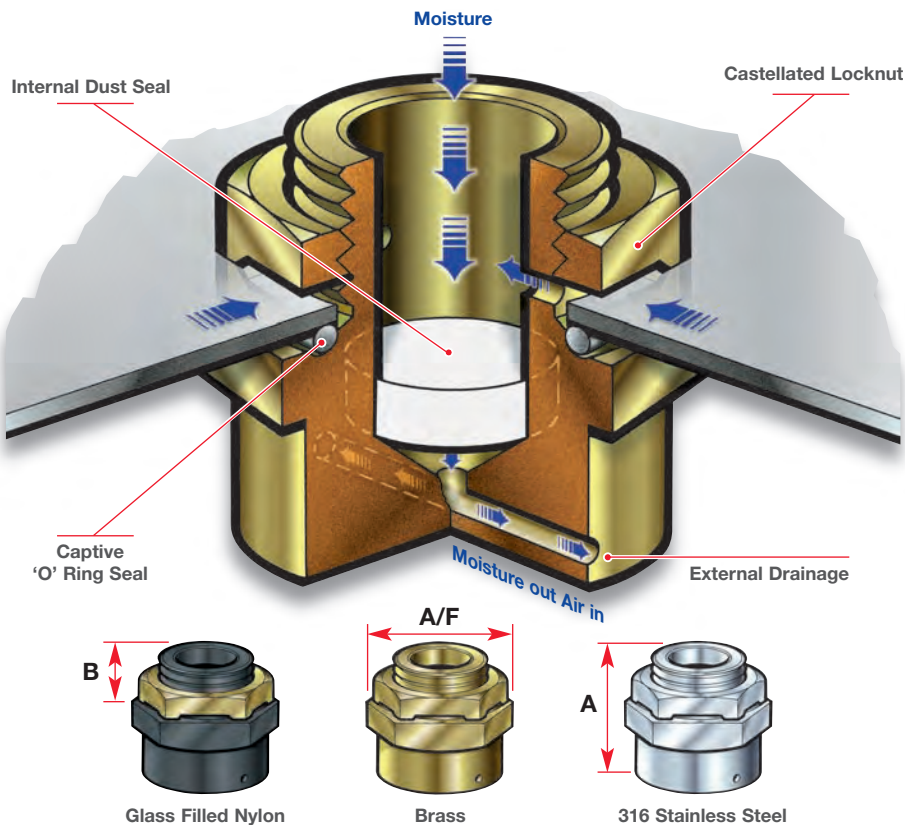
The new PX-U Series plug is a hollow version of the PH-E Series Hexagon Head Plug but with Exd/Exe certification. These plugs are NOT suitable for mining applications.

Approvals:	ATEX	SIRA 10ATEX1224X
	CSA	
	GOST	POCC GB.ГБ06.B01060
	IECEX	SIR 07.0009X
Ingress Protection:	IP68	
Threadforms:	Metric, NPT	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Size	A/F	Overall Length (A)	Thread Length (B)
M16	19.00	21.00	17.00
M20	23.30	21.00	17.00
M25	28.00	21.00	17.00
M32	37.50	21.00	17.00
M40	47.00	21.50	17.00
M50	56.00	22.50	17.00
M63	70.00	24.00	17.00
M75	80.00	25.00	17.00

Increased Safety (Exe) Breather Drains



The Redapt DP-E Series Breather Drain provides a method of effectively draining any moisture within an enclosure whilst allowing the air inside the enclosure to breathe with the surrounding atmosphere.

The Breather Drain is available in two thread lengths; the 10mm version has 2 drain holes, the 15mm version has 3 drain holes. Glass filled nylon versions and all NPT threaded breather drains are only available as 15mm thread length products.

Dimensions			
Size	Overall Length (A)	Thread Length (B)	A/F
M20	23.00 (min)	10.00 (min)	28.60
M25	23.00 (min)	10.00 (min)	34.90
M32	23.00 (min)	10.00 (min)	41.30
1/2" NPT	23.00 (min)	10.00 (min)	28.60
3/4" NPT	23.00 (min)	10.00 (min)	34.90
1" NPT	23.00 (min)	10.00 (min)	41.30

Approvals:	ATEX	SIRA 99ATEX3050U
	CSA	185887
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 08.0024U
Ingress Protection:	IP66, CSA Enclosure Type (NEMA) 4X	
Application Temperature Range:	-40°C to +180°C (dependent on 'O' Ring material)	
Threadforms:	Metric, NPT	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium, Glass Filled Nylon	
'O' Ring Materials:	Nitrile, EPDM, Neoprene, Viton, Silicone, Fluorosilicone	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please see table below	

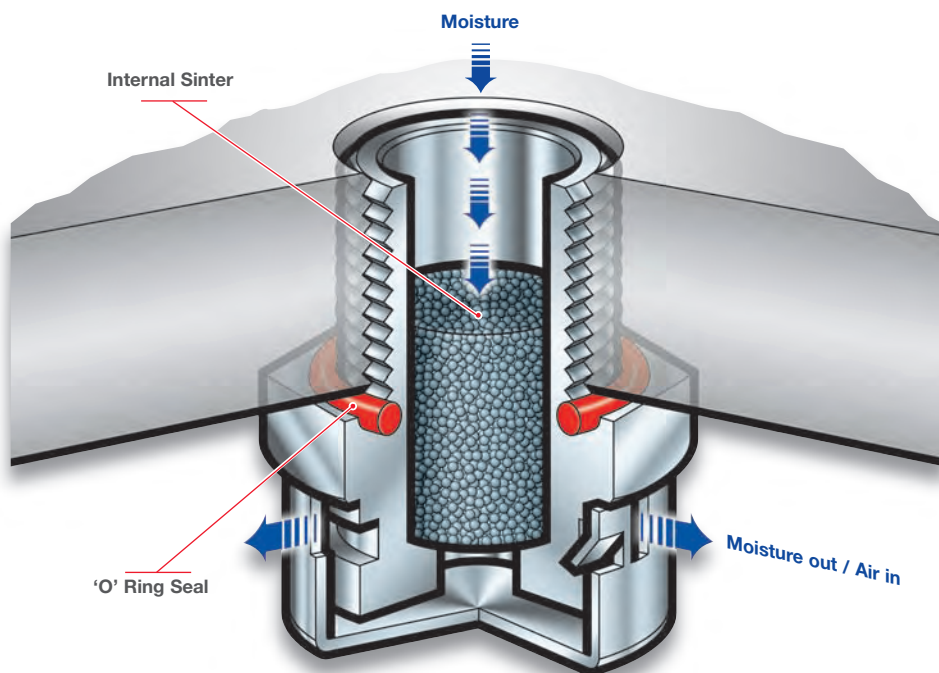
Part Numbering System: (For DP-E Breather Drains only)

Product		Certification		Material		Plating		Thread Type		Thread Length		Hole Position	Castellated L/Nut	
DP	Standard	E	Exe I&IIC	1	Brass	0	Unplated	04	M20	S1	10mm	2 Holes	With	
				3	S/Steel	1	E/Nickel	05	M25	S2	10mm	2 Holes	Without	
				4	GF Nylon	2	Zinc	06	M32	S3	15mm	3 Holes	With	
								29	½" NPT	S4	15mm	3 Holes	Without	
								30	¾" NPT					
								31	1" NPT					

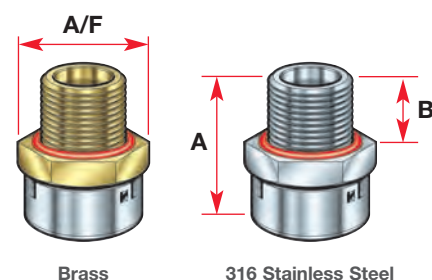
Note: Glass filled nylon version is only available in S3 & S4 options and is supplied complete with a brass castellated locknut.
NPT Threaded Breather Drains are only available in S3 and S4 options.

Example:	DP	-	E	-	3	-	0	-	04	-	S1
	Standard		Exe I&IIC		Stainless Steel		Unplated		M20		10mm

Flameproof (Exd) Breather Drains



The primary function of the Redapt BD-U Series Breather Drain is to effectively drain any water present within the enclosure, whilst allowing air in the enclosure to breathe with the surrounding atmosphere, minimizing moisture build up within the enclosure.



Approvals:	ATEX IECEX	SIRA 08ATEX1240U SIR 08.0096U
Ingress Protection:		IP66
Application Temperature Range:		-50°C to +150°C (dependent on 'O' Ring material)
Threadforms:		Metric, NPT
Materials:		Brass CZ121, 316 Stainless Steel
'O' Ring Materials:		Nitrile, EPDM, Neoprene, Viton, Silicone, Fluorosilicone
Plating:		Electroless Nickel and Zinc
Part Number:		Please see table below

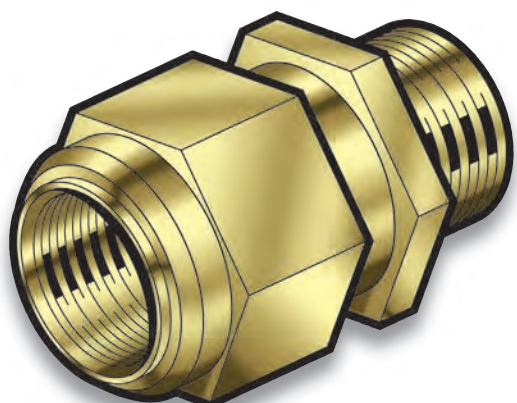
Dimensions			
Size	Hex A/F	Male Thread Length (A)	Overall Length (B)
M20	27.00	16.00	31.00
M25	31.75	16.00	31.00
1/2" NPT	27.00	20.00	35.00
3/4" NPT	31.75	20.00	35.00

Part Numbering System: (For BD-U Breather Drains only)

Product	Certification	Material	Plating	Thread	'O' Ring
BD Standard	U Exd I&IIC and Exe I&IIC	1 Brass 3 Stainless Steel	0 Unplated 1 Electroless Nickel 2 Zinc	04 M20 05 M25 29 1/2" NPT 30 3/4" NPT	D1 Silicone D2 Fluorosilicone D3 Viton D4 EPDM D5 Neoprene D6 Nitrile

Example:	BD	-	U	-	3	-	0	-	04	-	D1
	Standard		Exd I&IIC & Exe I&IIC		Stainless Steel		Unplated		M20		Silicone 'O' Ring

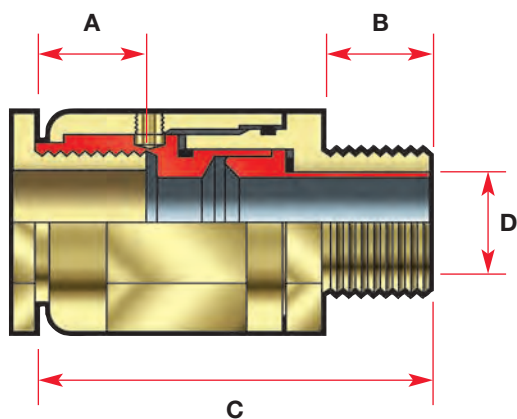
Cable Gland Stopper Boxes



Redapt SB-U Series Compound Stopper Boxes are designed to seal conductors at the entry to the enclosure via conduit or to enable an existing compression gland to be converted to a barrier gland. This is achieved by forming a barrier between the individual insulated conductors within the cable to prevent an explosion within the enclosure. The Compound Stopper Box allows compound to be packed around individual insulated conductors. Assembly of the component compresses the packing material and distributes the compound evenly to effect a barrier at point of entry into the enclosure.

The Compound Stopper Box is supplied with compound in a pack, complete with making off instructions and gloves.

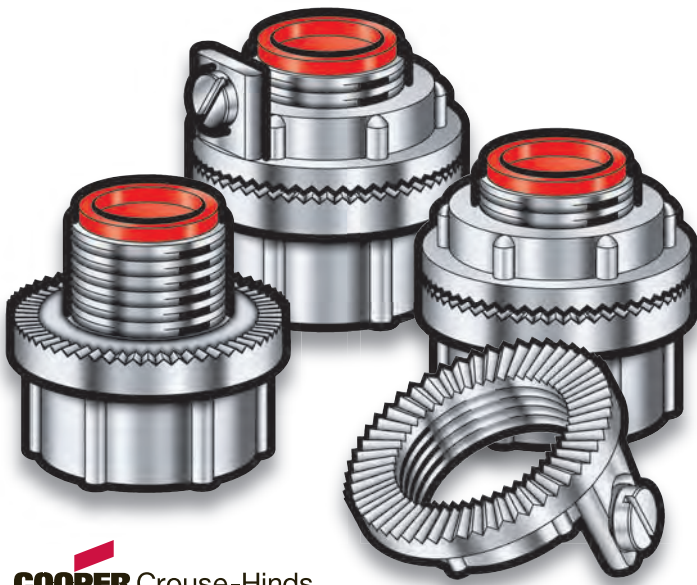
Redapt Compound Stopper Boxes are marked with the appropriate approval number and size.



Approvals:	ATEX	SIRA 00ATEX1073U, SIRA 11ATEX1301X
	GOST	POCC GB.ГБ06.B01060
	IECEx	
Ingress Protection:	IP54	
Application Temperature Range:	-20°C to +85°C	
Threadforms:	Metric, NPT, PG, BSP, ET	
Materials:	Brass CZ121, 316 Stainless Steel	
Plating:	Electroless Nickel and Zinc	
Part Number:	Please refer to page 8 for Part Numbering System	

Dimensions of Metric Versions

Thread	Bore MN (D)	Thread Length (A, B)	Overall Length (C)
M16	19.00	15.00	53.00
M20	23.30	15.00	56.50
M25	28.00	15.00	56.50
M32	37.50	15.00	56.50
M40	47.00	15.00	60.00
M50	56.00	15.00	62.00
M63	70.00	15.00	63.00
M75	80.00	15.00	63.00



COOPER Crouse-Hinds

Conduit Hubs for Rigid Conduit and IMC

- Vibration proof, oversize nut with radial serrations assures flush installation and positive grounding.*
- Captive O-ring gasket assures watertight and dust tight connections. Unaffected by corrosive moisture and petroleum products.
- Precision machine cut NPT threads for simple installation.
- Unique serrations on both nut and hub bite into metal for secure installations.
- Posi-Lok insulated throat provides smooth pulling surface. Made from flame retardant Lexan®.
- Grounding screw available for added safety.
- Complete size range from 3/8" to 6".
- Hubs fit standard knockouts. No special tools required.

Approvals:	NEC	501.4(B) Class I, Division 2
		502.4(A)(B) Class II, Divisions 1 & 2
		503.3(A)(B) Class III, Division 1 & 2
	UL Standard	514B
	CSA	C22.2 No. 18
	NEMA	Type 2, 3, 3R, 4, 4X and 12
Materials:	Die cast zinc, Die cast aluminum, Stainless Steel Type 316	
Finish:	Natural	
Plating:	Electroless Nickel and Zinc	

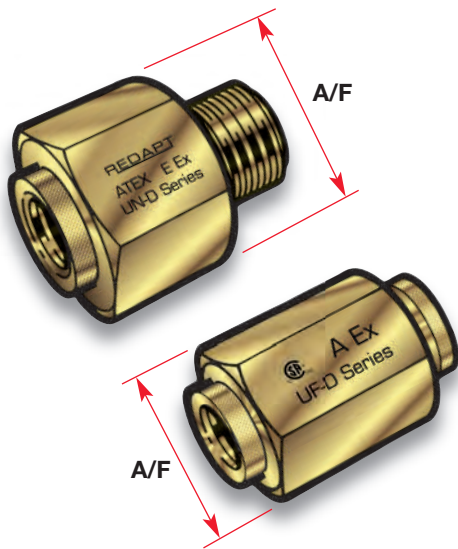
Product Codes

Zinc				Aluminum				Stainless		
Trade Size	Scru-Tite® Catalog #	Ground Hub Catalog #	Unit Qty.	Trade Size	Scru-Tite® Catalog #	Ground Hub Catalog #	Unit Qty.	Trade Size	Ground Hub Catalog #	Unit Qty.
3/8"	ST-03	-----	25							
1/2"	ST-1	STG-1	25	1/2"	STA-1	STAG-1	25	1/2"	SSTG-1	10
3/4"	ST-2	STG-2	25	3/4"	STA-2	STAG-2	25	3/4"	SSTG-2	10
1"	ST-3	STG-3	25	1"	STA-3	STAG-3	25	1"	SSTG-3	10
1 1/4"	ST-4	STG-4	10	1 1/4"	STA-4	STAG-4	10	1 1/4"	SSTG-4	5
1 1/2"	ST-5	STG-5	10	1 1/2"	STA-5	STAG-5	10	1 1/2"	SSTG-5	5
2"	ST-6	STG-6	10	2"	STA-6	STAG-6	10	2"	SSTG-6	5
2 1/2"	ST-7	STG-7	5	2 1/2"	STA-7	STAG-7	5	2 1/2"	SSTG-7	2
3"	ST-8	STG-8	2	3"	STA-8	STAG-8	2	3"	SSTG-8	2
3 1/2"	ST-9	STG-9	2	3 1/2"	STA-9	STAG-9	2	3 1/2"	SSTG-9	2
4"	ST-10	STG-10	2	4"	STA-10	STAG-10	2	4"	SSTG-10	2
5"	ST-11	STG-11	1	5"	STA-11	STAG-11	1			
6"	ST-12	STG-12	1	6"	STA-12	STAG-12	1			

Lexan® is a registered trademark of General Electric Co.

* Some enclosure coatings may require removal to ensure proper grounding.

Unions



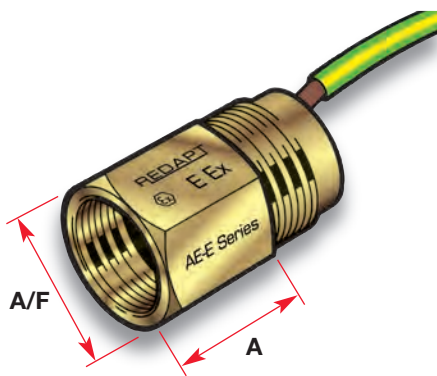
Redapt UN-D & UF-D Series Unions provide a running joint and eliminate exposed threads, while maintaining Ex certification. Redapt Unions are available in Male x Female (UN-D) or Female x Female (UF-D) variations.

Approvals:	ATEX	SIRA 00ATEX1096X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
Application Temperature Range:		-50°C to +180°C
Threadforms:		Metric, NPT, PG, BSP, ET
Materials:		Brass CZ121, 316 Stainless Steel, Aluminium
Plating:		Electroless Nickel and Zinc
Part Number:		Please refer to page 8 for Part Numbering System

Dimensions of Metric Versions

Male to Female Unions UN-D		Female to Female Unions UF-D	
Size	A/F	Size	A/F
M20	37.59	M20	37.59
M25	42.42	M25	42.42
M32	55.88	M32	55.88
M40	55.88	M40	55.88
M50	80.01	M50	80.01
M63	90.17	M63	90.17
M75	114.30	M75	114.30

Earth Lead Adaptors



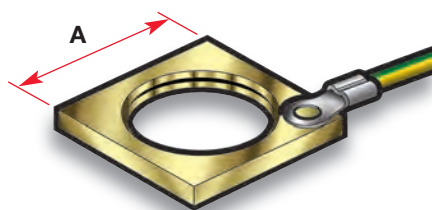
Redapt AE-E Series Earth Lead Adaptors provide a method of bonding a cable gland or conduit termination to a grounding or earth point within an enclosure, while maintaining Ex certification. AE-E Series Earth Lead Adaptors are only available as a male to female product.

Dimensions of Metric Versions

Size	Body Length (A)	A/F
M16	21.50	23.37
M20	21.50	30.48
M25	21.50	37.59
M32	21.50	47.24
M40	21.50	55.88
M50	21.50	70.10
M63	21.50	90.17

Approvals:	ATEX	SIRA 00ATEX3093X
	CSA	1248014
	GOST	POCC GB.ГБ06.B00688
	IECEX	SIR 12.0016X
Threadforms:		Metric, NPT, PG, BSP, ET
Materials:		Brass CZ121, 316 Stainless Steel, Aluminium, Mild Steel
Plating:		Electroless Nickel and Zinc
Part Number:		Please refer to page 8 for Part Numbering System

Threaded Earth Plates

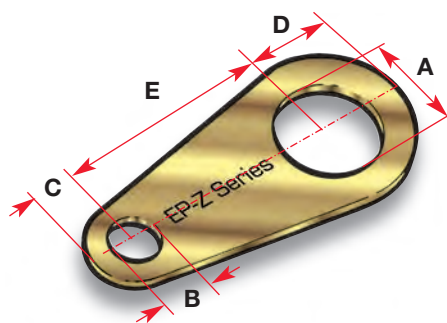


Redapt ET-E Series Threaded Earth Plates are designed to ensure earth continuity when terminating brass glands into non-metallic enclosures. The additional use of a locknut is recommended to ensure pressure is maintained with the wall enclosure. Threaded earth plates are marked with the appropriate approval number and size.

Dimensions		
Size	Material size (A)	Earth Lead x 300mm (mm ²)
M16	22.00	2.50
M20	30.00	2.50
M25	32.00	4.00
M32	38.00	6.00
M40	50.80	10.00
M50	63.50	16.00
M63	76.00	25.00
M75	102.00	25.00

Approvals:	ATEX	SIRA 00ATEX1073U
	CSA	
	GOST	POCC GB.ГБ06.B01060
	IECEX	
Threadforms:		Metric, PG, ET
Materials:		Brass CZ121
Plating:		
Part Number:		Please refer to page 8 for Part Numbering System

Earth Tags



(This illustration is for pictorial representation only; the outside shape may differ without affecting the functionality.)

Redapt EP-Z Series Earth Tags are used to provide an earthbond connection for an entry component.

Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium
Plating:	Electroless Nickel, Zinc, other on application
Part Number:	Please refer to page 8 for Part Numbering System

Dimensions of Metric Versions					
Size A	Thickness	B	C	D	E
M16	1.40	7.00	7.00	13.50	35.30
M20	1.40	7.00	7.00	13.50	35.30
M25	1.40	10.50	10.00	18.50	41.40
M32	1.40	12.00	13.00	23.30	53.90
M40	1.40	14.00	17.50	26.30	60.00
M50	1.40	14.00	17.50	32.10	76.10
M63	1.40	14.00	17.50	39.50	84.00
M75	1.40	14.00	17.50	44.00	94.50

Locknuts



Redapt LN-Z Series locknuts provide a method of securing a threaded entry component into a piece of equipment.

Dimensions of Metric Sizes

Female Thread	A/F Dims (mm)
M16	19.00
M20	25.40
M25	30.00
M32	46.00
M40	46.00
M50	65.00
M63	80.00
M75	95.00
M90	105.00

Please note that A/F dimensions are subject to variation - please speak to Sales staff

Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium, Steel, Nylon 6
Plating:	Electroless Nickel, Zinc, other on application
Part Number:	Please refer to page 8 for Part Numbering System

Earthing Locknuts

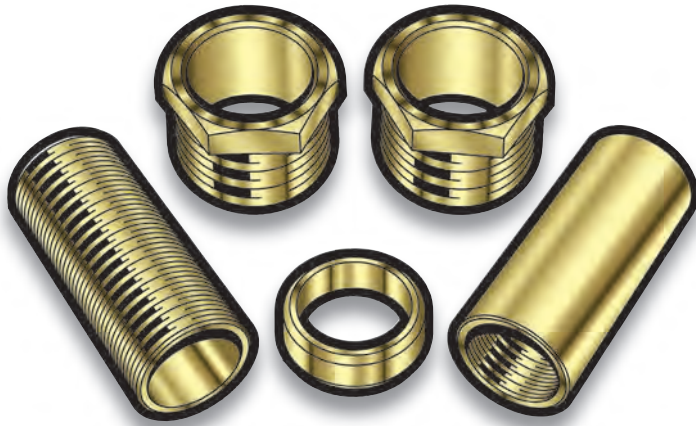


Redapt LE-Z Series Earthing Locknuts offer an alternative to the standard Earth Tag when terminating a metallic cable gland into a thin wall steel enclosure. The Earthing Locknut design includes a number of cutting teeth formed on one surface of the nut. When tightened, these teeth cut into the enclosure wall, preventing the nut from turning and enabling the gland to be tightened to the nut from the outside with only one tool. This allows all connections of the gland to be made within the enclosure, away from the corrosive or flammable atmosphere and away from possible mechanical damage, and results in a neater appearance. The nut may also be fitted with the plain side facing the enclosure where this is preferred.

Dimensions of Metric Sizes

Size	A/F
M12	14.00
M16	18.00
M20	23.00
M25	28.00
M32	36.00
M40	44.00
M50	54.00
M63	70.00

Threadforms:	Metric, NPT
Materials:	Brass CZ121, 316 Stainless Steel
Plating:	Electroless Nickel, Zinc
Part Number:	Please refer to page 8 for Part Numbering System



Nipples

N Series Nipples are supplied 50mm long as standard, alternative lengths can be supplied as required. Nipples are available in a variety of thread forms and materials including Brass, Mild Steel, Stainless Steel and Aluminium. Metallic finishes can be plated to requirements.

Couplers

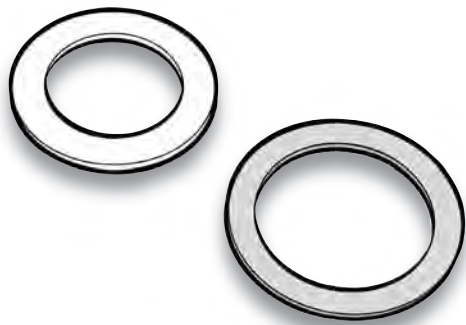
CO-Z Series Couplers are available in a wide combination of thread forms and sizes, and materials including Brass, Mild Steel, Stainless Steel, and Aluminium. Couplers can be plated to requirements.

Bushes

M Series Bushes are available in a variety of Male and Female thread forms. Materials include Brass, Mild Steel, Stainless Steel, and Aluminium and may be plated to requirements.



IP Sealing Washers



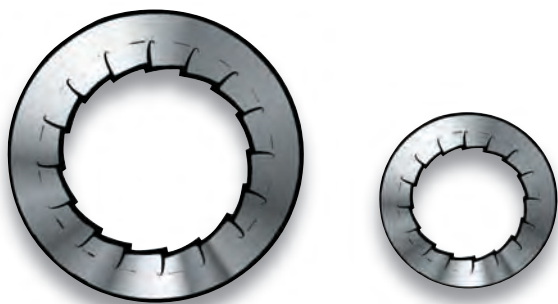
Redapt SW-Z Series IP Sealing Washers are fitted between an entry component and the equipment to maintain the ingress protection of the equipment.

Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET
Materials:	Nylon, Red Fibre, Teflon (PTFE), Neoprene
Part Number:	Please refer to page 8 for Part Numbering System

Dimensions of Metric Versions

Size	O/D	Thickness
M16	26.00	1.50
M20	30.50	1.50
M25	38.00	1.50
M32	42.60	1.50
M40	56.00	1.50
M50	64.00	1.50
M63	78.00	1.50
M75	90.00	1.50

Serrated Washers



Redapt SR-Z Series serrated washers can be used in conjunction with a locknut to provide additional fixing security and aid in bonding an entry component to the equipment.

Threadforms:	Metric, NPT, NPSM, ISO Pipe (BSP), PG, ET
Materials:	316 Stainless Steel, Steel/Zinc
Part Number:	Please refer to page 8 for Part Numbering System

Dimensions of Metric Versions

Size	O/D	Thickness	
		Min	Max
M16	25.50	1.00	2.50
M20	32.50	1.50	3.00
M25	39.50	1.50	3.75
M32	49.50	1.50	4.50
M40	64.50	1.50	4.50
M50	70.80	1.50	4.50
M63	100.00	1.50	4.50
M75	112.00	1.50	4.50



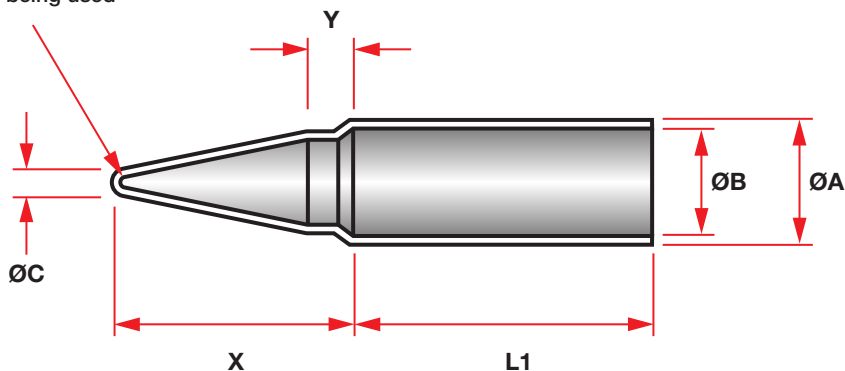
Redapt can offer a range of push on shrouds which are used to minimise the risk of dirt or foreign substances gathering on the cable gland body and/or point of cable to the gland interface.

The SH Series Shrouds are supplied in black PVC as standard and are suitable for all leading makes of glands; blue, grey or red PVC shrouds can also be supplied.

Redapt can also offer Flame Retardant (FR) shrouds in black PVC, Low Smoke and Fume (LSF) Halogen free PVC shrouds in black, white, red, blue, and PCP shrouds in black.

Please note that shrouds do not necessarily improve the ingress protection (IP) of the installed gland and may in certain conditions retain unwanted moisture.

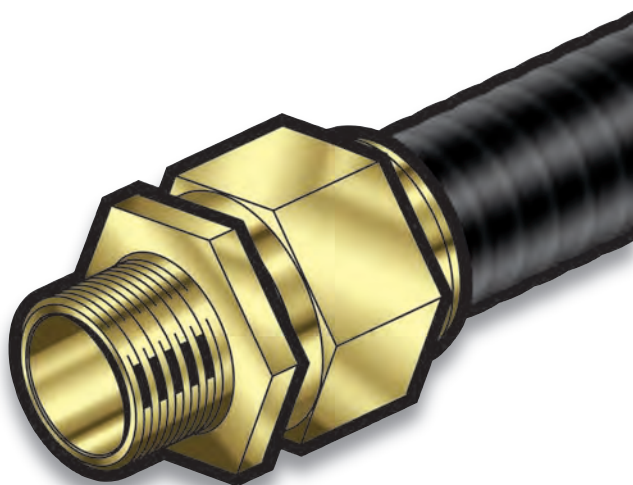
To be cut away to suit diameter of cable being used



Product Dimensions

Size	ØA	ØB	ØC	X	Y	L1
5	19.90	16.50	2.50	40.00	9.00	57.00
5A	23.80	20.00	2.50	50.00	10.00	60.00
6	25.20	20.00	2.50	50.00	10.00	78.00
7	31.50	26.00	8.00	50.00	10.00	80.00
8	43.00	36.00	11.00	50.00	12.00	78.00
8B	38.80	32.00	11.00	50.00	12.00	80.00
9	49.50	40.00	15.00	50.00	12.00	83.00
10	57.80	48.00	20.00	60.00	14.00	91.00
11	67.20	60.00	25.00	70.00	14.00	105.00
12	75.60	68.00	31.00	75.00	13.00	90.00
12E	84.00	70.00	34.00	75.00	13.00	115.00
13	89.30	75.00	37.00	75.00	13.00	110.00

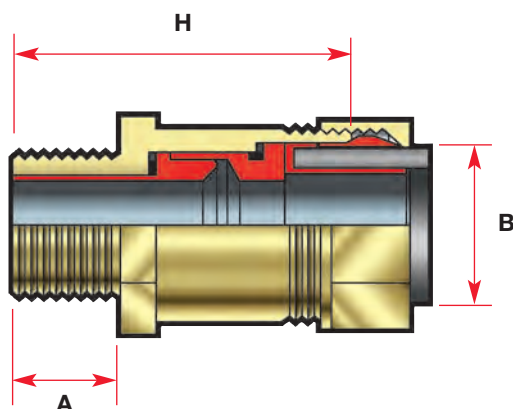
Flexible Conduit Barrier Stopper Boxes



The Redapt FX-U Series Barrier Stopper Box for flexible conduit is designed to provide a flameproof connection for liquid tight and braided flexible conduit in hazardous area applications. This is achieved by forming a barrier between the individual insulated conductors of a cable inside the conduit that are to be terminated within an enclosure.

The barrier is formed by using a setting compound packed around individual insulated conductors. Assembly of the component compresses the packing material and distributes the compound evenly to effect a barrier at point of entry into the enclosure.

The Barrier Stopper Box is supplied with compound in a pack, complete with making off instructions and gloves.



Approvals:	ATEX GOST IECEX	SIRA 00ATEX1073U, SIRA 11ATEX1301X
Ingress Protection:	IP6X, CSA Enclosure Type (NEMA) 3	
Application Temperature Range:	-20°C to +85°C	
Threadforms:	Metric	
Materials:	Brass CZ121, 316 Stainless Steel, Aluminium	
Plating:	Electroless Nickel, Zinc, other on application	
Part Number:	Please refer to page 8 for Part Numbering System	

Product Dimensions

Stopper Box Size	Thread A Min	Ø B Nominal	Length H
M20	15.00	21.10	44.50
M25	15.00	26.40	46.00
M32	15.00	33.10	51.50
M40	15.00	41.80	52.50
M50	15.00	47.90	58.50
M63	15.00	59.70	61.50

Redapt now offer a range of flexible conduit, all of which feature a high mechanical strength and are suitable for various applications.

Conduit Type FEZ



- Description:** Galvanised steel, helically wound, flexible conduit with smooth oil resistant and high temperature pvc cover
- Application:** Machine tools or outdoor installations where liquid tight is a requirement
- Features:** High mechanical strength and resistant to oils and greases
UV resistant (black) and good flexibility
Smooth wipe clean outer cover
Cover does not wrinkle when bent
IP Rating: IP66 + IP67+ IP68 (5 bar)
Temp range: -20°C to +105°C
Approvals: Lloyd's Register Type Approval

Conduit Type FDZ



- Description:** Galvanised steel, helically wound, flexible conduit with smooth thermoplastic rubber cover. ONLY AVAILABLE IN BLACK
- Application:** Machine tools or outdoor installations where liquid tight together with a low or high temperature rating is a requirement
- Features:** High mechanical strength and resistant to oils and greases
UV resistant (black) and good flexibility
Smooth wipe clean outer cover
Cover does not wrinkle when bent
IP Rating: IP66 + IP67+ IP68 (5 bar)
Temp range: -45°C to +135°C

Conduit Type FFZ

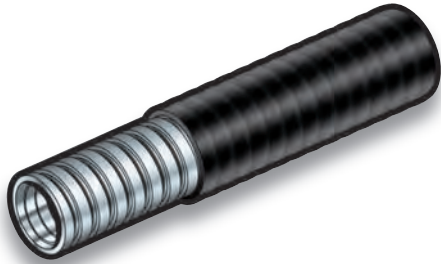


- Description:** Galvanised steel, helically wound, flexible conduit with galvanised steel braid and oil resistant and high temperature pvc smooth cover. ONLY AVAILABLE IN BLACK
- Application:** Machinery or outdoor installations where high corrosion resistance and liquid tight are a requirement combined with EMC screening.
- Features:** High mechanical strength and resistant to oils and greases
UV resistant (black) and good flexibility
Smooth wipe clean outer cover
Cover does not wrinkle when bent
IP Rating: IP66 + IP67+ IP68 (5 bar)
Temp range: -20°C to +105°C

Dimensions - FEZ, FDZ, FFZ

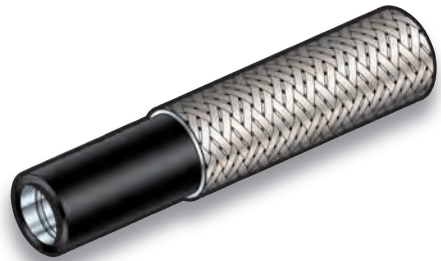
Nominal Size	Outside Dia.	Inside Dia.	Inside Bend Rad.	Inside Bend Rad. FFZ only
10	11.80	7.00	35.00	–
12	14.20	10.00	40.00	–
16	17.80	12.60	45.00	–
20	21.10	16.00	65.00	65.00
25	26.40	21.00	100.00	100.00
32	33.10	26.50	135.00	120.00
40	41.80	35.40	175.00	140.00
50	47.90	40.40	230.00	180.00
63	59.70	51.60	280.00	–

Flexible Conduit and Accessories



Conduit Type FGZ

- Description:** Stainless steel (316), helically wound, flexible conduit with oil resistant and high temperature pvc smooth cover. **ONLY AVAILABLE IN BLACK**
- Application:** Food processing machinery or outdoor applications where high corrosion resistance and liquid tight are a requirement
- Features:** High mechanical strength and resistant to oils and greases
UV resistant (black) and good flexibility
Smooth wipe clean outer cover
Cover does not wrinkle when bent
IP Rating: IP66 + IP67+ IP68 (5 bar)
Temp range: -20°C to +105°C



Conduit Type FAZ

- Description:** Galvanised steel, helically wound, flexible conduit with thermoplastic rubber cover and stainless steel (316) overbraid
- Application:** Very arduous industrial environments such as steel works
- Features:** High mechanical strength
High abrasion resistance and very high tensile strength
EMC Screening Performance
IP Rating: IP66 + IP67+ IP68 (5 bar)
Temp range: -45°C to +135°C



Conduit Support P Clips Type FZZ

- Description:** Type FZZ plated steel P clip with pvc liner
- Application:** P Clips to support flexible conduit Types FAZ, FDZ and FEZ

Conduit Support P Clips Type FYZ

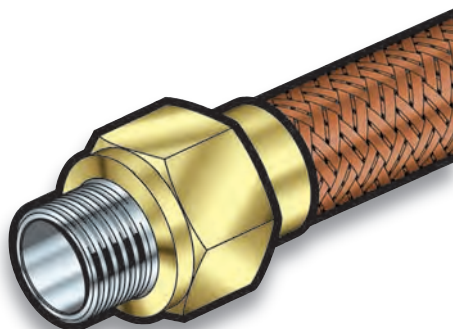
- Description:** Type FYZ stainless steel P clip
- Application:** P Clips to support flexible conduit Type FAZ, FDZ, FEZ, FFZ and FGZ

Dimensions - FGZ

Nominal Size	Outside Dia.	Inside Dia.	Inside Bend Rad.
10	11.80	7.00	35.00
12	14.20	10.00	40.00
16	17.80	12.60	45.00
20	21.10	16.00	65.00
25	26.40	21.00	100.00
32	33.10	26.50	135.00
40	41.80	35.40	175.00
50	47.90	40.40	230.00
63	59.70	51.60	280.00

Dimensions - FAZ

Nominal Size	Outside Dia.	Inside Dia.	Inside Bend Rad.
16	19.30	12.60	45.00
20	22.60	16.00	65.00
25	27.90	21.00	100.00
32	34.60	26.50	135.00



EC Series Explosionproof Couplings are used in hazardous areas where a flexible member is required in a conduit system to accomplish difficult bends, where lack of space makes usage of rigid conduit difficult, or to allow for movement or vibration of connected equipment or units.

The EC Series Couplings are designed to withstand Class 1 explosive pressure and mechanical abuse, and are also liquid tight for wet locations. No bonding jumpers are required as the metallic braid provides a continuous electrical path. The EC Series Couplings are available in two main types; the ECGJH has two threaded male end fittings, the ECLK has one female union and one threaded male end fitting.

Approvals:	NEC:	1/2" and 3/4" (Brass and S516) – Class I, Division 1, Groups A, B, C, D 1" to 2" (Brass and S516) – Class I, Division 1, Groups C, D All sizes also for use in Class II, Division 1, Groups E, F, G and Class III
	UL Standard:	1203
	ATEX and IECEx: (ECGJH S516 only)	1/2" and 3/4" (4" to 36" flexible length only) – Ex d IIC, IP66 1", 1 1/4", 1 1/2", 2" (4" to 36" flexible length only) – Ex d IIB, IP66
Threadforms:		NPT
Materials:		End fittings: 1/2" to 2" – Brass, 2 1/2" to 4" – Stainless Steel Female Unions: 1/2" to 1" – galvanised steel, 1 1/4" to 4" galvanised Feraloy® iron alloy 1/2" to 2" have bronze braid covering and flexible brass inner core 2 1/2" to 4" have a Type 304 stainless steel braid
Options:		All stainless steel (Type ECGJH only) – add suffix S516 to product code A flexible PVC protective coating supplied for severely corrosive locations– add suffix S758 to product code Special coupling lengths available up to 144 inches

Product Codes

Flexible Length (In.)	Size (NPT)	Product Code (ECGJH Male to Male)	Product Code (ECLK Female to Female)	Flexible Length (In.)	Size (NPT)	Product Code (ECGJH Male to Male)	Product Code (ECLK Female to Female)	Flexible Length (In.)	Size (NPT)	Product Code (ECGJH Male to Male)	Product Code (ECLK Female to Female)
4	1/2	ECGJH14	ECLK14	18	1	ECGJH318	ECLK318	27	2 1/2	ECGJH727	ECLK727
4	3/4	ECGJH24	ECLK24	18	1 1/4	ECGJH418	ECLK418	27	3	ECGJH827	ECLK827
6	1/2	ECGJH16	ECLK16	18	1 1/2	ECGJH518	ECLK518	27	4	ECGJH1027	ECLK1027
6	3/4	ECGJH26	ECLK26	18	2	ECGJH618	ECLK618	30	1/2	ECGJH130	ECLK130
6	1	ECGJH36	ECLK36	18	2 1/2	ECGJH718	ECLK718	30	3/4	ECGJH230	ECLK230
8	1/2	ECGJH18	ECLK18	18	3	ECGJH818	ECLK818	30	1	ECGJH330	ECLK330
8	3/4	ECGJH28	ECLK28	18	4	ECGJH1018	ECLK1018	30	1 1/4	ECGJH430	ECLK430
8	1	ECGJH38	ECLK38	21	1/2	ECGJH121	ECLK121	30	1 1/2	ECGJH530	ECLK530
10	1/2	ECGJH110	ECLK110	21	3/4	ECGJH221	ECLK221	30	2	ECGJH630	ECLK630
10	3/4	ECGJH210	ECLK210	21	1	ECGJH321	ECLK321	30	2 1/2	ECGJH730	ECLK730
10	1	ECGJH310	ECLK310	21	1 1/4	ECGJH421	ECLK421	30	3	ECGJH830	ECLK830
12	1/2	ECGJH112	ECLK112	21	1 1/2	ECGJH521	ECLK521	30	4	ECGJH1030	ECLK1030
12	3/4	ECGJH212	ECLK212	21	2	ECGJH621	ECLK621	33	1/2	ECGJH133	ECLK133
12	1	ECGJH312	ECLK312	21	2 1/2	ECGJH721	ECLK721	33	3/4	ECGJH233	ECLK233
12	1 1/4	ECGJH412	ECLK412	21	3	ECGJH821	ECLK821	33	1	ECGJH333	ECLK333
12	1 1/2	ECGJH512	ECLK512	21	4	ECGJH1021	ECLK1021	33	1 1/4	ECGJH433	ECLK433
12	2	ECGJH612	ECLK612	24	1/2	ECGJH124	ECLK124	33	1 1/2	ECGJH533	ECLK533
12	2 1/2	ECGJH712	ECLK712	24	3/4	ECGJH224	ECLK224	33	2	ECGJH633	ECLK633
12	3	ECGJH812	ECLK812	24	1	ECGJH324	ECLK324	33	2 1/2	ECGJH733	ECLK733
12	4	ECGJH1012	ECLK1012	24	1 1/4	ECGJH424	ECLK424	33	3	ECGJH833	ECLK833
15	1/2	ECGJH115	ECLK115	24	1 1/2	ECGJH524	ECLK524	33	4	ECGJH1033	ECLK1033
15	3/4	ECGJH215	ECLK215	24	2	ECGJH624	ECLK624	36	1/2	ECGJH136	ECLK136
15	1	ECGJH315	ECLK315	24	2 1/2	ECGJH724	ECLK724	36	3/4	ECGJH236	ECLK236
15	1 1/4	ECGJH415	ECLK415	24	3	ECGJH824	ECLK824	36	1	ECGJH336	ECLK336
15	1 1/2	ECGJH515	ECLK515	24	4	ECGJH1024	ECLK1024	36	1 1/4	ECGJH436	ECLK436
15	2	ECGJH615	ECLK615	27	1/2	ECGJH127	ECLK127	36	1 1/2	ECGJH536	ECLK536
15	2 1/2	ECGJH715	ECLK715	27	3/4	ECGJH227	ECLK227	36	2	ECGJH636	ECLK636
15	3	ECGJH815	ECLK815	27	1	ECGJH327	ECLK327	36	2 1/2	ECGJH736	ECLK736
15	4	ECGJH1015	ECLK1015	27	1 1/4	ECGJH427	ECLK427	36	3	ECGJH836	ECLK836
18	1/2	ECGJH118	ECLK118	27	1 1/2	ECGJH527	ECLK527	36	4	ECGJH1036	ECLK1036
18	3/4	ECGJH218	ECLK218	27	2	ECGJH627	ECLK627				

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