

Thread Conversion Solutions



Pre-Launch Preview

FOR CUSTOMERS WHO DEMAND THE BEST

For those who demand quality, reliability and above all, safety, Hawke International is the obvious choice.

Smarter Products

Hawke International has provided peace of mind to contractors, installers and end users for over 55 years. Our innovative range of cable connection and termination products, specifically designed with the customer in mind, have gained worldwide approval and credibility for the testing conditions of hazardous (classified) locations and hostile environments.

The customers requirements for sustained safety and reliability under extreme conditions are therefore Hawke's primary objectives. Furthermore our superior designs allow ease of installation, use long life materials and are manufactured to rigorous quality standards. All this provides the customer with unparalleled benefits of the lowest lifetime cost of purchase.

Worldwide

Located in Manchester, UK, Hawke International has subsidiary locations in Houston, USA and Singapore, along with direct representation in Brazil, the Middle East, Canada and China. Hawke International is supported worldwide by the Hubbell Group along with a global network of agents and distributors.

Product Development

Hawke International recognises that the demands of the customer base never stand still and we are therefore committed to the ongoing development of our products and features to provide improved safety, versatility, reliability and ease of use.

First Choice

Predominantly used on Offshore and Onshore oil and gas exploration, production and processing facilities. Hawke's products are the 'First Choice' for the world's major oil, gas and petrochemical companies.

A Quality Company

Hawke International's products are designed and manufactured under a quality system not only complying with ISO 9001 but also with the latest international standards. Rigorous and regular in-house testing ensures that every product manufactured meets the highest quality standards expected by the market.



Hawke International

"Leading the way in the design of worldwide connection solutions"



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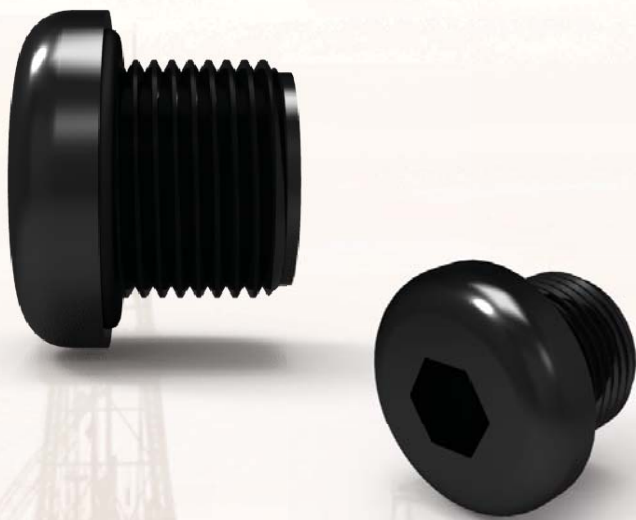
* Certification Pending

Stopping Plugs

Domed Head & Hexagon Head

Increased Safety Exe Dual Certified ATEX / IECEx

375 Domed Head Stopping Plug



Certification Details

- Increased Safety Exe IIC Gb, Extb IIIC Db, Ⓜ II 2GD.
- Certificate No's: Baseefa06ATEX0118U and IECEx BAS 06.0056U.
- Operating Temperature Range -60°C to +75°C.
- Group II and II.

General Information

- Manufactured in Polyamide with Nitrile O-Ring.
- M16 to M75 as standard.
- Thread length is 15mm as standard.
- Metric entry threads are 1.5mm pitch as standard.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending

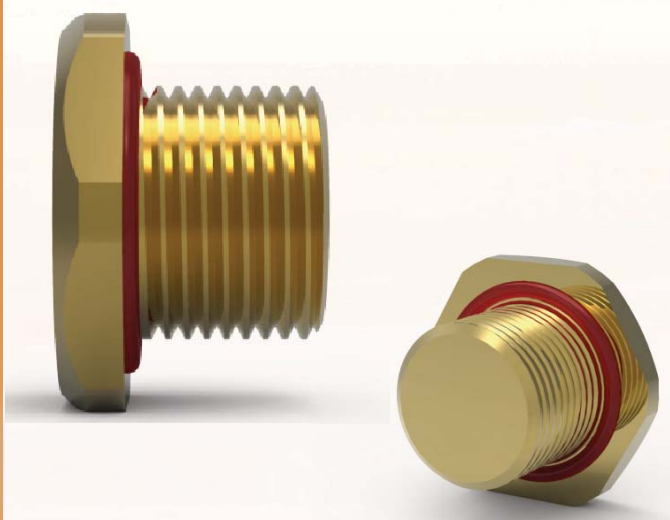
SELECTION TABLE

Thread Size	'S' Dia (mm)	Allen Key (mm)
M16	23.0	8
M20	27.5	10
M25	32.0	10
M32	39.0	10
M40	49.0	10
M50	59.0	10
M63	72.0	10
M75	84.0	10

Ordering Example:

Product	Thread Size	Material	Finish
375	M32	N/A	N/A

390 Hexagon Head Stopping Plug



Certification Details

- Increased Safety Exe I Mb, Exd I Mb, Exe IIC Gb, Extb IIIC Db, Ⓜ I M2 / II 2GD.
- Certificate No's: Baseefa11ATEX0157X and IECEx BAS 11.0079X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and III.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel. (Aluminium for Group II use only).
- M16 to M130 as standard.
- M16 to M75 are 1.5mm pitch as standard.
- M80 to M130 are 2.0mm pitch as standard (1.5mm pitch option available).
- Longer thread lengths available for sizes M80 to M130.
- Other parallel thread options available on request, including BSPP, PG, ET and NPSM.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications..
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

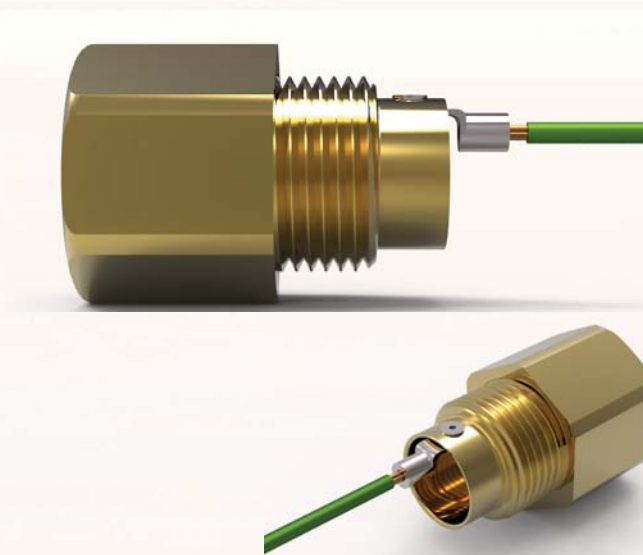
Thread Size	Length of Thread (mm)	Across Flats (mm)	Across Corners (mm)
M16	15	24	26.4
M20	15	30	32.5
M25	15	36	39.5
M32	15	46	50.5
M40	15	46	50.5
M50	15	65	66.0
M63	15	80	88.0
M75	15	95	104.5

Ordering Example:

Product	Thread Size	Material	Finish
390	M32	Brass	Nickel Plated

Increased Safety Exe Dual Certified ATEX / IECEx

383 Earth Lead Adaptor (Male to Female)



Certification Details

- Increased Safety Exe IIC Gb, Extb IIIC Db, Ⓜ II 2GD.
- Certificate No's: Baseefa11ATEX0152X and IECEx BAS 11.0074X.
- Operating Temperature Range -60°C to +80°C..
- Group II and III.

General Information

- Manufactured in Brass, Nickel Plated Brass and Stainless Steel.
- PVC Insulated Cable, (Optional LSOH cable available).
- M20 to M75 as standard, other thread forms available on request.
- Different thread sizes and types are permitted each end of the adaptor. These thread sizes may differ by one size only.
- If longer cable lengths than standard are required, advise length in millimeters.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

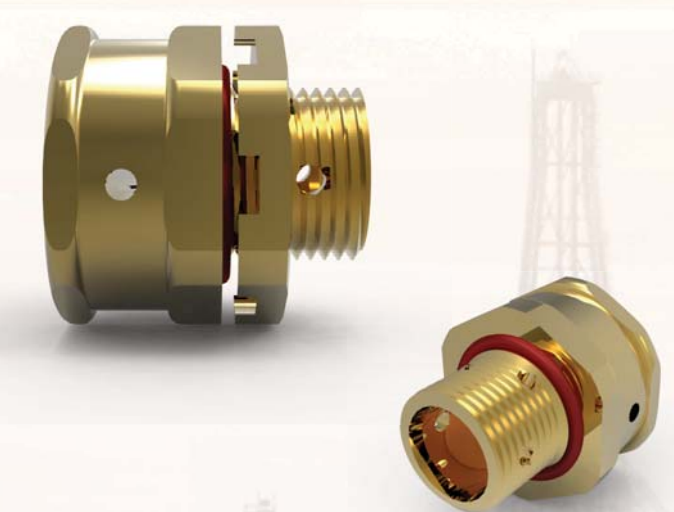
Thread Size Male / Female	Across Flats (mm)	Across Corners (mm)	Cable Length (mm)	Cable Size (sq. mm)
M20 / M20	24	26.5	250	4.0
M25 / M25	30	32.5	250	4.0
M32 / M32	36	39.5	250	6.0
M40 / M40	46	50.5	250	10.0
M50 / M50	55	60.5	500	16.0
M63 / M63	70	77.5	500	25.0
M75 / M75	80	88.0	500	25.0

Ordering Example:

Always state the male thread first

Product	Thread Size	Material	Finish
383	M32 Male x M32 Female	Brass	Nickel Plated

389 Breather Drain & Locknut



Certification Details

- Increased Safety Exe I Mb, Exe IIC Gb, Extb IIIC Db, Ⓜ I M2 / II 2GD.
- Certificate No's: Baseefa11ATEX0153X and IECEx BAS 11.0075X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and III.

General Information

- Manufactured in Brass, Nickel Plated Brass, Stainless Steel – Grade 316L. O Ring manufactured from Silicone Rubber.
- M20 and M25 with 1.5mm pitch as standard.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

Thread Size	Length of Thread (mm)	Across Flats (mm)	Across Corners (mm)
M20	15	30	32.5
M25	15	36	39.5

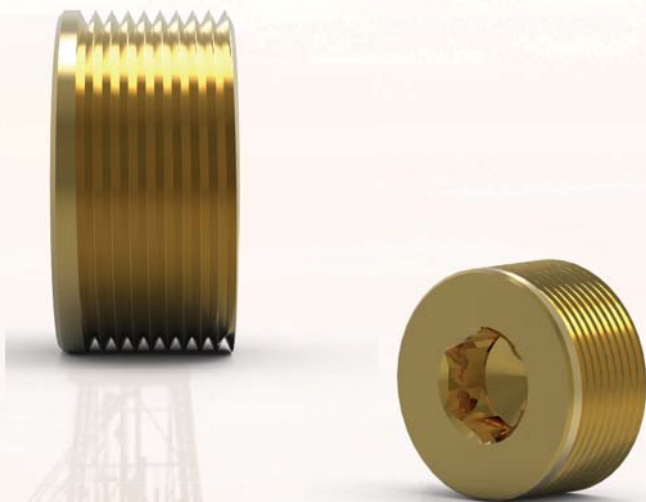
Ordering Example:

Product	Thread Size	Pitch	Material	Finish
389	M25	1.5 mm	Brass	Nickel Plated

Stopping Plugs (Tamperproof)

Flameproof Exd Dual Certified ATEX / IECEx

475 Tamperproof Stopping Plug



Certification Details

- Flameproof Exd I Mb, Exd IIC Gb, Extb IIIC Db, IM2 / II 2GD.
- Certificate No's: Baseefa10ATEX0262X and IECEx BAS 10.0120X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and II.

General Information

- The 475 is fitted from outside of the enclosure.
- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel. (Aluminium for Group II use only).
- M16 to M75 as standard.
- Other thread options available on request, including BSPP, PG, NPT and ET.
- Metric entry threads are 1.5mm pitch as standard.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

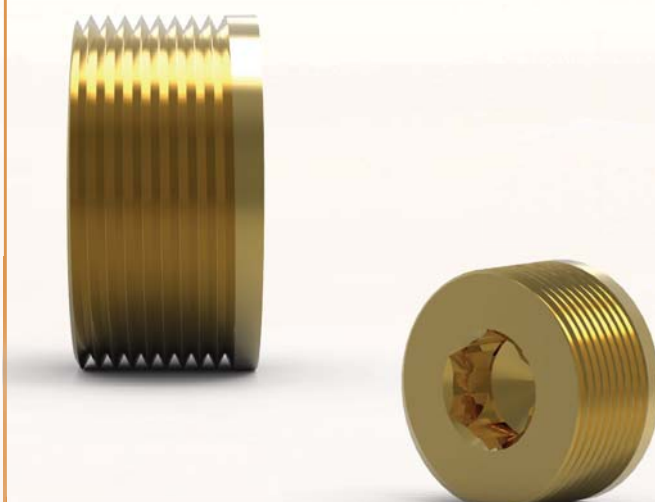
SELECTION TABLE

Thread Size	Thread Size (NPT)	Allen Key (mm)
M16	1/2"	10
M20	3/4" or 1/2"	10
M25	1" or 3/4"	10
M32	1 1/4" or 1"	10
M40	1 1/2" or 1 1/4"	10
M50	2" or 1 1/2"	10
M63	2 1/2" or 2"	10
M75	3" or 2 1/2"	10

Ordering Example:

Product	Thread Size	Material	Finish
475	M32	Brass	Nickel Plated

477 Tamperproof Stopping Plug



Certification Details

- Flameproof Exd IM2, Exd IIC Gb, Extb IIIC Db, IM2 II 2GD.
- Certificate No's: Baseefa10ATEX0262X and IECEx BAS 10.0120X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and II.

General Information

- The 477 is fitted from inside the enclosure.
- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel. (Aluminium for Group II use only).
- M16 to M75 as standard.
- Other parallel thread options available on request, including BSPP, PG, NPT and ET.
- Metric entry threads are 1.5mm pitch as standard.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

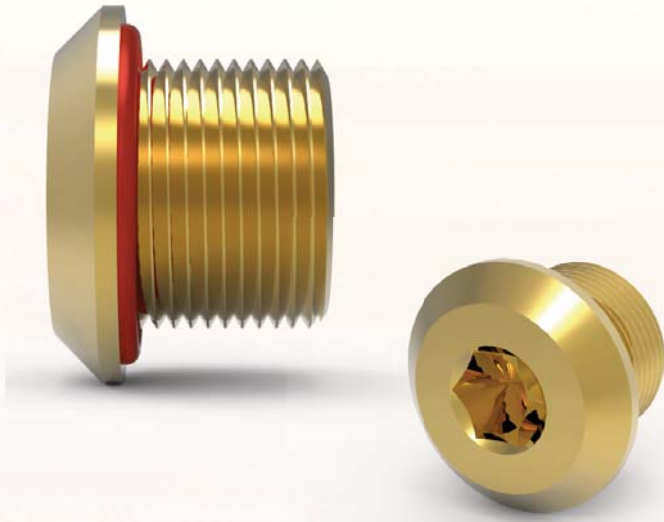
SELECTION TABLE

Thread Size	Thread Size (NPT)	Allen Key (mm)
M16	1/2"	10
M20	3/4" or 1/2"	10
M25	1" or 3/4"	10
M32	1 1/4" or 1"	10
M40	1 1/2" or 1 1/4"	10
M50	2" or 1 1/2"	10
M63	2 1/2" or 2"	10
M75	3" or 2 1/2"	10

Ordering Example:

Product	Thread Size	Material	Finish
477	M32	Brass	Nickel Plated

Flameproof Exe / Increased Safety Exe Dual Certified ATEX / IECEx 487 Domed Head Stopping Plug



Certification Details

- Increased Safety and Flameproof Exe I Mb, Exd I I Mb,0 Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, IM2 / II 2GD.
- Certificate No's: Baseefa11ATEX0149X and IECEx BAS 11.0071X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and II.

General Information

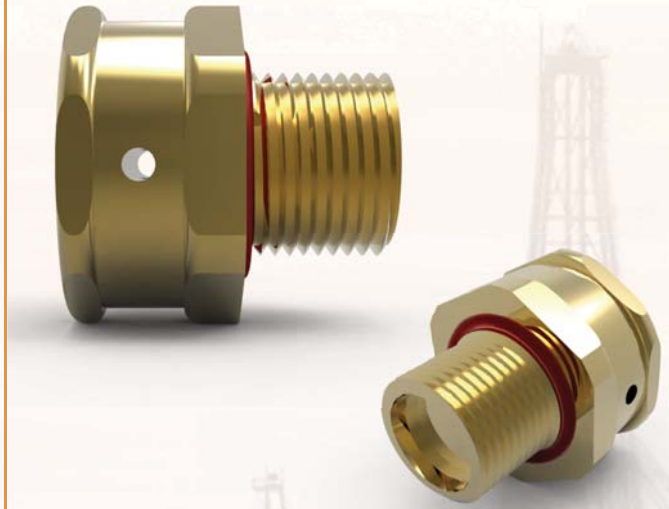
- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel. (Aluminium for Group II use only).
- O Ring manufactured from Silicone Rubber.
- M16 to M130 as standard.
- Other parallel thread options available on request, including BSPP, PG, NPSM and ET.
- Metric entry threads are 1.5mm pitch as standard.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE			
Thread Size	Length of Thread (mm)	Overall Dia. (mm)	Allen Key (mm)
M16	15	28	8
M20	15	32	10
M25	15	36	10
M32	15	45	10
M40	15	52	10
M50	15	62	10
M63	15	75	10
M75	15	87	10

Ordering Example:

Product	Thread Size	Material	Finish
487	M32	Brass	Nickel Plated

Flameproof Exd Dual Certified ATEX / IECEx 489 Breather Drain



Certification Details

- Flameproof Exd I Mb, Exd IIB H₂, IM2 / II 2G.
- Certificate No's: Baseefa11ATEX0154X and IECEx BAS 11.0076X.
- Ambient Temperature Range -60°C to +60°C.
- Temperature Classification: T6
- Group I, II and II.

General Information

- The Breather Drain may only be fitted to the underside of Exd enclosures with internal volumes of 2.5 litres or less..
- Manufactured in Brass, Nickel Plated Brass, Stainless Steel – Grade 316L. O Ring manufactured from Silicone Rubber.
- M20 and M25 with 1.5mm pitch as standard.
- Other thread options available on request, including BSPP, PG, NPT, ET and NPSM.
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0 & IEC/EN 60079-1
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

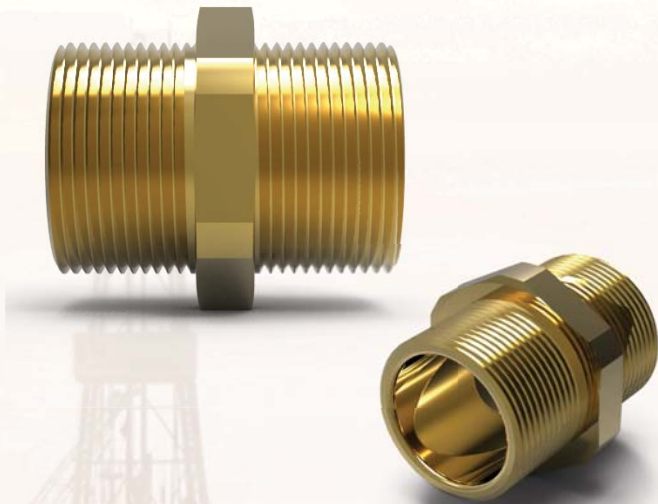
SELECTION TABLE			
Thread Size	Length of Thread (mm)	Across Flats (mm)	Across Corners (mm)
M20	15	30	32.5
M25	15	36	39.5

Ordering Example:

Product	Thread Size	Material	Finish
489	M20	Brass	Nickel Plated

Flameproof Exd / Increased Safety Exe Dual Certified ATEX / IECEx

479 Inline Adaptor (Male to Male)



Certification Details

- Increased Safety and Flameproof Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ex II 2GD.
- Certificate No's: Baseefa11ATEX0155U and IECEx BAS 11.0077U.
- Operating Temperature Range -60°C to +160°C.
- Group II and III.

General Information

- Manufactured in Brass, Nickel Plated Brass, Aluminium, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other thread options available on request, including BSPP, PG, NPT, ET and NPSM.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

Note: Different thread sizes and types are permitted each end of the adaptor, a step of one thread size is permitted between the male threads. Where different thread types / sizes are supplied, the overall dimensions of the adaptor may increase in size.

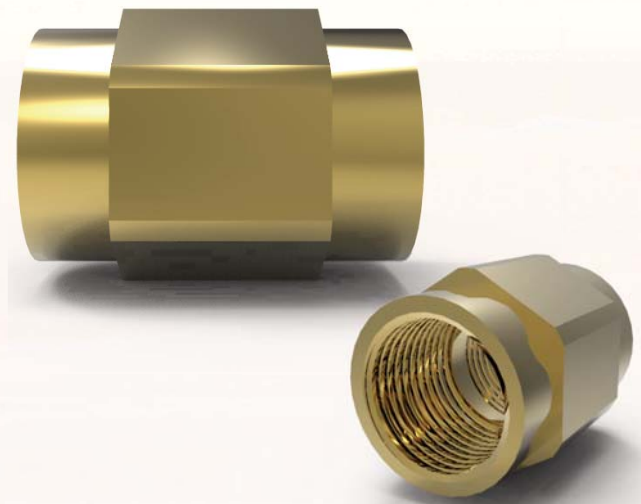
SELECTION TABLE

Male Thread Size	Thread Pitch (mm)	Male Thread Size	Thread Pitch (mm)	Thread Length (mm)	Across Flats (mm)	Across Corners (mm)
M16	1.5	M16	1.5	15	24	26.5
M20	1.5	M20	1.5	15	30	32.5
M25	1.5	M25	1.5	15	36	39.5
M32	1.5	M32	1.5	15	46	50.5
M40	1.5	M40	1.5	15	55	60.6
M50	1.5	M50	1.5	15	65	70.8
M63	1.5	M63	1.5	15	80	88.0
M75	1.5	M75	1.5	15	95	109.5

Ordering Example:

Product	Thread Size	Material	Finish
479	M32 Male x 1 ¼" NPT Female	Brass	Nickel Plated

480 Inline Adaptor (Female to Female)



Certification Details

- Increased Safety and Flameproof Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ex II 2GD.
- Certificate No's: Baseefa11ATEX0155U and IECEx BAS 11.0077U.
- Operating Temperature Range -60°C to +160°C.
- Group II and III.

General Information

- Manufactured in Brass, Nickel Plated Brass, Aluminium, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other thread options available on request, including BSPP, PG, NPT, ET and NPSM.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

Note: Different thread sizes and types are permitted each end of the adaptor, a step of one thread size is permitted between the female threads. Where different thread types / sizes are supplied, the overall dimensions of the adaptor may increase in size.

SELECTION TABLE

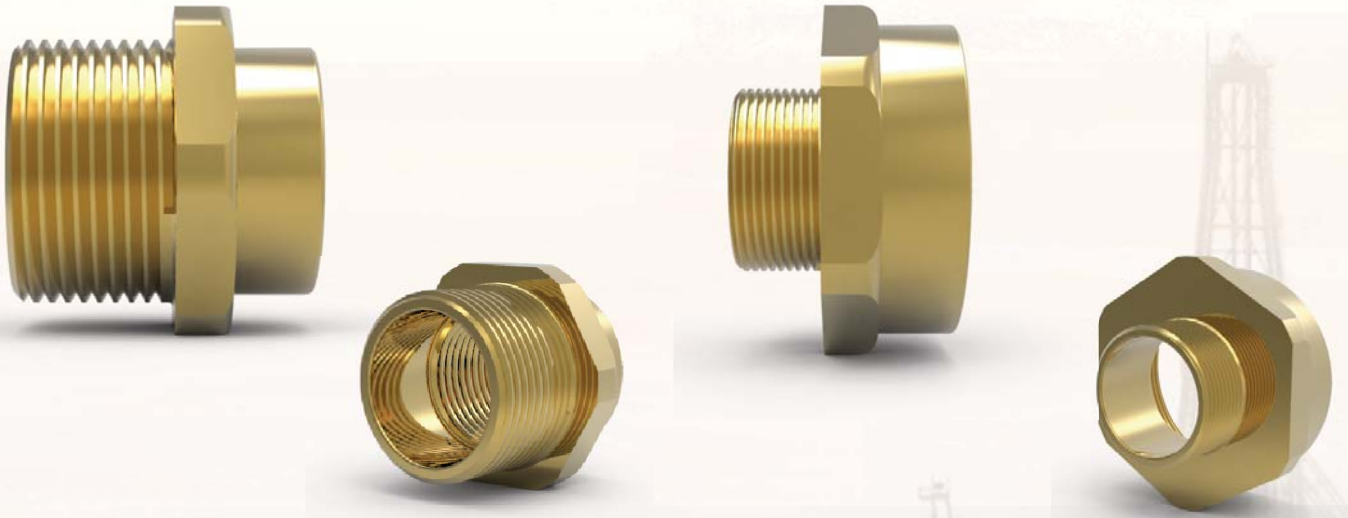
Female Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Across Flats (mm)	Across Corners (mm)
M16	1.5	M16	1.5	16	24	26.5
M20	1.5	M20	1.5	16	30	32.5
M25	1.5	M25	1.5	16	36	39.5
M32	1.5	M32	1.5	16	46	50.5
M40	1.5	M40	1.5	16	55	60.6
M50	1.5	M50	1.5	16	65	70.8
M63	1.5	M63	1.5	16	80	88.0
M75	1.5	M75	1.5	16	95	109.6

Ordering Example:

Product	Thread Size	Material	Finish
479	M32 Male x 1 ¼" NPT Female	Brass	Nickel Plated

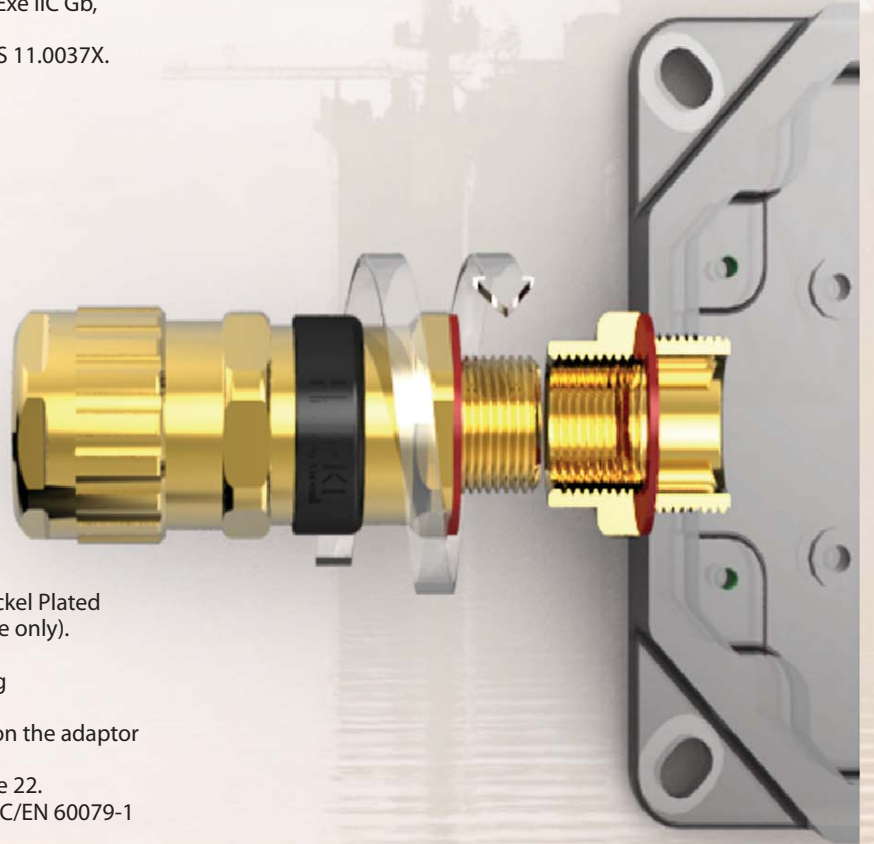
Flameproof Exd / Increased Safety Exe Dual Certified ATEX / IECEx

476 Adaptor / Reducer (Male to Female)



Certification Details

- Increased Safety and Flameproof Exe IMb, Exd IMb, Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, IM2 / II 2GD.
- Certificate No's: Baseefa11ATEX0167X and IECEx BAS 11.0037X.
- Operating Temperature Range -60°C to +160°C.
- Group I, II and II.



General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel. (Aluminium for Group II use only).
- M16 to M130 (½" NPT to 6" NPT) as standard.
- Other thread options available on request, including BSPP, PG, ET, NPT and NPSM.
- Up to two step thread sizes above the male thread on the adaptor is permitted.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

Ordering Examples:

Always state the male thread first

Product	Thread Size	Material	Finish
476/Adaptor	M20 Male x 1 ¾" NPT Female	Brass	Nickel Plated

Ordering Example:

Always state the male thread first

Product	Thread Size	Material	Finish
476/Reducer	M32 Male x M20 Female	Stainless Steel	N/A

Adaptors / Reducers

FEMALE THREAD

KEY:		METRIC & ET													NPT, BSPP & NPSM										PG																										
A = ADAPTOR A = ADAPTOR - Only permitted in dissimilar thread forms R = REDUCER		METRIC & ET													NPT, BSPP & NPSM										PG																										
		5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	M110	M115	M120	M130	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	PG7	PG9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48						
METRIC & ET	5/8"	M16	A	A	A																				A	A										R	A	A	A												
	3/4"	M20	R	A	A	A																				A	A	A									R	R	A	A	A										
	1"	M25	R	R	A	A	A																			R	A	A	A								R	R	R	R	A	A	A								
	1 1/4"	M32	R	R	R	A	A	A																		R	R	A	A	A							R	R	R	R	R	A	A	A							
	1 1/2"	M40	R	R	R	R	A	A	A																	R	R	R	A	A	A						R	R	R	R	R	R	A	A	A						
	2"	M50	R	R	R	R	R	A	A	A																R	R	R	R	A	A	A					R	R	R	R	R	R	R	A	A	A					
	2 1/2"	M63	R	R	R	R	R	R	A	A	A															R	R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	R	A				
	3"	M75	R	R	R	R	R	R	R	A	A	A														R	R	R	R	R	A	A	A																		
		M80	R	R	R	R	R	R	R	R		A	A													R	R	R	R	R	R	R	A	A	A																
		M90	R	R	R	R	R	R	R	R			A	A												R	R	R	R	R	R	R	R	A	A	A															
		M100	R	R	R	R	R	R	R	R				A	A											R	R	R	R	R	R	R	R	R	A	A															
		M110	R	R	R	R	R	R	R	R					A	A										R	R	R	R	R	R	R	R	R	R	A															
		M115	R	R	R	R	R	R	R	R						A	A									R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
		M120	R	R	R	R	R	R	R	R							A									R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
	M130	R	R	R	R	R	R	R	R								A								R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R			
NPT, BSPP & NPSM	1/2"		R	A	A	A																			A	A	A									R	R	R	A	A	A										
	3/4"		R	R	A	A	A																		A	A	A	A								R	R	R	R	A	A	A									
	1"		R	R	R	A	A	A																	R	R	A	A	A							R	R	R	R	R	A	A	A								
	1 1/4"		R	R	R	R	A	A	A																R	R	R	A	A	A						R	R	R	R	R	R	A	A								
	1 1/2"		R	R	R	R	R	A	A	A															R	R	R	R	A	A	A					R	R	R	R	R	R	R	A	A	A						
	2"		R	R	R	R	R	R	A	A	A														R	R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	A	A					
	2 1/2"		R	R	R	R	R	R	R	A	A	A													R	R	R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	R	A				
	3"		R	R	R	R	R	R	R	R	A	A	A												R	R	R	R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	R	R			
	3 1/2"		R	R	R	R	R	R	R	R	R	A	A	A											R	R	R	R	R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	R	R		
	4"		R	R	R	R	R	R	R	R	R	R	A	A	A										R	R	R	R	R	R	R	R	R	A	A				R	R	R	R	R	R	R	R	R	R	R		
5"		R	R	R	R	R	R	R	R	R	R	R	A	A	A									R	R	R	R	R	R	R	R	R	R	A				R	R	R	R	R	R	R	R	R	R	R			
PG	PG11		A	A	A																				A										R	R		A	A												
	PG13.5		R	A	A	A																			A	A									R	R	R		A	A											
	PG16		R	A	A	A																			A	A	A								R	R	R	R		A	A										
	PG21		R	R	A	A	A																		R	A	A	A							R	R	R	R	R		A	A									
	PG29		R	R	R	R	A	A																	R	R	A	A	A						R	R	R	R	R	R		A	A								
	PG36		R	R	R	R	R	A	A																R	R	R	A	A	A					R	R	R	R	R	R	R	R		A	A						
	PG42		R	R	R	R	R	A	A	A															R	R	R	R	A	A	A				R	R	R	R	R	R	R	R	R	R	R		A				
	PG48		R	R	R	R	R	A	A																R	R	R	R	R	A	A				R	R	R	R	R	R	R	R	R	R	R	R	R				

Metric – BS 3643		
Size	Major Dia. (mm)	Pitch (mm)
M16	15.97	1.5
M20	19.97	1.5
M25	24.97	1.5
M32	31.97	1.5
M40	39.97	1.5
M50	49.97	1.5
M63	62.97	1.5
M75	74.97	1.5
M80	79.97	2.0
M90	89.97	2.0
M100	99.97	2.0
M110	109.97	2.0
M115	114.97	2.0
M120	115.97	2.0
M130	129.97	2.0

National Pipe Straight Mechanical NPSM – USAS B 2.1		
Size	Major Dia. (mm)	TPI
1/8"	10.29	27
1/4"	13.72	18
3/8"	17.15	18
1/2"	21.34	14
3/4"	26.67	14
1"	33.40	11 1/2
1 1/4"	42.16	11 1/2
1 1/2"	48.26	11 1/2
2"	60.33	11 1/2
2 1/2"	73.03	8
3"	88.90	8
3 1/2"	101.60	8
4"	114.30	8
5"	141.30	8

National Pipe Thread NPT – USAS B 2.1 <i>Taper 1 in 15 on Major Diameter</i>		
Size	Major Dia. (mm)	TPI
1/8"	10.29	27
1/4"	13.72	18
3/8"	17.15	18
1/2"	21.34	14
3/4"	26.67	14
1"	33.40	11 1/2
1 1/4"	42.16	11 1/2
1 1/2"	48.26	11 1/2
2"	60.33	11 1/2
2 1/2"	73.03	8
3"	88.90	8
3 1/2"	101.60	8
4"	114.30	8
5"	141.30	8

Electrical Thread Imperial ET – BS 31		
Size	Major Dia. (mm)	TPI
1/2"	12.50	18
5/8"	15.88	16
3/4"	19.05	16
1"	25.40	16
1 1/4"	31.75	16
1 1/2"	38.10	14
2"	50.80	14
2 1/2"	63.50	14
3"	76.20	14

Pipe Gauge PG – DIN 40430		
Size	Major Dia. (mm)	TPI
PG 7	12.50	20
PG 9	15.20	18
PG 11	18.60	18
PG 13.5	20.40	18
PG 16	22.50	18
PG 21	28.30	16
PG 29	37.00	16
PG 36	47.00	16
PG 42	54.00	16
PG 48	59.30	16

British Standard Pipe - Parallel BSPP – BS 2779		
Size	Major Dia. (mm)	TPI
1/8"	9.73	28
1/4"	13.16	19
3/8"	16.66	19
1/2"	20.96	14
5/8"	22.91	14
3/4"	26.44	14
1"	33.25	11
1 1/4"	41.91	11
1 1/2"	47.80	11
2"	59.61	11
2 1/2"	75.18	11
3"	87.88	11
4"	113.03	11
5"	138.43	11

Flameproof Exd / Increased Safety Exe Dual Certified ATEX / IECEx

490 (M to F) Swivel In-Line Union



Certification Details

- Flameproof Exe IMb, Exd IMb, Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ⓜ II 2GD.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group I, II and II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other thread options available on request, including BSPP, PG, ET, NPSM and NPT. NPT male and female threads can also be supplied in sizes ranging from 1/2" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Suitable for T6 and T5 applications.
- Assembly Instruction Sheet: AI Pending.

491 (M to F) Swivel In-Line Union with Lockstop



Certification Details

- Flameproof Exe IMb, Exd IMb, Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ⓜ II 2GD.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group I, II and II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other parallel male thread options available on request, including BSPP, PG, ET and NPSM. NPT female threads can also be supplied in sizes ranging from 1/2" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

Male Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Tapered A/F (mm) 'E'	Tapered A/C (mm) 'F'
M16	1.5	M16	1.5	16	36	39.5
M20	1.5	M20	1.5	16	36	39.5
M25	1.5	M25	1.5	16	46	50.5
M32	1.5	M32	1.5	16	46	50.5
M40	1.5	M40	1.5	16	65	70.8
M50	1.5	M50	1.5	16	65	70.8
M63	1.5	M63	1.5	16	95	104.0
M75	1.5	M75	1.5	16	95	104.0

Note: Different thread sizes and types are permitted each end of the elbow, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the inline swivel may increase in size.

Note: Different thread sizes and types are permitted each end of the elbow, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the inline swivel may increase in size.

Ordering Example:

Product	Thread Size	Pitch	Material	Finish
490	M32 Male x M32 Female	1.5 mm	Brass	Nickel Plated

Always state the male thread first

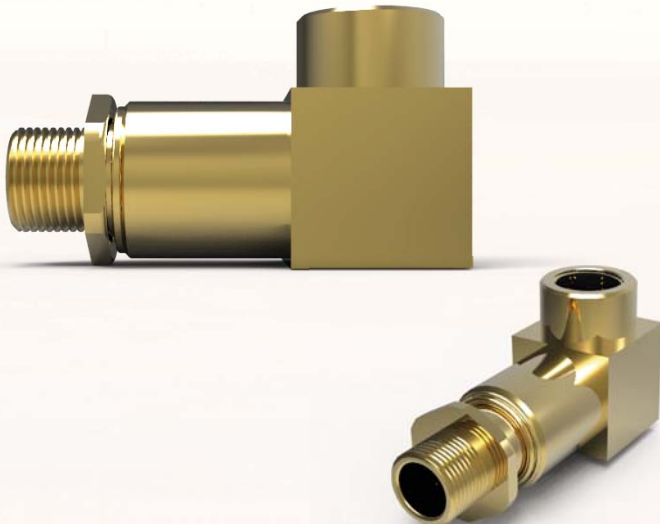
Ordering Example:

Product	Thread Size	Pitch	Material	Finish
491	M32 Male x M32 Female	1.5 mm	Brass	Nickel Plated

Always state the male thread first

Flameproof Exd / Increased Safety Exe Dual Certified ATEX / IECEx

492 (M to F) Swivel 90° Elbow



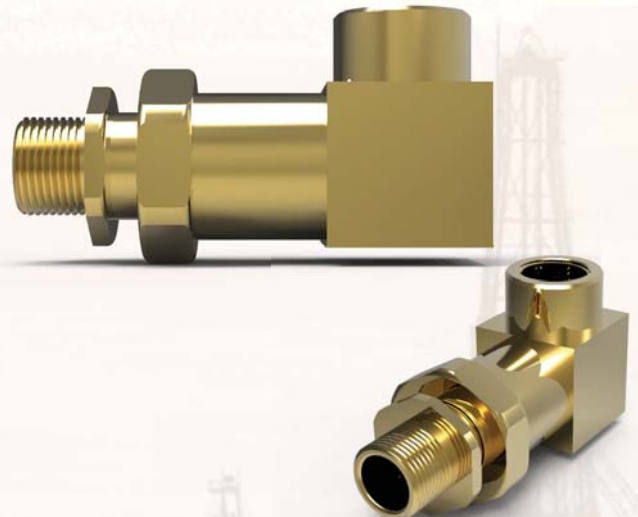
Certification Details

- Flameproof Exe IMb, Exd IMb, Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ex II 2GD.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group I, II and II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other thread options available on request, including BSPP, PG, ET, NPSM and NPT. NPT female threads can also be supplied in sizes ranging from ½" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

498 (M to F) Swivel 90° Elbow with Lockstop



Certification Details

- Flameproof Exe IMb, Exd IMb, Exe IIC Gb, Exd IIC Gb, Extb IIIC Db, Ex II 2GD.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group I, II and II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other parallel male thread options available on request, including BSPP, PG, ET and NPSM. NPT female threads can also be supplied in sizes ranging from ½" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and mining applications.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

Male Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Typical A/F (mm) 'C'	Typical A/C (mm) 'D'
M16	1.5	M16	1.5	16	36	39.5
M20	1.5	M20	1.5	16	36	39.5
M25	1.5	M25	1.5	16	55	60.6
M32	1.5	M32	1.5	16	55	60.6
M40	1.5	M40	1.5	16	80	88.0
M50	1.5	M50	1.5	16	80	88.0
M63	1.5	M63	1.5	16	95	104.0
M75	1.5	M75	1.5	16	95	104.0

Note: Different thread sizes and types are permitted each end of the elbow, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the inline swivel may increase in size.

Note: Different thread sizes and types are permitted each end of the elbow, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the inline swivel may increase in size.

Ordering Example:

Product	Thread Size	Pitch	Material	Finish
492	M32 Male x M32 Female	1.5 mm	Brass	Nickel Plated

Always state the male thread first

Ordering Example:

Product	Thread Size	Pitch	Material	Finish
493	M32 Male x M32 Female	1.5 mm	Brass	Nickel Plated

Always state the male thread first

Flameproof Exd Dual Certified ATEX / IECEx

481 (M to F) Union



Certification Details

- Flameproof Exd IIC Gb, Ex II 2G.
- Certificate No's: Baseefa11ATEX0155U and IECEx BAS 11.0077U.
- Operating Temperature Range -60°C to +80°C.
- Group II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other parallel thread options available on request, including BSPP, PG, ET and NPSM. NPT threads can also be supplied in sizes ranging from ½" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

Note: Different thread sizes and types are permitted each end of the adaptor, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the union may increase in size.

SELECTION TABLE

Male Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Across Flats (mm)	Across Corners (mm)
M16	1.5	M16	1.5	16	19	21.0
M20	1.5	M20	1.5	16	24	26.5
M25	1.5	M25	1.5	16	30	32.5
M32	1.5	M32	1.5	16	36	39.5
M40	1.5	M40	1.5	16	46	50.5
M50	1.5	M50	1.5	16	55	60.5
M63	1.5	M63	1.5	16	70	77.5
M75	1.5	M75	1.5	16	88	88.0

Ordering Example:

Product	Thread Size	Pitch	Material	Finish
490	M32 Male x M32 Male	1.5 mm	Brass	Nickel Plated

482 (F to F) Union



Certification Details

- Flameproof Exd IIC Gb, Ex II 2G.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group II.

General Information

- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel and Stainless Steel.
- M16 to M75 as standard.
- Other parallel thread options available on request, including BSPP, PG, ET and NPSM. NPT threads can also be supplied in sizes ranging from ½" to 3".
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

Note: Different thread sizes and types are permitted each end of the adaptor, a step of one thread size is permitted between the two threads. Where different thread types / sizes are supplied, the overall dimensions of the union may increase in size.

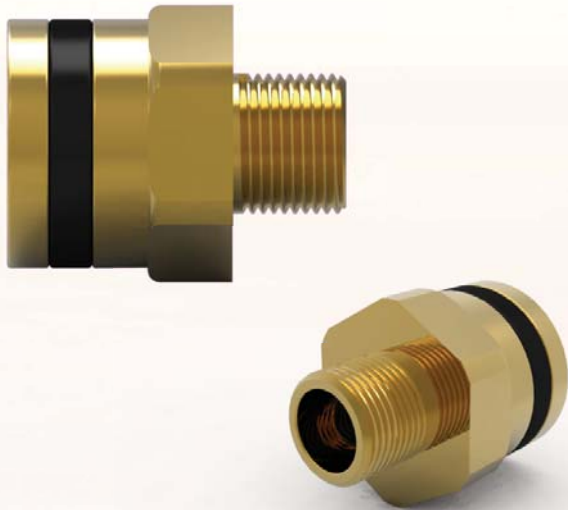
SELECTION TABLE

Female Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Across Flats (mm)	Across Corners (mm)
M16	1.5	M16	1.5	16	19	21.0
M20	1.5	M20	1.5	16	24	26.5
M25	1.5	M25	1.5	16	30	32.5
M32	1.5	M32	1.5	16	36	39.5
M40	1.5	M40	1.5	16	46	50.5
M50	1.5	M50	1.5	16	55	60.5
M63	1.5	M63	1.5	16	70	77.5
M75	1.5	M75	1.5	16	88	88.0

Ordering Example:

Product	Thread Size	Pitch	Material	Finish
491	M32 Female x M32 Female	1.5 mm	Brass	Nickel Plated

Flameproof Exd Dual Certified ATEX / IECEx 478 Insulated Adaptor



Certification Details

- Increased Safety and Flameproof Exe I Mb, Exd I Mb, Exe IIC Gb, Exd IIC Gb, Extb IIC Db, (Ex) I M2 / II 2GD.
- Certification Pending.
- Operating Temperature Range -60°C to +80°C.
- Group I, II and II.

General Information

- For converting dissimilar or similar thread forms or thread sizes.
- Manufactured in Brass, Nickel Plated Brass, Steel, Nickel Plated Steel, Stainless Steel and Aluminium.
- Insulating Material: Polyamide
- M20 to M75 as standard.
- Other parallel thread options available on request, including BSPP, PG, ET and NPSM. NPT threads (Male only) can also be supplied in sizes ranging from ½" to 3"
- Male and Female thread entries are the same.
- Suitable for use in Zone 1, Zone 2, Zone 21 and Zone 22.
- Construction and Test Standards: IEC/EN 60079-0, IEC/EN 60079-1 IEC/EN 60079-7 and IEC/EN 60079-31.
- Ingress Protection: IP66.
- Assembly Instruction Sheet: AI Pending.

SELECTION TABLE

Male Thread Size	Thread Pitch (mm)	Female Thread Size	Thread Pitch (mm)	Thread Length (mm)	Across Flats (mm)	Across Corners (mm)
M20	1.5	M20	1.5	15	36.0	39.5
M25	1.5	M25	1.5	15	46.0	50.5
M32	1.5	M32	1.5	15	55.0	60.6
M40	1.5	M40	1.5	15	65.0	70.5
M50	1.5	M50	1.5	15	80.0	88.0
M63	1.5	M63	1.5	15	95.0	104.0
M75	1.5	M75	1.5	15	106.4	115.0

Ordering Example:

Always state the male thread first

Product	Thread Size	Pitch	Material	Finish
478	M20 Male x ¾" NPT Female	1.5 mm	Brass	Nickel Plated

Increased Safety Exe

Shrouds



General Information

- Available in sizes Os to J.
- Suitable for outdoor or indoor use.
- For fitting over cable glands when additional environmental and corrosion protection is required.
- Manufactured in Low Smoke and Fume, Halogen Free TPE material with excellent UV, ozone and weathering resistance.
- Black supplied as standard, other colour options are available, please contact the Hawke Sales Team for further information.

Ordering Example:

Product	Thread Size
Shroud	C

Nylon & Red Fibre Washers



General Information

- For use on cable gland entry threads.
- To maintain ingress protection rating at the enclosure.
- Retaining "pips" make washer captive on metric cable gland entry thread.
- M80 and above washers are only available in Red Fibre.

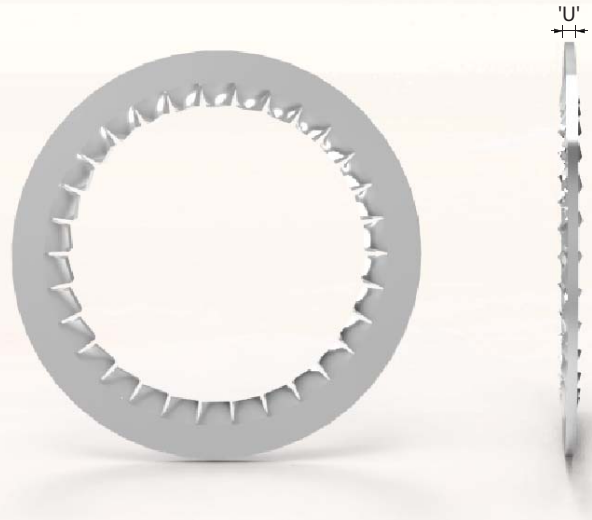
Note: All dimensions are in millimetres except * where dimensions are in inches.

SELECTION TABLE		
Gland Size Metric	Gland Size NPT *	Thickness
M16	½"	1.5
M20	¾"	1.5
M25	1"	1.5
M32	1 ¼"	1.5
M40	1 ½"	1.5
M50	2"	1.5
M63	2 ½"	1.5
M75	3"	1.5
M80	3 ½"	1.5
M90	3 ½"	1.5
M100	4"	1.5
M110	4 ½"	1.5
M115	4 ½"	1.5
M120	5"	1.5
M130	5"	1.5

Ordering Examples:

Product	Thread Size	Product	Thread Size
Nylon Washer	M25	Fibre Washer	M25

Serrated Washer



General Information

- For use on cable gland entry threads.
- To dampen vibrations of the cable gland / equipment assembly.
- Manufactured in Stainless Steel as standard.

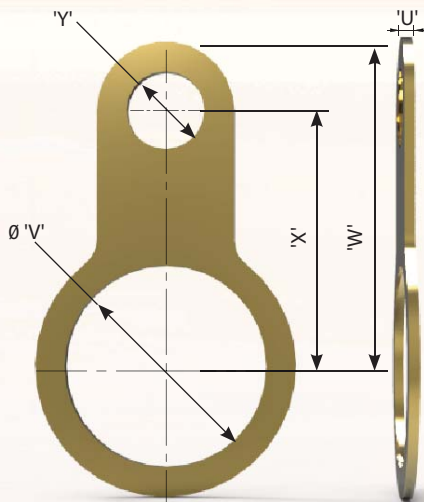
Note: All dimensions are in millimetres except * where dimensions are in inches.

SELECTION TABLE		
Gland Size Metric	Gland Size NPT *	'U'
M16	½"	1.5
M20	¾"	1.5
M25	1"	1.5
M32	1 ¼"	1.5
M40	1 ½"	1.5
M50	2"	1.5
M63	2 ½"	1.5
M75	3"	1.5
M80	3 ½"	1.5
M90	3 ½"	1.5
M100	4"	1.5
M110	4 ½"	1.5
M115	4 ½"	1.5
M120	5"	1.5
M130	5"	1.5

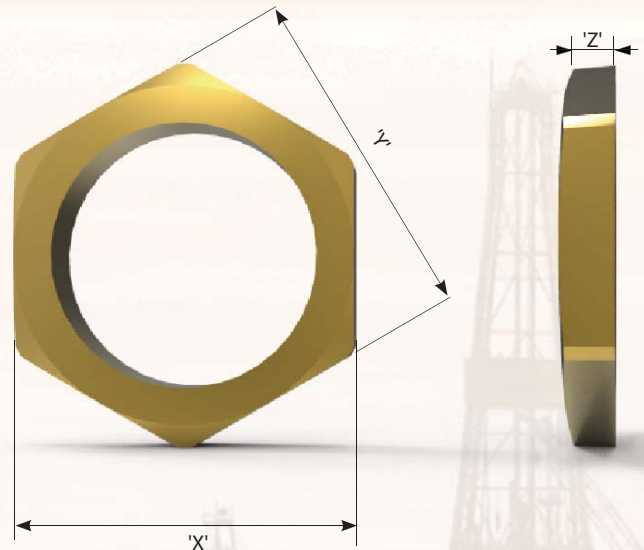
Ordering Examples:

Product	Thread Size	Product	Thread Size
Serrated Washer	M25	Serrated Washer	1" NPT

Earthtags



Locknuts



General Information

- Provides an earth bond attachment for a cable gland.
- Manufactured in Brass as standard.
- Stainless Steel earthtags are available, but the dimensions may differ slightly to those stated in the selection table. Please contact the Hawke Sales Team for details.

General Information

- For use on cable gland entry threads.
- Manufactured in Brass as standard.
- Stainless Steel locknuts are also available, but dimensions may differ from the ones in the table.

Note: All dimensions are in millimetres.

SELECTION TABLE

Gland Size 'V'	'Y'	'W'	'X'	'Z'
M20	6.75	39.6	33.1	1.6
M25	6.85	45.5	36.5	1.6
M32	12.6	52.0	40.9	1.6
M40	13.4	59.6	44.2	1.6
M50	13.5	78.9	58.1	1.6
M63	13.5	87.6	66.8	1.6
M75	13.5	93.7	72.9	1.6
M80	14.0	128.0	104.0	3.0
M90	14.0	128.0	104.0	3.0
M100	14.0	128.0	104.0	3.0
M110	TBC	TBC	TBC	TBC
M115	TBC	TBC	TBC	TBC
M120	TBC	TBC	TBC	TBC
M130	TBC	TBC	TBC	TBC

Ordering Examples:

Product	Thread Size
Earthtag	M25

Note: All dimensions are in millimetres except * where dimensions are in inches.

SELECTION TABLE

Gland Size	Across Flats 'X'	Across Corners 'Y'	'Z'	NPT * Gland Size	Across Flats 'X'	Across Corners 'Y'	'Z'
M16	19.0	21.9	3.2	—	—	—	—
M20	24.2	26.9	4.0	½"	30.0	33.6	4.7
M20	24.0	26.9	4.0	¾"	30.0	33.6	4.7
M25	30.0	33.6	4.0	1"	36.0	40.3	6.4
M32	46.0	53.1	4.0	1 ¼"	46.0	53.1	6.4
M40	65.0	53.1	4.8	1 ½"	55.0	61.6	6.4
M50	80.0	72.8	4.7	2"	65.0	72.8	6.4
M63	95.0	89.6	6.4	2 ½"	80.0	89.6	6.4
M75	106.4	107.0	6.4	3"	95.0	107.0	6.4
M80	106.4	119.2	10.0	3 ½"	127.0	143.0	9.0
M90	106.4	119.2	10.0	3 ½"	127.0	143.0	9.0
M100	127.0	142.2	10.0	4"	139.0	158.0	9.0
M110	TBC	TBC	TBC	TBC	TBC	TBC	TBC
M115	TBC	TBC	TBC	TBC	TBC	TBC	TBC
M120	TBC	TBC	TBC	TBC	TBC	TBC	TBC
M130	TBC	TBC	TBC	TBC	TBC	TBC	TBC

Ordering Examples:

Product	Thread Size	Material	Product	Thread Size	Material
Locknut	M25	Brass	Locknut	1" NPT	Brass

OTHER PRODUCTS



Junction Boxes

Range consists of a large variety of sizes of enclosures manufactured from stainless steel or glass reinforced plastics which enable safe, reliable circuit connections in gas and dust hazardous areas. Supplied predominately to the oil and gas producing industries.



Cable Glands

An environmental and explosion protected barrier for cable entry into various electrical equipment, different designs being focused on different cable types and the protection the cable uses (i.e. PVC outer jackets etc). Major use is in hazardous areas where explosive gases are present. Supplied predominately to the oil, gas and pharmaceutical producing industries



Connectors

Topside electrical connections using a pin and socket arrangement which gives explosion protection for low - medium power and instrumentation connections.



OUR BRANDS

Extreme environments demand superior performance, which is why you will find Hubbell products and systems installed in some of the most arduous and safety critical locations worldwide.

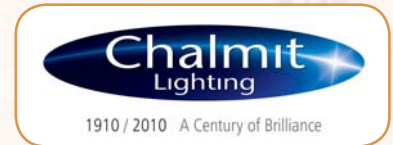
The **Hubbell Harsh & Hazardous** group combines dedicated, market leading brands within Hubbell portfolio to provide a complete package for companies operating in some of the toughest environments on the planet.

We are committed to providing quality products and services that will meet and exceed your expectations. Our principal activities include the design and manufacture of rugged and hard wearing products. These includes telephones and communication products; lighting, control gear and electrical connection products, all designed to operate primarily in extreme outdoor, hazardous and corrosive areas.

Our primary industry sectors include:

- Oil & Gas
- Petrochemical
- Industrial
- Marine
- Military
- Transport
- Commercial

Our brands are all long established and well respected businesses within each of their industries



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