**KB/KD SERIES DRAIN & BREATHERS**

**Applications**
When installed in the top of an enclosure, these fittings act as breathers which allow air flow through the enclosure. Bottom installations permit water from condensation to drain from the enclosure continuously. The drains and breathers are offered in a variety of hub sizes, 1/4, 3/8 & 1/2 inch NPT and metric M16 & M20.

**Body Material**
Aluminum with optional stainless steel or brass available for special orders.

**Volume**
For use in enclosures with a maximum internal volume to 9526 cubic inches or 160 liters.

**Specifications**
- Air flow = 83 + 15 / -25 SCFH at 5PSI
- Pressure drop = 1.3 PSI at 100 PSI
- Maximum flow pressure = 800 PSI
- Volume = For use in enclosures with a maximum internal volume of 9526 cubic inches or 160 liters.

**Typical Installation**

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**KB SERIES FLAME ARRESTOR**

**Applications**
The flame arrestor provides a means to connect gas analysis equipment and electro pneumatic devices' pipe or tubing system through the wall of an explosion-proof enclosure.

**Body Material:** 6061-T6 series aluminum provided as standard. Optional stainless steel or brass for special orders.

**Specifications**
- Class I, Div. 1 & 2, Groups B, C, D
- Class I, Zones 1 & 2, Groups IIB + H2
- Class II, Div. 1 & 2, Groups E, F, G
- Class III, NEMA Type 3, 4
- Class III, Type 3 & 4
- Class III, ENCL TYPE 3, 4
- Class III, ENCL TYPE 3 & 4
- Class III, NEMA Type 3, 4
- Ta = -50°C to +60°C
- For use in acetylene atmospheres

**Warning**
- Not for use in acetylene atmospheres
- See below for suitability

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**TABLES**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>External Hub Thread Size</th>
<th>Internal &amp; External Process Piping Thread Size</th>
<th>Third Party</th>
<th>Suitability USA</th>
<th>Third Party</th>
<th>Suitability Canada</th>
<th>Third Party</th>
<th>Suitability ATEX/IEC Ex</th>
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<tr>
<td>KB1F25</td>
<td>1/2 NPT</td>
<td>1/4 NPT</td>
<td>CSA</td>
<td>Class I Groups C &amp; D</td>
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<td>Class I Groups C &amp; D</td>
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<td>III 2 G Ex d IIIC T3 Gb IP66</td>
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</table>

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**Images and Charts**

- Diagram of KB/KD SERIES DRAIN & BREATHERS and KB SERIES FLAME ARRESTOR
- Table of specifications and body materials
- Warning labels for use in acetylene atmospheres
FEATUR ES-SPECIFICATIONS

Applications:
When installed in the top of an enclosure, this fitting acts as a breather to allow air flow through the enclosure. Bottom installation permits water from condensation to drain from the enclosure continuously.

Features
- Suitable for Explosionproof and Dust-Ignitionproof environments
- Type 3, 4, 4X Rating (NEMA)
- Machined 1/2” NPT Thread

Standard Materials
- Copper-Free Aluminum
- 316 Stainless Steel

Finish
- Anodized Lightblue - Aluminum
- Natural - 316 Stainless Steel

KB EXPLOSIONPROOF, DUST-IGNITIONPROOF AND TYPE 4X UNIVERSAL DRAIN OR BREATHER

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>THREAD SIZE</th>
<th>BODY MATERIAL</th>
<th>FINISH</th>
<th>SHIP CTN QTY</th>
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<td>Aluminum</td>
<td>ANODIZED LIGHTBLUE</td>
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<tr>
<td>KB1-4XS6</td>
<td>1/2” NPT</td>
<td>316 Stainless Steel</td>
<td>NATURAL</td>
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DIMENSIONS

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<th>CATALOG NUMBER</th>
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<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td></td>
<td>A/C</td>
<td>A/F</td>
<td>A/C</td>
<td>A/F</td>
<td>+/– 1/8” TYPICAL</td>
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<td>2-1/8&quot;</td>
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<td>7/8&quot;</td>
<td>51/64&quot;</td>
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</table>

Class I, Div. 1 & 2, Groups B™, C, D
Class I, Zones 1 & 2, Groups IIB + H₂
Class II, Div. 1 & 2, Groups E, F, G
Class III
Type 3, 4, 4X (NEMA)

Certified File - LR11716
Certified File - LR11716
File E10514
Certified File - LR11716

© Canadian suitability

Class I, Div. 1 & 2, Groups C, D
Class I, Zones 1 & 2, Groups IIB
Class II, Div. 1 & 2, Groups E, F, G
Class III
Type 3, 4, 4X (NEMA)
**FEATURES-SPECIFICATIONS**

**Applications**
When installed in the bottom of a thin wall enclosure the KDE allows water from condensation to drain continuously out of the enclosure. The drain breathers are installed through clearance holes and held secured with an internal locknut. The silicone external o-ring makes a hose down tight seal.

**Features**

- Silicone o-ring supplied as standard and suitable for use in a -55°C to +80°C temperature range.
- Available in 300 series stainless steel, 316 stainless steel, aluminum and 30% glass filled nylon.
- Internal 316 stainless steel locknut supplied as standard. When tightened to the proper torque the joint makes a hose down tight seal for type 4, 4X & IP66 application.

**Materials**

- 303 or 304 stainless steel, 316 stainless steel, brass, aluminum or 30% glass filled nylon.
- Internal locknut 316 stainless steel.
- High temp silicone o-ring

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**CLASSIFICATION**

Class I, Div. 2, Groups A, B, C, D
Class I, Zone 1 & 2, Ex e / AEx e IIIC, A/Ex tb
Class II, Div. 1 & 2, Groups E, F, G
Class III, Ambient Temperature Range -55°C to +80°C
Enclosure Type 3, 4 & 4X IP66

- IECEx QPS 15.0154X
- CML 15ATEX3028X
- PATENT PENDING

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### MATERIAL / CATALOG NUMBER

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<th>GLASS FILLED PA6 NYLON</th>
<th>ALUMINUM</th>
<th>316 STAINLESS STEEL</th>
<th>BRASS</th>
<th>NICKEL PLATED BRASS</th>
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Note: Other thread forms and materials available upon request.

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Class II Div. 1 Canada only, Div. 2 in the U.S.
Type 4X in 316 & 304 SS, Aluminum & Nylon materials only.