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Reducer and Adaptor EXDE





Adaptors and reducers provide a method of matching electrical thread forms on hazardous area approved equipment while ensuring that integrity and Ex approval of the installation is maintained.

Manufactured from hexagon material to facilitate easy installation they are also complete with a captive o-ring seal. The o-ring is located in a recess on the face of the product, helping to protect the o-ring from environmental damage and ensuring that it is not displaced during installation.

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 where the thread size of the cable gland device is smaller than the entry thread enclosure.

Adaptors and reducers are designed for hazardous area applications and are certified to protection concepts Exd "Flameproof" and Exe "Increased Safety" for use in Zone 1 and Zone 2 applications.

- Protection method: Exd - Flameproof/Exe - Increased safety . Ingress protection: IP66/IP67/IP68 to a depth of 2 mtr. . Ambient temperature range: - 50C° to 100 C° Brass CZ121, 316 stainless steel, aluminium 6082, mild steel EN1A Materials: Plating: Nickel, electroless nickel, zinc, others up
- O-ring materials:
 - Standards approved to:
- Approval:

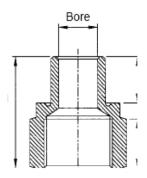
Nitrile, silicone, vitron, EDPM, neoprene, others up IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0 IEC 61241-1 Cenelec ATEX, IECEx, GOST-R, CSA SIRA 00ATEX 1094X IECExSIR 12.0016X CSA 1248014CLR106084-2

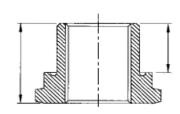
			Adaptor						
	Female Male	M16	M20	M25	M32	M40	M50	M63	M75
	M16		8002143						
	M20	8002426 / 8009123 *	8002144	8002145	8000543				
	M25	8002791	8002151 / 8008415*		8002417				
Reducer	M32		8002077	8002078 / 8008416*		8000546	8073846		
	M40		8002086	8002079	8002080 / 8008411*		8002418		
	M50		8000682	8002676	8002828	8002429		8002419	
	M63		8060357	8060356	8005960	8000686	8002827		
	M75							8002789	

*The part number highlighted with * refers to the Nickel Plated product The items are also available in RG and NPT sizes



Order Code for Reducer and Adaptor





		Example		
SAX	M20	M25	1	0
1: Adaptor	2: Male	3: Female	4: Material	5: Plating

1: Туре.
SAX = Adaptor
SRX = Reducer
SAVX = 90 deg C Adaptor

2: Male
M16-M20-M25-M32-M40-M50-M63-M75
1/2"NPT-3/4"NPT-1"NPT-1.1/4"NPT-1.1/2"NPT-2"NPT-2.1/2"NPT
PG7-PG9-PG11-PG13,5-PG16-PG21-PG29-PG36-PG42-PG48

3: Female
M16-M20-M25-M32-M40-M50-M63-M75
1/2"NPT-3/4"NPT-1"NPT-1.1/4"NPT-1.1/2"NPT-2"NPT-2.1/2"NPT
PG7-PG9-PG11-PG13,5-PG16-PG21-PG29-PG36-PG42-PG48

4: Material
1 = Brass (Standard stock)
2 = Stainless Steel 316
3 = Aluminium

5: Plating

0 = Unplated (Standard stock)

1 = Nickel

Other dimensions or materials up.



Exd "Flameproof" and Exe "Increased Safety" Dome **Head Stopping Plugs**



Dome head stopping plugs provide a method of blanking off unused entries in approved hazardous area equipment while ensuring that integrity and Ex approval of the installation are maintained.

Dome head plugs are designed to be installed with an Allen key from the outside of an enclosure and are supplied complete with a captive o-ring seal. The o-ring is located in a recess on the face of product, helping to protect the o-ring from environmental damage and ensuring that it is not displaced during installation. Dome head stopping plugs are designed for hazardous area applications and are certified to protection concepts Exd "Flameproof" and Exe "Increased Safety" for use in zone 1 and zone 2 applications.

Protection method:

Exd - Flameproof/Exe - Increased Safety

Ingress protection maintained: IP66/IP68 to a Depth of 2 Metres

20 Nm (7Nm for Aluminium Products)

- Impact resistance:
- Ambient temperature range: Materials:
- -50C° to 100C° Brass CZ121, 316 Stainless Steel, Aluminium 6082
- Plating:

Nickel, Electroless Nickel, Zinc. Other materials are available up

	Available sizes and dimensions					
Size	Hex socket	Thread length	Total length	Order number Brass	Order number Nylon	Order number Nickel Plated
M16	8	16	21.5	8001308		8008423
M20	10	16	21.5	8002148	8002147	8008420
M25	10	16	21.5	8002149	8008555	8008421
M32	10	16	21.5	8002499		8008422
M40	10	16	21.5	8002500		8008424
M50	10	16	21.5	8002354		8008419
M63	10	16	21.5	8010656		
M75	10	16	21.5			

Other thread forms and materials are available up.

Metric, NPT NPSM, ISO Pipe (BSP), PG Thread former: ET Materials: Brass, 316 Stainless Steel, Aluminium SIRA 00ATEX1094X, IECExSIR 12.0016X Certicate:



Exe "Increased Safety" Hexagon Head Stopping **Plugs**



Hex Head Stopping Plugs provide a method of blanking off unused entries in hazardous area approved equipment while ensuring that integrity and Ex approval of the installation is maintained

The PH-E series of stopping plugs is designed to be installed from the outside of an enclosure and can be used in a threaded or un-threaded entry hole. An appropriate sized sealing washer can be used to ensure the required level of ingress protection.

Hex Head Stopping Plugs are designed for hazardous area applications and are certified to protection concept Exe "Increased Safety" for use in Zone 1 and Zone 2 applications.

- Protection method: Exe - Increased Safety
- Ingress protection maintained: IP64 7Nm
- Impact resistance:

Available sizes and dimensions					
Size	Thread length	Total length	Order number Brass		
M16	10	14.5	8000580		
M20	10	15	8002150		
M25	10	15	8002124		
M32	10	15	8000581		
M40	10	15.5	8002825		
M50	10	15.5	8002834		
M63	10	16	8002838		
M75	10	16			

The product is also available in NPT and PG sizes

Other thread forms and materials up.

Thread forms:	Metric, NPT NPSM, ISO Pipe(BSP), PG ET
Materials:	Brass, 316 stainless steel, aluminium

- Ambient temperature range 50°C to 100°C
- Brass CZ121, 316 stainless steel, aluminium 6082 . Materials
 - Plating Nickel, electroless nickel, zinc, others up

None

• O-ring material

.

- Standards approved to IEC 60079-0, IEC 60079-1, IEC 61241-0, IEC 61241-1
- CENELEC ATEX approval SIRA00ATEX3092X



Exd "Flameproof" Type "A" and Type "B" Stopping Plugs





A Type: Externally accessible hexagon recess

B Type: Internally accessible hexagon recess

Type "A" and "B" Stopping Plugs provide a method of blanking off unused entries in hazardous area approved equipment while ensuring that integrity and Ex approval of the installation is maintained.

Type A Stopping Plugs are designed to be installed from the outside of an enclosure and tightened with an appropriate Allen key. When installed they fall flush with the outside of the enclosure wall.

Type B Stopping Plugs are designed to be installed from the outside of an enclosure. The hexagon recess is located on the inside and the plug is tightened with an appropriate Allen key. Due to this feature they are sometimes referred to as tamper-proof stopping plugs. When installed they fall flush with the outside of the enclosure wall.

- Protection method
 Exd Flameproof
- Ingress protection maintained IP64
- Impact resistance 7Nm

Materials

Plating

- Ambient temperature range 50°C to 100°C
 - Brass CZ121, 316 stainless steel, aluminium 6082
 - Nickel, electroless nickel, zinc, others up
- O-ring materials
 None
 - Standards approved to IEC 60079-0, IEC 60079-1, IEC 61241-0, IEC 61241-1
 - CENELEC ATEX approval SIRA99ATEX1113X, IECEX SIR 0016X



Type A and Type B Stopping Plugs are designed for hazardous area applications and are certified to protection concept Exd "Flameproof" for use in Zone 1 and Zone 2 applications.

Available sizes and dimensions					
Size	Hex socket A/F	Total length	Order number Brass		
M16 Type A	8	17			
M20 Type A	10	17	8002720		
M25 Type A	10	17	8002721		
M32 Type A	10	17	8002724		
M40 Type A	10	17			
M50 Type A	10	17	8002727		
M63 Type A	10	17	8002728		
M75 Type A	10	17	8003695		
M16 Type B	8	17			
M20 Type B	10	17	8002722		
M25 Type B	10	17	8002723		
M32 Type B	10	17	8002725		
M40 Type B	10	17	8002729		
M50 Type B	10	17			
М63 Туре В	10	17	8002730		
M75 Type B	10	17			
PG-7 Type B	6	16			
PG11 Type B	10	17	8002731		
PG-13.5 Type B	10	17	8002732		
PG-16 Type B	10	17	8002733		
PG-21 Type B	10	17	8002734		
PG-29 TypeB	10	17	8002735		

Other thread forms and materials up.

Thread forms:Metric, NPT NPSM, ISO Pipe(BSP), PG ETMaterials:Brass, 316 stainless steel, aluminium



Exe "Increased Safety" Breather Drains (metallic) – DP-E Series



Description

Redapt DP-E series of Exe breather drains provide a method of preventing moisture build-up within a hazardous area approved enclosure whilst ensuring the integrity and Ex approval of the installation is maintained.

They allow for air within an enclosure to breathe with the surrounding atmosphere helping to prevent condensation and any potential damage to sensitive electric/electronic equipment housed within. All whilst maintaining an IP66 rating of the enclosure it is installed in.

Designed for hazardous area applications, Redapt's DP-E series of breather drains are certified to protection concept Exe "Increased Safety" for use in Zone 1 and Zone 2 applications. Also certified Ex tb "dust tight" for use in Zone 21 & 22 applications.

Materials

- Brass CZ121
- 316 stainless steel
- Aluminium

Plating options

- Electroless nickel
- Zinc
- Others on application

Threadforms

- Metric
- NPT

Code of protection categories	 ATEX: I M2/II 2 GD, Ex e I/II Mb Gb, Ex tb IIIC Db IECEx: Ex e I/IIC Mb/Gb, Ex tb IIIC Db CSA: Ex eb IIC Gb IP66 CI I Zn 1 AEx eb IIC Gb Enclosure Type 4X (NEMA 4X)
Compliance standards	 ATEX: EN 60079-0, EN 60079-7, EN 60079-31 IECEx: IEC 60079-0, IEC 60079-7, IEC 60079-31 CSA: C22.2 No. 0-10, CAN/CSA C22.2 NO. 18.3-12, CAN/CSA C22.2 No. 60079-0, CAN/CSA C22.2 No. 60079-7, CAN/CSA C22.2 NO. 94-M91 ANSI/UL 514B, ANSI/UL 60079-0 ANSI/UL 60079-7, ANSI/UL 50
Certificate details	- ATEX: ITS16ATEX101338X - IECEx: IECEx ITS 16.0014X - EAC: RU C-GB.M 62.B.06227 - CSA: CSA00CA1033919X - INMETRO: NCC 18.0165 X

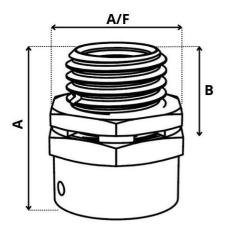
Technical specifications



Temperature	Dependent on filter and O-ring seal Metallic body: -60°C to +200°C, without an O-ring seal
Filter options	HDPE filter: -50°C to 85°C Metal filter: dependent on interface material
Interface O-ring Material options	 Nitrile: -30°C to +80°C (supplied as standard with HDPE filter version) EPDM: -50°C to +100°C Neoprene: -40°C to +80°C Viton: -20°C to +180°C Silicone: -60°C to +180°C Fluorosilicone: -60°C to +130°C
Ingress protection (IP):	IP66 when fitted in accordance to manufacturer's instructions.
Part number	Please refer to part numbering system below

Dimensions

Size	A/F	Overall length (A)	Thread length (B)
M20	28.60	23.00 (min.)	10.00 (min.)
M25	34.90	23.00 (min.)	10.00 (min.)
M32	41.30	23.00 (min.)	10.00 (min.)
½" NPT	28.60	28.00 (min.)	15.00 (min.)
³₄" NPT	34.90	28.00 (min.)	15.00 (min.)
1" NPT	41.30	28.00 (min.)	15.00 (min.)





Increased safety (Exe) breather drains (metallic) - Product coding

Product	Digits 1 & 2
DP	Increased Safety BREATHER DRAIN <u>DP</u>

Certification	Digit 3
Ē	Exe I and IIC

Material	Digit 4	
1	Brass	
3	Stainless steel	
5	Aluminium	

Plating	Digit 5
<u>0</u>	Unplated
1	Electroless nickel
2	Zinc

Digits 6 & 7
Thread type
<u>04</u> M20
05 M25
06 M32
29 1/2" NPT
30 3/4" NPT
31 1" NPT

Digits 8 & 9		
Thread length	Hole position	Castellated I/nut
<u>S1</u> - HDPE filter 10mm	2 Holes	With
S2 - HDPE filter 10mm	2 Holes	Without
S3 - HDPE filter 15 mm	3 Holes	With
S4 - HDPE filter 15 mm	3 Holes	Without
M1 - Metallic filter 10mm	2 Holes	With
M2 - Metallic filter 10mm	2 Holes	Without
M3 - Metallic filter 15 mm	3 Holes	With
M4 - Metallic filter 15 mm	3 Holes	Without

EXAMPLE

Digits 1 & 2	Digit 3	Digit 4	Digit 5	Digit 6 & 7	Digit 8 & 9
DP	Ē	<u>3</u>	<u>0</u>	<u>04</u>	<u>S1</u>
Breather drain	Exe I and IIC	Stainless steel	Unplated	M20	10mm

Notes:

- NPT threaded breather drains are only available in S3 and S4 options

- Default option is S3



PG

Thread dimension chart

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	1	
M80	79.97	12.70
M85	84.97	12.70
M90	88.97	12.70
M100	99.97	12.70
M110	109.97	12.70
M120	119.97	12.70

NPT

Size	Pipe dia.	TPI
1⁄2"	21.34	14.00
3⁄4"	26.67	14.00
1"	33.40	11.50
11⁄4"	42.16	11.50
11⁄2"	48.26	11.50
2"	60.33	11.50
21⁄2"	73.03	8.00
3"	88.90	8.00
31⁄2"	101.60	8.00
4"	114.30	8.00

BS 3643 1.5mm pitch Major TPI Size dia. PG7 12.50 20.00 PG9 15.20 18.00 PG11 18.60 18.00 PG13.5 20.40 18.00 PG16 22.50 18.00 PG21 16.00 28.30 PG29 37.00 16.00 PG36 47.00 16.00 PG42 54.00 16.00 PG48 59.30 16.00

Alternate ISO pipe thread designations

BS 3643 1.5mm pitch

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

BSP ISO pipe thread

ISO R/7; UNI 6125		
Size	Pipe Dia.	TPI
3/8"	16.66	19.00
1/2"	20.96	14.00
³ /4"	26.44	14.00
1"	33.25	11.00
11⁄4"	41.91	11.00
11⁄2"	47.80	11.00
2"	59.61	11.00
21/2"	75.18	11.00
3"	87.88	11.00

ET imperial conduit

BS31		
Size	Pipe Dia.	TPI
5/"	15.88	18.00
³ /4"	19.05	16.00
1"	25.40	16.00
11⁄4"	31.75	16.00
1½"	38.10	14.00
2"	50.80	14.00
21/2"	63.50	14.00
3"	76.20	14.00



Reducer - Adaptor and Blind Plug

Thread dimension substitution chart

Metric	NPT (or NPS)	PG	BSP ISO Pipe	ET
M16	-	7, 9	-	5⁄8"
M20	1/2"	11, 13.5	1/2"	3/"
M25	3⁄4"	16	3/4"	1"
M32	1"	21	1"	11⁄4"
M40	11⁄4"	29	1¼"	11⁄2"
M50	11/2"	36	11⁄2"	2"
M63	2"	42, 48	2"	21⁄2"
M75	21/2"	-	21/2"	3"
M90 x 2.0	3"	-	3"	-
M100 x 2.0	31⁄2"	-	-	-
M110 x 2.0	-	-	-	-
M120 x 2.0	-	-	-	-



Part numbering system

Adaptors and reducers			
Page No.	Product	Digits 1 & 2	
14-17	<u>AD</u>	Adaptor	
14-17	RD	Reducer	
18	TA	Swivel – in-line male to female	
18	TC	Swivel – in-line female to female	
18	TD	Swivel – in-line male to male	
18	TP	Swivel – 90° male to female	
18	TQ	Swivel – 90° female to female	
18	TR	Swivel – 90° male to male	
19	AY	'Y' adaptor	
20	AT	'T' adaptor	
21	AR	90° adaptor	
22	AM	Male to male adaptor	
23	AF	Female to female adaptor	
24-25	DB	Insulated adaptor	
Stopping Plugs			
26-27	PD	Dome head plug	
28	PA	Type A plug	
28	РВ	Type B plug	
Breather Drains			
31	DP	Breather drain (Exe)	

Certification	Digit 3
<u>U</u>	Exd and IIC & EXE I and IIC
D	Exd I and IIC
E	Exd I and IIC
F	Industrial (market product)

Material	Digit 4
<u>1</u>	Brass
2	Mild steel
3	Stainless steel
4	Glass filled nylon
5	Aluminium
6	Nylon 6
7	Red fibre

Plating	Digit 5
0	Unplated
<u>1</u>	Electroless nickel
2	Zinc
6	Chromated

Other products

32

34	UN	Union – male to female
34	UF	Union – female to female
35	AE	Earth lead adaptor

ΒD

Breather drain (Exde)



Example

Digits 1 & 2	Digit 3	Digit 4	Digit 5	Digit 6 & 7	Digit 8 & 9
AD	<u>U</u>	<u>1</u>	<u>1</u>	<u>29</u>	<u>04</u>
Adaptor	Exd/e certified	Brass	Nickel-plated	1/2" NPT (male)	M20 (female)

Always quote male thread first.

Ordering Information

Part number	Description	Manufacturer's part number
8042549	Drain Plug M20 EEXE SS316	DPE3004S1



Exe "Increased safety" Breather Drains (nylon) – DP-E4 Series



Description

Redapt DP-E4 series of Exe breather drains provide a method of preventing moisture build-up within a hazardous area approved enclosure whilst ensuring the integrity and Ex approval of the installation is maintained.

They allow for air within an enclosure to breathe with the surrounding atmosphere helping to prevent condensation and any potential damage to sensitive electric/electronic equipment housed within.

All whilst maintaining an IP66 rating of the enclosure it is installed in.

Designed for hazardous area applications, Redapt's DP-E4 series of breather drains are certified to protection concept Exe "Increased Safety" for use in Zone 1 and Zone 2 applications. Also certified Ex tb "dust tight" for use in Zone 21 & 22 applications.

Materials

Glass filled nylon

Threadforms

- Metric
- NPT

Code of protection categories	 ATEX: II 2 GD, Ex eb II Mb Gb, Ex tb IIIC Db IECEx: Ex eb IIC Mb/Gb, Ex tb IIIC Db CSA: Ex eb IIC Gb IP66 CI I Zn 1 AEx eb IIC Gb Enclosure Type 4X (NEMA 4X)
Compliance standards	 ATEX: EN 60079-0, EN 60079-7, EN 60079-31 IECEX: IEC 60079-0, IEC 60079-7, IEC 60079-31 CSA: C22.2 No. 0-10, CAN/CSA C22.2 NO. 18.3-12, CAN/CSA C22.2 No. 60079-0, CAN/CSA C22.2 No. 60079-7, CAN/CSA C22.2 NO. 94-M91 ANSI/UL 514B, ANSI/UL 60079-0 ANSI/UL 60079-7, ANSI/UL 50
Certificate details	- ATEX: ITS16ATEX101338X - IECEx: IECEx ITS 16.0014X - EAC: RU C-GB.M 62.B.06227 - CSA: CSA00CA1033919X - INMETRO: NCC 18.0165 X

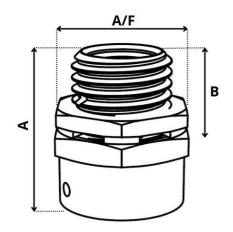
Technical specifications



Temperature	Dependent on filter and O-ring seal Nylon body: -30°C to +90°C, unless limited by filter material
Filter options	HDPE filter: -50°C to 85°C
Interface O-ring Material options	 Nitrile: -30°C to +80°C (supplied as standard) EPDM: -50°C to +100°C Neoprene: -40°C to +80°C Viton: -20°C to +180°C Silicone: -60°C to +180°C Fluorosilicone: -60°C to +130°C
Ingress protection (IP):	IP66 when fitted in accordance to manufacturer's instructions.
Part number	Please refer to part numbering system below

Dimensions

Size	A/F	Overall length (A)	Thread length (B)
M20	28.60	34.00 (min.)	17.00 (min.)
M25	34.90	34.00 (min.)	17.00 (min.)
½" NPT	34.90	32.00 (min.)	15.00 (min.)





Increased safety (Exe) breather drains (metallic) - Product coding

Product	Digits 1 & 2
DP	Increased Safety BREATHER DRAIN

Certification	Digit 3
Ē	Exe I and IIC

Material	Digit 4	
<u>4</u>	Glass filled nylon	

Plating	Digit 5
<u>0</u>	Unplated

Digits 6 & 7
Thread type
<u>04</u> M20
05 M25
29 1/2" NPT

Digits 8 & 9			
Thread length	Hole position	Castellated I/nut	
<u>S3</u> - HDPE filter 15 mm	3 Holes	With	
S4 - HDPE filter 15 mm	3 Holes	Without	

Alternative thread-forms and material on application.

EXAMPLE

Digits 1 & 2	Digit 3	Digit 4	Digit 5	Digit 6 & 7	Digit 8 & 9
DP	Ē	4	<u>0</u>	<u>04</u>	<u>S3</u>
Breather drain	Exe I and IIC	Glass filled nylon	Unplated	M20	15mm

Thread dimension chart

ISO metric

	BS 3643	1.5mm	pitch
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Size	Major dia.	TPI
M20	19.97	16.93
M25	24.97	16.93

NPT		
	R1	2

ANSI.ASME B1.20.1		
Size	Pipe dia.	TPI
1⁄2"	21.34	14.00



Reducer - Adaptor and Blind Plug

Digit 3 Exd and IIC & EXE I and IIC

Exd I and IIC

Exd I and IIC

Industrial (market product)

Digit 4 Brass

Mild steel

Stainless steel

Part numbering system

Adaptors and reducers

Page No.	Product	Digits 1 & 2			
14-17	<u>AD</u>	Adaptor			
14-17	RD	Reducer			
18	ТА	Swivel – in-line male to female			
18	TC	Swivel – in-line female to female			
18	TD	Swivel – in-line male to male			
18	TP	Swivel – 90° male to female			
18	TQ	Swivel – 90° female to female			
18	TR	Swivel – 90° male to male			
19	AY	'Y' adaptor			
20	AT	'T' adaptor			
21	AR	90° adaptor			
22	AM	Male to male adaptor			
23	AF	Female to female adaptor			
24-25	DB	Insulated adaptor			
Stopping Plugs					
26-27	PD	Dome head plug			

			Plating	Digit 5
	'Y' adaptor			
	male to male		7	Red fibre
	female to female Swivel – 90°		6	Nylon 6
			5	Aluminium
	Swivel – 90°		4	Glass filled nylon

Certification

<u>U</u>

D Е

F

Material

1 2

3

Plating	Digit 5	
0	Unplated	
<u>1</u>	Electroless nickel	
2	Zinc	
6	Chromated	

Stopping Plugs		
26-27	PD	Dome head plug
28	PA	Type A plug
28	PB	Type B plug

Breather Drains

31	DP	Breather drain (Exe)
32	BD	Breather drain (Exde)

Other products

34	UN	Union – male to female
34	UF	Union – female to female
35	AE	Earth lead adaptor



Example					
Digits 1 & 2	Digit 3	Digit 4	Digit 5	Digit 6 & 7	Digit 8 & 9
AD	<u>U</u>	<u>1</u>	<u>1</u>	<u>29</u>	<u>04</u>
Adaptor	Exd/e certified	Brass	Nickel-plated	1/2" NPT (male)	M20 (female)

Always quote male thread first.

Ordering Information

Part number	Description	Manufacturer's part number
8057460	Drain Plug 15mm long Offset (x3) M20 EEXE Nylon	DPE4004M3



781 Breather / Drain Plug, Explosive atmosphere cable

Drain plug, Globally approved, Explosive atmosphere cable, Conduit accessory.



Туре Е



Type D

Description

781E for Ex e use

781D for Ex d use

Drains equipment susceptible to moisture collection

Enables equipment to breathe

General purpose / industrial version available

Nylon Ex e only version available (-20°C to +60°C)

-60°C to +130°C (metallic versions)

Globally marked, UKEX, IECEx, ATEX and cCSAus

The 781D can be used with enclosures up to 30 litres for group IIB gases and enclosures up to 2.5 litres for group IIC gases

No enclosure volume restrictions apply to 781E

Technical classification

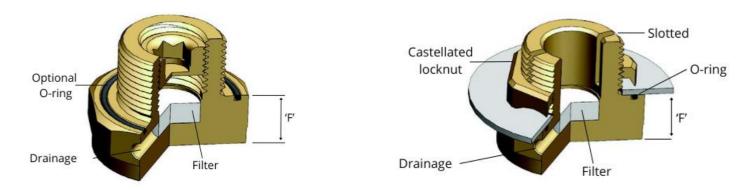
Design specification	BS 6121:Part 1:1989
Enclosure protection	IK10 to IEC 62262 (20 joules) Brass and Stainless Steel Only
	781D: IP66 (when fitted with CMP sealing accessories)
Ingress protection rating	781E: IP66 (with o-ring interface seal and lock nut as standard)
Available materials	Brass, Nickel Plated Brass, Aluminium, Stainless Steel, Nylon (781E only)
Continuous operating temperature	781D: -60°C to +130°C 781E: -60°C to +130°C (-20°C to +60°C Nylon)
Accessories included (781E only)	Integral Entry Thread equipment interface o- ring seal, Castellated Locknut

** When CMP installation accessories are used (781E).





The 781D can be used with enclosures up to 30 litres for group IIB gases and enclosures up to 2.5 litres for group IIC gases. No enclosure volume restrictions apply to 781E.



	Product selection table					
Ordering reference (781D)	Ordering reference (781E)	Thread size	Minimum thread length	Protrusion length 'F'	Across flats dimension	Across corners dimensions
781DM2	781EM2	M20 x 1.5	15.0	12.7	30.0	33.0
781DM3	781EM3	M25 x 1.5	15.0	12.7	36.0	39.6
781DT1	781ET1	½" NPT	19.9	12.7	30.0	33.0
781DT2	781ET2	³⁄₄" NPT	20.2	12.7	36.0	39.6
All dimensions shown are in millimeters unless otherwise stated						

How to order

e.g., 781 - D - M - 3 = Ex d - M25

e.g., 781 - E - M - 3 = Ex e - M25

Other thread variations are available on request.

The CMP 781E range of Increased Safety type 'e' breather / drain plugs have been tested together with CMP serrated washers to ensure that in areas that are subject to vibration the plug does not suffer from self-loosening and inadvertently fall out of the enclosure. Serrated washers are not included as standard but can be ordered separately.

Ordering Information

Part number	Description	Manufacturer's part number
8109703	781 EXD M25(M) ALUMINIUM BREATH/DRAIN 5 plug	781DM31
8109702	781 EXD M20(M) BREATHER/DRAIN PLUG 5 ALUMINIUM	781DM21
8094169	CMP Breather Drain Plug M25, Exd, Nickel Plated Brass	781DM35
8078097	CMP Drain Plug M20 Nickel Plated Brass	781EM2-NP
8010966	CMP Drain Plug M25 Nickel Plated Brass	781EM35-NP
8027639	CMP Drain Plug M20 SS316	781EM24



SEMCO
maritime

Global product certification			
ATEX Certificate	CML 18ATEX1330U	- IECEx Certificate	IECEx CML 18.0187U
UKEX Certificate	CML 21UKEX1241U		
Code of protection	781D: II 2G 1D Ex db IIC Gb, Ex ta IIIC Da	Code of protection	781D: Ex db IIC Gb, Ex ta IIIC Da
	781E: II 2G 1D Ex eb IIC Gb, Ex ta IIIC Da		781E:Ex eb IIC Gb, Ex ta IIIC Da
Compliance standards	EN 60079-0,1,7,31	Compliance standards	IEC 60079-0,1,7,31
cCSAus Certificate (20S16 - 100)	1055233	UL Certificate	E253914
Code of protection	781D: Ex d IIC, Class I, Zone 1 AEx d IIC; Class I Div 1, Groups A,B,C,D, Enclosure Type 4X	Code of protection	781D: Class I, Zone 1, AEx d IIB or IIC; Zone 20, AEx ta IIIC
	781E: Ex e II, Class I, Zone 1, AEx e II, Enclosure Type 4X		781E: Class I, Zone 1, AEx e IIC
Compliance standards	CSA C22.2 No 0-10, 0.5, 30, 94; CSA C22.2 60079- 0,1,7, E61241-1-1, UL50, 1203, UL60079-0,1,7	Compliance standards	UL 60079-0, 1, 7, 31
EAC Certificate		RU C-GB.АД07.В.02492/20	
Compliance standards		1Ex d IIC Gb X, 1Ex e IIC Gb X, 2Ex nR IIC Gc X, Ex ta IIIC Da X, IP66, IP67, IP68	
RETIE Approval Number	03866	CCOE / PESO (India) Certificate	P444949
ECAS Certificate	20-02-05264	UkrSEPRO Certificate	СЦ 19.0370U
Marine approvals	LRS: 01/00173	KCS Certificate	781E: 19-AV4BO-0255X 781D: 19-AV4BO-0254X
INMETRO approval		TÜV 12.133OU	
SANS		IA S-XPL21962 21.0304U	