

# DB Series IIB Unions

## Flameproof

Zone 1 and 21  
Gas (G) and Dust (D)

### Applications

- To be used with a fire retardant seal fitted directly at the entry to the flameproof housing. Enables connection via rigid or flexible union.
- Used for joining conduit and connecting conduit to enclosures.
- Facilitates modifications, permits the removal of enclosures without turning or removal of conduit.

### Features

- Accurately tapped, tapered threads for tight, rigid joints and ground continuity.

### Standard Materials

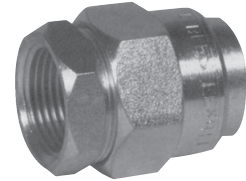
- Zinc plated steel

### ATEX/IECEx Certifications and Compliances

- **Certification Type BMF - BFF**
  - Gas: Zone 1
  - Type of Protection: Ex d IIB
  - Dust: Zone 21
  - Type of Protection: Ex tD A21
  - Conforming to ATEX 94/9/CE: Ⓢ II 2GD
  - Operating Temperatures: -20 °C to +60 °C
  - CE Declaration of Conformity: 5C232
  - ATEX Certificate: CESI 99 ATEX 034U
  - Index of Protection according EN/IEC 60529: IP66/67



500044



500049

Tapered Thread (NPT)	Weight kg	Volume dm <sup>3</sup>	Pack	Catalog Number
<b>Male/Female</b>				
1/2"	0.17	0.12	1	500044
3/4"	0.19	0.12	1	500045
1"	0.30	0.23	1	500046
1-1/4"	0.80	0.50	1	500047
1-1/2"	1.00	0.50	1	500048
<b>Female/Female</b>				
1/2"	0.15	0.12	1	500049
3/4"	0.15	0.12	1	500050
1"	0.23	0.23	1	500051
1-1/4"	0.70	0.50	1	500052
1-1/2"	0.37	0.50	1	500053
3"	0.90	2.00	1	500158

Shaded catalog numbers are normally stocked items. All other items are made to order.

# DB Series IIC Elbows

Zone 1 and 21  
Gas (G) and Dust (D)

## Applications

- Used to connect two lengths of conduit.
- Used to make 90° bends in conduit runs.

## Features

- Accurately tapped, tapered threads for tight, rigid joints and ground continuity.

## Standard Materials

- Aluminum

## Features

- Female to female thread.

## ATEX/IECEx Certifications and Compliances

- **Certification Type ELF**
  - Gas: Zone 1
    - Type of Protection: Ex d IIC Gb; Ex e IIC Gb
  - Dust: Zone 21
    - Type of Protection: Ex tb IIIC Db
  - Conforming to ATEX 94/9/CE: Ⓔ II 2GD
  - Operating Temperatures: -55 °C to +150 °C
  - CE Declaration of Conformity: 5C223
  - ATEX Certificate: CESI 01 ATEX 104U
  - IECEx Certificate: IECEx CES 15.0005U
  - Index of Protection according EN/IEC 60529: IP66/67



Tapered Thread (NPT)	Dimensions mm		Weight kg	Volume dm <sup>3</sup>	Catalog Number
	A	B			
1/2"	73	57	0.1	0.12	500054
3/4"	73	67	0.1	0.10	500055
1"	92	83	0.2	0.23	500056
1-1/4"	115	84	0.4	0.50	500057
1-1/2"	115	84	0.6	0.50	500058
3"	185	95	0.5	2.00	500059

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# DB Series IIC Flexible Couplings

## Flameproof

Zone 1 and 21  
Gas (G) and Dust (D)

### Applications

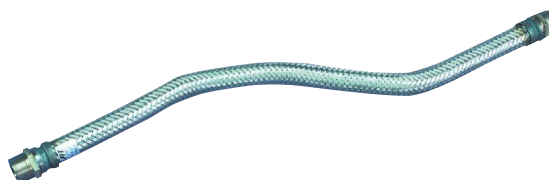
- Used in areas where vibration and/or movement are a problem.
- Used in place of rigid conduit in where it would be difficult to bend conduit.

### Standard Materials

- Stainless steel

### ATEX/IECEX Certifications and Compliances

- **Certification Type FLEXCO**
  - Gas: Zones 1
    - Type of Protection: Ex d IIC Gb
  - Dust: Zone 21
    - Type of Protection: Ex t IIIIC Db
  - Conforming to ATEX 94/9/CE: Ⓢ II 2G 2D
  - Operating Temperatures: -40 °C to +150 °C



- CE Declaration of Conformity: 5C247
- ATEX Certificate: LCIE 11 ATEX 3006U
- IECEX Certificate: IECEX LCIE 12.0011U
- Index of Protection according EN/IEC 60529: IP66

### Male/Male — To be used with fire-retardant seals or unions,

Tapered Thread (NPT)	Length mm	Weight kg	Volume dm <sup>3</sup>	Catalog Number	Pack
1/2"	100	0.65	1	500060	1
1/2"	170	0.70	1.75	500061	1
1/2"	250	0.70	2.5	500106	1
1/2"	300	0.75	3	500062	1
1/2"	400	0.80	4	500063	1
1/2"	500	0.85	5	500064	1
1/2"	600	0.90	6	500065	1
1/2"	700	0.95	7	500066	1
1/2"	800	1.00	8	500067	1
1/2"	900	1.05	9	500068	1
1/2"	1000	1.10	10	500069	1
3/4"	300	0.75	3	500070	1
3/4"	400	0.80	1	500071	1
3/4"	500	0.85	5	500072	1
3/4"	600	0.90	6	500073	1
3/4"	700	0.95	7	500074	1
3/4"	800	1.00	8	500075	1
3/4"	900	1.05	9	500076	1
3/4"	1000	1.10	10	500077	1
1"	300	0.75	3	500078	1
1"	400	0.80	1	500079	1
1"	500	0.85	5	500080	1
1"	600	0.90	6	500081	1
1"	700	0.95	7	500082	1
1"	800	1.00	8	500083	1
1"	900	1.05	9	500084	1
1"	1000	1.1	3	500085	1
1-1/4"	300	0.75	3	500086	1
1-1/4"	400	0.80	3	500087	1
1-1/4"	500	0.85	5	500088	1
1-1/4"	600	0.90	6	500089	1
1-1/4"	700	0.95	7	500090	1
1-1/4"	800	1.00	8	500091	1
1-1/4"	900	1.05	9	500092	1
1-1/4"	1000	1.10	10	500093	1
1-1/2"	300	0.75	3	500094	1
1-1/2"	400	0.80	1	500095	1
1-1/2"	500	0.85	5	500096	1
1-1/2"	600	0.90	6	500097	1
1-1/2"	700	0.95	7	500098	1

ZONE 1 CONDUIT FITTINGS

Fittings

# DB Series Fire Retardant Seal Flameproof

Zone 1 and 21  
Gas (G) and Dust (D)

## Applications

- Used to prevent passage of gasses, vapors or flames from one portion of a conduit system to another.

## Features

- Female to female threads.

## Standard Materials

- Aluminum

## ATEX Certifications and Compliances

- Certification Type EYS**
  - Gas: Zones 1
    - Type of Protection: Ex d IIC
  - Dust: Zone 21
    - Type of Protection: Ex tD A21
  - Conforming to ATEX 94/9/CE: Ⓢ II 2GD
  - Ambient Temperature: -60 °C to +130 °C
  - CE Declaration of Conformity: 50268
  - ATEX Certificate: CESI 03 ATEX 085
  - Index of Protection according EN/IEC 60529: IP66



Tapered Thread (NPT)	Dimensions mm				Qty of resin required	Weight kg	Volume dm <sup>3</sup>	Pack	Catalog Number
	A	B	B1	R					
<b>Aluminum Fire-Retardant Seal — Female/Female</b>									
1/2"	77		—	43	35 g	0.13	2.3	1	500146
3/4"	87	67	—	50	50 g	0.19	3.2	1	500147
1"	105	83	—	62	100 g	0.32	3.2	1	500148
1-1/4"	130	84	—	56	240 g	0.60	3.2	1	500149
1-1/2"	130	84	—	56	240 g	0.60	4.0	1	500150
2"	140	95	—	63	380 g	0.65	7.6	1	500151
2-1/2"	175	113	—	74	1250 g	1.26	7.6	1	500152
3"	190	—	135	92	1250 g	1.33	7.6	1	500153
<b>Fire Retardant Resin</b>									
1 kg pot of resin + 250 g of catalyst						1.5	3.2	1	500154
<b>Fire Retardant Fiber</b>									
1 kg bog						1.5	8.0	1	500155

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# DB Series Drain and Breather Valves

## Flameproof or Increased safety

Zone 1 and 21  
Gas (G) and Dust (D)

### Applications

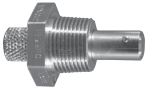
- Flameproof Bleed Valve:
  - Used to drain condensation from inside enclosures and boxes.
- Increased Safety Breather Drain:
  - Ensures that the condensation is evacuated from the lower section of the enclosures and limits the "pumping" effect in the upper section.

### Standard Materials

- Bleed Valve and Breather: nickel plated brass or stainless steel.
- Breather Drain: polyamide, brass or stainless steel

### ATEX/IECEX Certifications and Compliances

- **Certification Type DP-E**
  - Gas: Zones 1
    - Type of Protection: Ex e IIC Gb
  - Dust: Zone 21
    - Type of Protection: Ex tb IIC Db
  - Conforming to ATEX 94/9/CE: Ⓢ II 2G 2D
  - Ambient Temperature: -50 °C to +85 °C
  - CE Declaration of Conformity: 5C225
  - ATEX Certificate: Sira 99ATEX3050X
  - IECEx Certificate: IECEx SIR 08.0024X
  - Index of Protection according EN/IEC 60529: IP66


	Metric Thread	Material	Weight kg	Volume dm <sup>3</sup>	Pack	Catalog Number
<b>Flameproof Bleed Valve</b>						
<i>To be used only with our range of flameproof enclosure. The ATEX certification is included in our Exd enclosure's certification.</i>						
	M20	Nickel plated brass	0.20	0.33	1	<b>DBD20NB</b>
	M20	Stainless steel	0.20	0.33	1	<b>DBD20S</b>

### Flameproof Breather

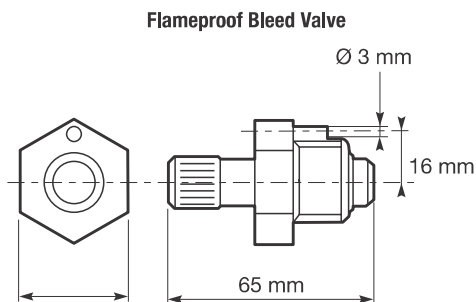
*To be used only with our range of flameproof enclosure. The ATEX certification is included in our Exd enclosure's certification.*

	M20	Nickel plated brass	0.20	0.33	1	<b>DBDB20NB</b>
	M20	Stainless steel	0.20	0.33	1	<b>DBDB20S</b>

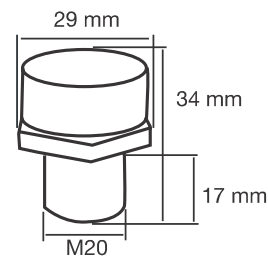
### Increased Safety Combination Drain and Breather (Type DP-E)

	M20	Polyamide	0.20	0.10	1	<b>DBE20P</b>
	M20	Brass	0.20	0.10	1	<b>DBE20B</b>
	M20	Stainless steel	0.20	0.10	1	<b>DBE20S</b>

### Dimensions in Millimeters



### Increased Safety Drain and Breather



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