



# FILLER BREATHER BAYONET STYLE



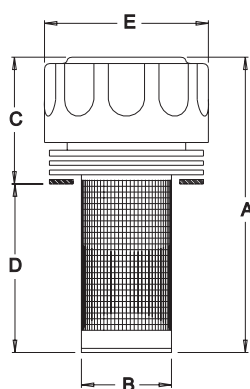
VESCOR® Filler Breathers are designed to be used as a filler port for tanks, hydraulic power units or other fluid containers. These units also lets the tank breathe while keeping out airborne particles.

### Features

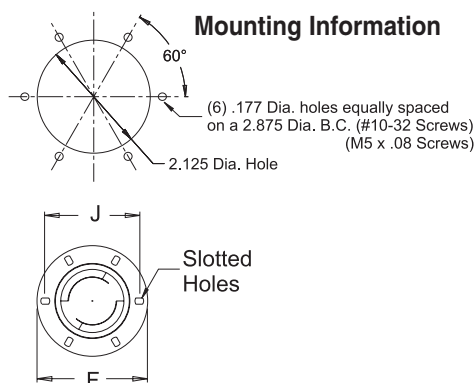
1. Bayonet Nickel-Chrome Plated Steel Cap - large capacity. Twist to lock removable cap breathes and filters air. Air vents are concealed allowing for outdoor applications. Fluted finger inserts for easy gripping. (except for non vented style)
2. 40 or 10 Micron Filtration (except for non vented style)
3. Safety Chain - prevents loss of cap
4. Heavy Duty Cork-Neoprene Gaskets provide a positive seal between flanges
5. Zinc Plated Flange - bayonet flange (SAE J829)
6. Customer Specified Strainer Baskets
  - 4" nylon strainer with solid dome bottom to prevent punchout
  - 3" stainless steel strainer, 30 mesh, 1-15/16 diameter large area for rapid filling
7. Thread Forming Screws - prevents particles from entering reservoir during installation by forming threads instead of cutting them

Options: Locking tabs

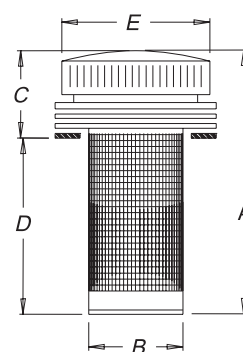
### Standard Bayonet Style



### Mounting Information



### Non Vented Bayonet Style



### Technical and Dimensional Details- Standard Bayonet Type

| Air Filtration |       | Air Flow Capacity | Oil Transfer Rate | Bayonet Flange |     |     |     |     |      |      |
|----------------|-------|-------------------|-------------------|----------------|-----|-----|-----|-----|------|------|
| Nominal Level  | Media |                   |                   | A              | B   | C   | D   | E   | F    | J    |
| 10 Micron      | Foam  | 15CFM             | 115GPM            | 6.1            | 1.9 | 2.3 | 3.8 | 3.0 | 3.25 | 2.88 |
| 40 Micron      | Foam  | 25CFM             | 192 GPM           | 6.1            | 1.9 | 2.3 | 3.8 | 3.0 | 3.25 | 2.88 |

### Non-Vented Filler Breathers

| Vescor Part Number | Style Cap  | Breather Style | Type Strainer Basket |
|--------------------|------------|----------------|----------------------|
| 5232               | Non vented | Non vented     | Nylon                |
| 5227               | Non vented | Non vented     | Stainless            |

### Standard Filler Breathers

| Vescor Part Number | Micron Rating | Cap Style | Breather | Strainer Basket Type |
|--------------------|---------------|-----------|----------|----------------------|
| 5201               | 40            | Std.      | Non-Pres | Nylon                |
| 5204               | 10            | Std.      | Non-Pres | Nylon                |
| 5216               | 40            | Std.      | Non-Pres | Stainless Steel      |
| 5220               | 10            | Std.      | Non-Pres | Stainless Steel      |

### Pressurized Filler Breathers-Standard Bayonet Style

| Vescor Part Number | Micron Rating | Cap Style | Breather  | Strainer Basket Type |
|--------------------|---------------|-----------|-----------|----------------------|
| 5201-5P            | 40            | Std.      | 5PSI-Pres | Nylon                |
| 5205               | 10            | Std.      | 5PSI-Pres | Stainless            |

### Dimensional Details - Non Vent Bayonet Style

| A   | B   | C   | D   | E   | F    | J    |
|-----|-----|-----|-----|-----|------|------|
| 5.1 | 1.9 | 1.3 | 3.8 | 3.0 | 3.25 | 2.88 |

### Metric Mounting Filler Breathers-Standard Bayonet Style

| Vescor Part Number | Micron Rating | Cap Style | Breather | Strainer Basket Type |
|--------------------|---------------|-----------|----------|----------------------|
| 5203               | 40            | Std.      | Non-Pres | Nylon                |

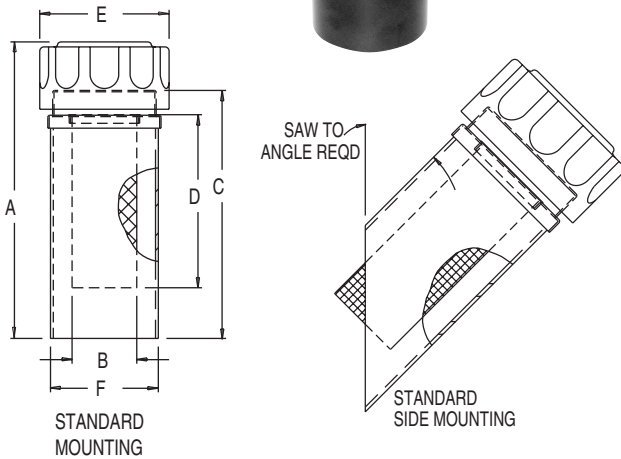
### Ordering Information Options

- For Locking Tabs add -LT to part number (3/8" dia. hole to accept padlock)(not available in non vented breathers)



# FILLER BREATHER

## Extended Neck



### Features

- Nickel-Chrome plated steel cap-large capacity. Twist to lock removable cap breathes and filters air. Air vents are concealed allowing for outdoor applications. Fluted finger insertions for easy gripping
- 40 micron filtration
- Bayonet flange (SAE J829)
- Removable 4" stainless steel 30 mesh strainer basket - 1 1/2" diameter large area for rapid filling
- Saw neck to any angle to mount on vertical side tank walls
- Ideal for mobile applications

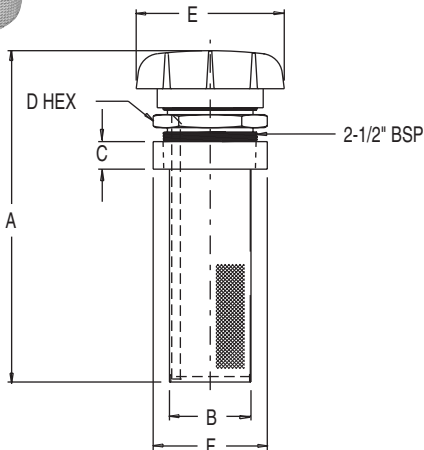
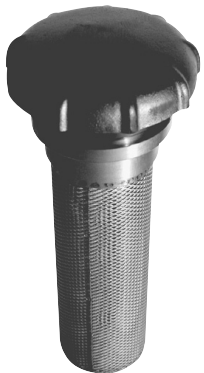
### Technical and Dimensional Details

| Vescor Part Number | Air Filtration |       | Air Flow Capacity | Oil Transfer Rate | Bayonet Flange |     |     |     |     |     |
|--------------------|----------------|-------|-------------------|-------------------|----------------|-----|-----|-----|-----|-----|
|                    | Nominal Level  | Media |                   |                   | A              | B   | C   | D   | E   | F   |
| 5201TRBS           | 40 Micron      | Foam  | 25CFM             | 192 GPM           | 6.8            | 1.5 | 5.7 | 4.0 | 3.0 | 2.5 |

### Mounting Information

Drill a 2.250/2.375 dia. hole. Place neck directly over hole and weld in place.

## Large Oil Filler/Breather



### Features

- For use on larger reservoirs. Provides reservoir with constant air filtration
- Galvanized steel body
- Aluminum breather cap
- Buna-n seals
- Sintered brass air filler
- 200 micron steel filtration element
- Complete assembly includes weld coupling

### Dimensional Details

| Vescor Part Number | Dimensions |     |     |     |     |     |     |
|--------------------|------------|-----|-----|-----|-----|-----|-----|
|                    | A          | B   | C   | D   | E   | F   | G   |
| TA212G             | 10.5       | 2.6 | 4.0 | 8.9 | 4.7 | 2.9 | 3.5 |

### Mounting Information

Drill a 3.000 dia. hole. Remove cap. Drop in screen assembly and weld in place



# FILLER BREATHER

## Side Mount



VESCOR® Side Mount Filler Breathers are designed to be used where top surfaces are not readily available for locating a filler port. This unit easily mounts on vertical tank walls. These units filter the fluid as it is added and also lets the tank breathe while keeping out airborne particles.

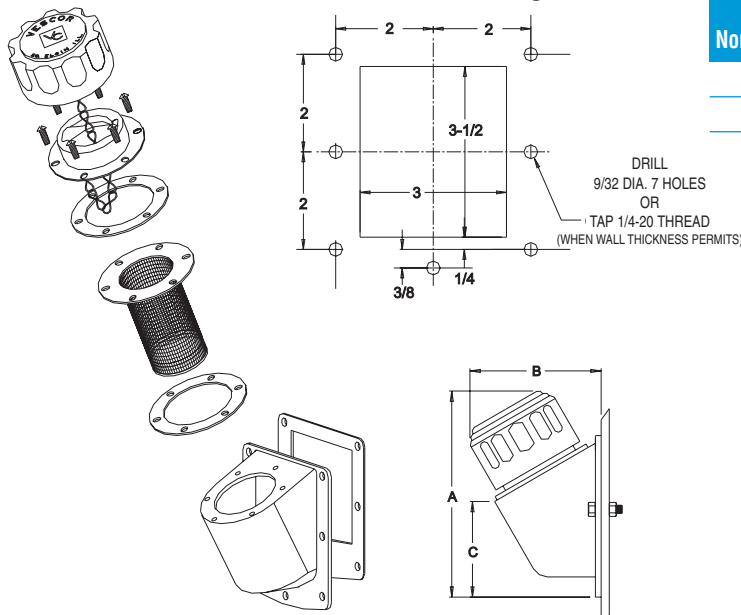
### Features

1. Nickel-Chrome Plated Steel Cap-large capacity. Twist to lock removable cap breathes and filters air. Air vents are concealed allowing for outdoor applications. Fluted finger insertions for easy gripping.
2. 40 or 10 micron filtration
3. Safety Chain-prevents loss of cap
4. Heavy Duty Cork-Neoprene Gaskets provide a positive seal between flanges.
5. Zinc Plated Flange - bayonet type. (SAEJ829)
6. 3" Stainless Steel Strainer - 30 mesh, 1<sup>15</sup>/<sub>16</sub> diameter. Large area for rapid filling.
7. Thread Forming Screws - prevents particles from entering reservoir during installation by forming threads instead of cutting them.
8. Tough Glass-Reinforced Nylon Housing.
9. Includes (7) 1/4-20NC x 1" Bolts and Nuts for mounting

### Technical and Dimensional Details

| Air Filtration |       | Air Flow Capacity | Oil Transfer Rate | Bayonet Flange |     |     |
|----------------|-------|-------------------|-------------------|----------------|-----|-----|
| Nominal Level  | Media |                   |                   | A              | B   | C   |
| 10 Micron      | Foam  | 15CFM             | 115 GPM           | 6.1            | 3.9 | 3.2 |
| 40 Micron      | Foam  | 25CFM             | 192 GPM           | 6.1            | 3.9 | 3.2 |

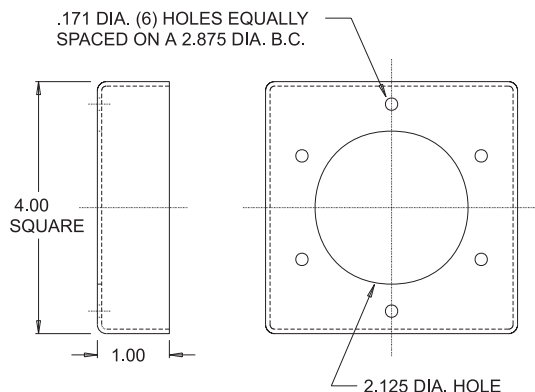
### Mounting Information



### Side Mount Filler Breathers

| Vescor Part Number | Micron Rating | Cap Style | Breather | Strainer Basket Type |
|--------------------|---------------|-----------|----------|----------------------|
| SM-5201            | 40            | Std.      | Non-Pres | Stainless            |
| SM-5204            | 10            | Std.      | Non-Pres | Stainless            |

## Filler Breather Weld Riser-Stainless Steel



- VESCOR® Filler Breather Weld Riser is designed to raise filler breathers 1" above the mounting surface of the reservoir
- Eliminate the need to drill and tap tank top. Just weld in place.
- Prevent contamination from entering reservoir
- Square design
- Use with VESCOR® filler breathers
- 316 Stainless steel

### Filler Breather Riser

| Vescor Part Number | Style  | Description         |
|--------------------|--------|---------------------|
| 5275SS             | Square | 316 Stainless Steel |



# AIR BREATHERS

VESCOR® Air Breathers and Air Breathers with Silencers are used at the point of air intake to provide 99+% efficient filtration at 10 microns (per SAE fine dust test)

VESCOR® Air Breathers stop airborne dirt from entering the reservoir as the oil is removed. They provide clean, filtered air to replace the oil.

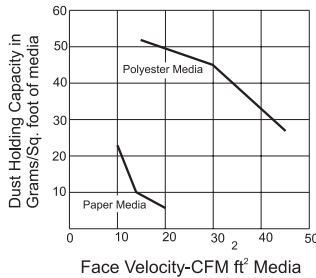
Tube silencers in housing decreases noise from 5 to 15 dB. Moisture-resistant polyester cloth element handles hot air and oil mist. Rugged, all steel weather hood.

Replacement Filters for the use with VESCOR® Air Breathers are specifically designed to withstand strong pulsations of air. Easy to replace. Model number with "P" include polyurethane prefilter to increase dust loading capacity 40 to 50%.

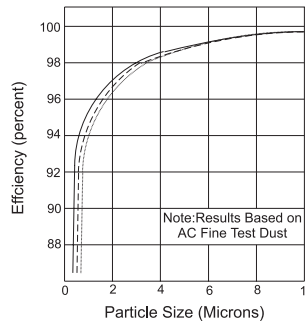


## Replacement Elements

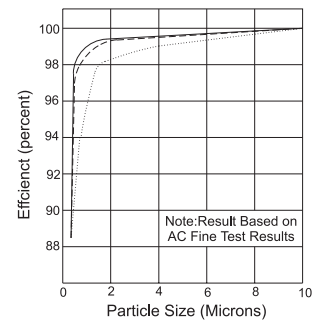
**Influence of Face Velocity on Dust Holding Capacity**



**POLYESTER**



**PAPER**



### Dust Removal Efficiency

Dust removal efficiency of polyester media at face velocity of:

- 15CFM/FT<sup>2</sup> - Media \_\_\_\_\_
- 30CFM/FT<sup>2</sup> - Media \_\_\_\_\_
- 45CFM/FT<sup>2</sup> - Media \_\_\_\_\_

Dust removal efficiency of paper media at face velocity of:

- 15CFM/FT<sup>2</sup> - Media \_\_\_\_\_
- 30CFM/FT<sup>2</sup> - Media \_\_\_\_\_
- 45CFM/FT<sup>2</sup> - Media \_\_\_\_\_

- high temperature plastisol endcaps
  - reinforced with epoxy coated steel wire on both sides of polyester
  - nominally 99+% efficient at 10 microns
  - washable-lukewarm water and mild detergent
  - dust loading capacity is increased 40-50% with polyurethane prefilter
- ADVANTAGES**
- less maintenance, longer life
  - more durable
  - moisture resistant
  - handles hot air and oil mist

- plastisol endcaps
  - heavy duty industrial strength paper
  - nominally 99+% efficient at 10 microns
  - reinforced with heavy gauge zinc plated expanded metal
  - dust loading capacity is increased 40-50% with polyurethane prefilter
- ADVANTAGES**
- less expensive
  - more surface area per given size
  - higher efficiency

| Vescor Part Numbers |               |                   | Flow CFM | Effective Surface Area of Element in Square Feet |       | Dimensions                      |                                 |                                 |
|---------------------|---------------|-------------------|----------|--|-------|---------------------------------|---------------------------------|---------------------------------|
| Polyester Element   | Paper Element | Wire Mesh Element |          | Polyester  | Paper | ID                              | OD                              | HT                              |
| <b>E19P</b>         | <b>E18P</b>   | <b>E18S</b>       | 100      | 1.5  | 3.0   | 3"                              | 4 <sup>3</sup> / <sub>4</sub> " | 4 <sup>3</sup> / <sub>4</sub> " |
| <b>E31P</b>         | <b>E30P</b>   | <b>E30S</b>       | 195      | 2.3  | 5.7   | 3 <sup>3</sup> / <sub>8</sub> " | 5 <sup>3</sup> / <sub>4</sub> " | 4 <sup>3</sup> / <sub>4</sub> " |
| <b>E231P</b>        | <b>E230P</b>  | <b>E230S</b>      | 300      | 4.5  | 10.9  | 3 <sup>3</sup> / <sub>4</sub> " | 5 <sup>3</sup> / <sub>4</sub> " | 9 <sup>1</sup> / <sub>2</sub> " |



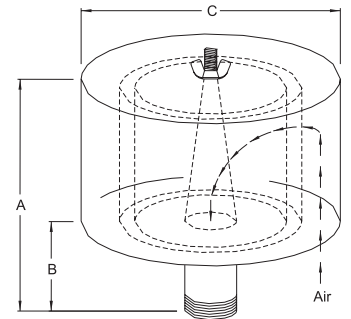
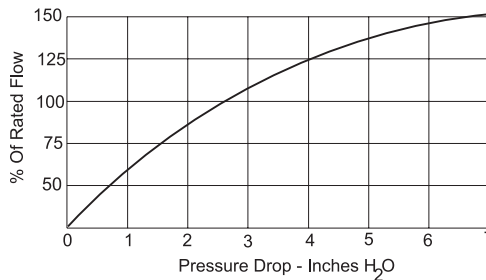
# AIR BREATHERS

## Series AB

### Features:

- Fully drawn weatherhood – no welds to rust or vibrate apart
- Low entrance velocity between base and cover minimizes pressure drop.
- Center yoke bracket located for minimal flow restriction
- Durable heavy gauge steel base with low pressure drop pipe design
- Durable carbon steel construction with baked enamel finish

Normal Flow Curve



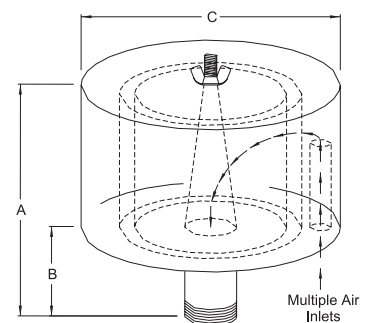
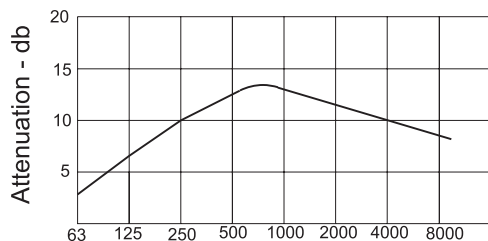
| Vescor Model Numbers AB Series |               |                   | Effective Surface Area of Element in Square Feet |       | Application CFM |                 | Dimensions     |        |        |        |
|--------------------------------|---------------|-------------------|--|-------|-----------------|-----------------|----------------|--------|--------|--------|
| Polyester Element              | Paper Element | Wire Mesh Element | Polyester  | Paper | Pulsating Flow  | Continuous Flow | NPT Connection | A      | B      | C      |
| AB-E19P-125                    | AB-E18P-125   | AB-E18S-125       | 1.5  | 3.0   | 60              | 80              | 1 1/4"         | 6 1/2" | 1 1/2" | 6"     |
| AB-E19P-150                    | AB-E18P-150   | AB-E18S-150       | 1.5  | 3.0   | 60              | 80              | 1 1/2"         | 6 1/2" | 1 1/2" | 6"     |
| AB-E31P-200                    | AB-E30P-200   | AB-E30S-200       | 2.3  | 5.7   | 60              | 135             | 2"             | 7 1/4" | 2 1/4" | 7 3/4" |
| AB-E31P-250                    | AB-E30P-250   | AB-E30S-250       | 2.3  | 5.7   | 80              | 195             | 2 1/2"         | 7 1/2" | 2 1/2" | 7 3/4" |
| AB-E231P-300                   | AB-E230P-300  | AB-E230S-300      | 4.5  | 10.9  | 300             | 300             | 3"             | 13"    | 3"     | 10"    |

## Series AF (with Silencers)

### Features:

- Fully drawn weatherhood – no welds to rust or vibrate apart
- Tubular silencing design - tubes positioned to maximize attenuation and air flow while minimizing pressure drop
- Durable carbon steel construction with baked enamel finish
- Low pressure drop center bracket and pipe design
- Interchangeable elements

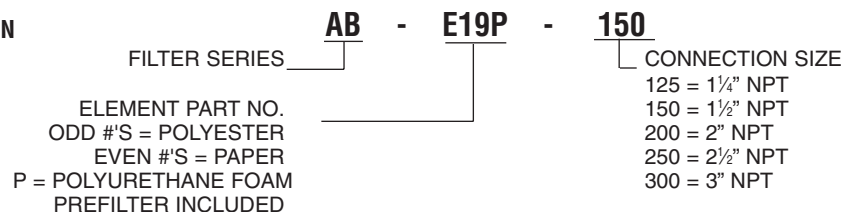
Typical Noise Attenuation - AF Series



| Vescor Model Numbers AF Series |                    |                        | Effective Surface Area of Element in Square Feet |       | Application CFM |                 | Dimensions     |         |        |     |
|--------------------------------|--------------------|------------------------|--|-------|-----------------|-----------------|----------------|---------|--------|-----|
| With Polyester Element         | With Paper Element | With Wire Mesh Element | Polyester  | Paper | Pulsating Flow  | Continuous Flow | NPT Connection | A       | B      | C   |
| AF-E19P-125                    | AF-E18P-125        | AF-E18S-125            | 1.5  | 3.0   | 60              | 60              | 1 1/4"         | 6 1/2"  | 1 1/2" | 6"  |
| AF-E19P-150                    | AF-E18P-150        | AF-E18S-150            | 1.5  | 3.0   | 60              | 80              | 1 1/2"         | 6 1/2"  | 1 1/2" | 6"  |
| AF-E31P-200                    | AF-E30P-200        | AF-E30S-200            | 2.3  | 5.7   | 60              | 135             | 2"             | 7 1/4"  | 2 1/4" | 10" |
| AF-E19P-250-9T                 | AF-E18P-250-9T     | AF-E18S-250-9T         | 1.5  | 3.0   | 60              | 100             | 2 1/2"         | 8 1/4"  | 3 1/4" | 6"  |
| AF-E231P-300                   | AF-E230P-300       | AF-E230S-300           | 4.5  | 10.9  | 200             | 300             | 3"             | 12 1/2" | 2 1/2" | 10" |

### ORDERING INFORMATION

Example:



NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



# SCREW-IN / MINI BREATHERS

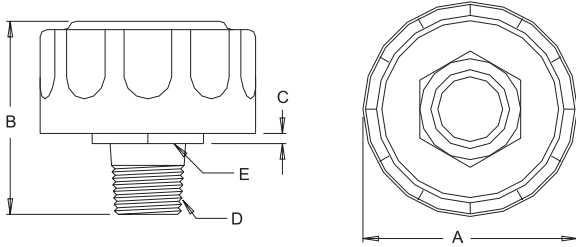
## Screw-in Breather

VESCOR® Screw-In Breathers insure free flow of air into hydraulic tanks or other fluid containers. These units let the tank breathe while keeping out airborne particles. Connection is 3/4" NPT (male) for direct connection to standard 3/4" NPT (female) threaded pipe ports.



### Features

- Nickel-Chrome Plated Cap - large capacity. Cap breathes and filters air. Air vents are concealed allowing for outdoor applications. Fluted finger inserts for easy gripping
- 40 Micron Filtration
- 3/4" NPT (male) Connection



### Screw-In Breathers

| Vescor Part Number | Micron Rating | Cap Style | Breather | NPT Thread |
|--------------------|---------------|-----------|----------|------------|
| V-5213             | 40            | Blank     | Screw-In | 3/4"       |

### Technical and Dimensional Details

| Air Filtration |       | Air Flow Capacity | Oil Transfer Rate | Dimensions |     |     |       |       |
|----------------|-------|-------------------|-------------------|------------|-----|-----|-------|-------|
| Nominal Level  | Media |                   |                   | A          | B   | C   | D NPT | E Hex |
| 40 Micron      | Foam  | 30CFM             | 192 GPM           | 3.0        | 2.7 | .50 | 3/4"  | 1.38  |

### Mounting Information

Any standard 3/4" NPT (female) threaded pipe port

## Screw-In Type

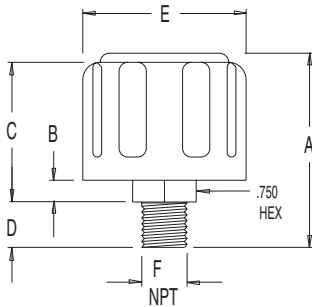


### Features

- Metal Cap - chrome plated
- 1/4" and 3/8" Male Pipe Threaded Fittings
- 10 or 40 Micron Filtration
- Operating Temperatures to 212° (100°C)

### Technical and Dimensional Details

| Air Filtration |       | Air Flow Capacity | Dimensions |      |      |      |      |
|----------------|-------|-------------------|------------|------|------|------|------|
| Nominal Level  | Media |                   | A          | B    | C    | D    | E    |
| 10 Micron      | Foam  | 10CFM             | 1.77       | 0.28 | 1.34 | 0.43 | 1.85 |
| 40 Micron      | Foam  | 10CFM             | 3.90       | 1.06 | 1.34 | 2.56 | 1.85 |



### Bayonet Type Miniature Tank Breathers

| Vescor Part Number | Micron Rating | Cap Style | Breather | F NPT |
|--------------------|---------------|-----------|----------|-------|
| MMB0210            | 10            | Std.      | Non-Pres | 1/4"  |
| MMB0240            | 40            | Std.      | Non-Pres | 1/4"  |
| MMB0510            | 10            | Std.      | Non-Pres | 3/8"  |
| MMB0540            | 40            | Std.      | Non-Pres | 3/8"  |

### Mounting Information

MMB02\*\* Any standard 1/4" NPT (female) threaded pipe port.

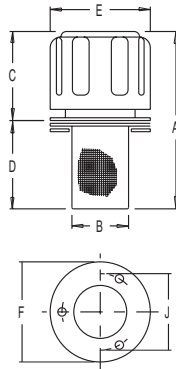
MMB05\*\* Any standard 3/8" NPT (female) threaded pipe port.





# MINIATURE TANK BREATHERS

## Bayonet Type



### Features

- Metal Cap - chrome plated
- 2 1/2" Metal Basket - 30 mesh
- 10 or 40 Micron Filtration
- Cork Neoprene Gaskets
- Operating Temperatures to 212° (100°C)

### Technical and Dimensional Details

| Air Filtration |       | Air Flow Capacity | Dimensions |      |      |      |      |      |      |
|----------------|-------|-------------------|------------|------|------|------|------|------|------|
| Nominal Level  | Media |                   | A          | B    | C    | D    | E    | F    | J    |
| 10 Micron      | Foam  | 10CFM             | 3.90       | 1.06 | 1.34 | 2.56 | 1.85 | 2.05 | 1.61 |
| 40 Micron      | Foam  | 10CFM             | 3.90       | 1.06 | 1.34 | 2.56 | 1.85 | 2.05 | 1.61 |

### Bayonet Type Miniature Tank Breathers

| Vescor Part Number | Micron Rating | Cap Style | Breather | Strainer Basket Type |
|--------------------|---------------|-----------|----------|----------------------|
| MMB10              | 10            | Std.      | Non-Pres | Metal                |
| MMB40              | 40            | Std.      | Non-Pres | Metal                |

### Mounting Information

1.156 dia. hole w/(3) .177 dia holes equally spaced on a 1.610 dia. B.C.

## Miniature Tank Breathers



VESCOR® Miniature Tank Breathers are designed to replace more costly, less efficient breathers and to improve the filtering performance of the breather vent.

### Features

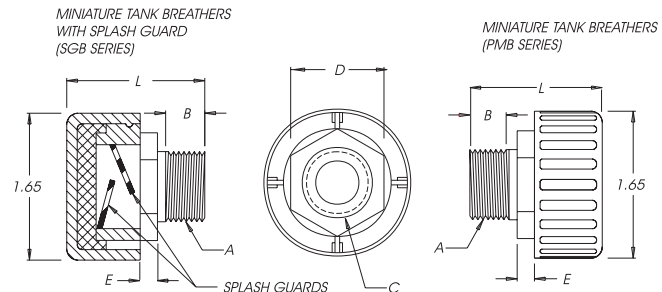
- Special polyamide technopolymer cap
- Available in 1/4", 3/8", 1/2" and 3/4" male pipe threaded fittings
- 40 micron air filtration
- Gray cap for high visibility
- Optional splash guard

### Mounting Information

- PMB/SGB-02-10 Any standard 1/4" NPT (female) threaded pipe port
- PMB/SGB-05-10 Any standard 3/8" NPT (female) threaded pipe port
- PMB/SGB-03-10 Any standard 1/2" NPT (female) threaded pipe port
- PMB/SGB-07-10 Any standard 3/4" NPT (female) threaded pipe port

### Miniature Tank Breathers

| Vescor Part Number | NPT Size | Style Cap Color | Breather |
|--------------------|----------|-----------------|----------|
| PMB-02-10          | 1/4"     | Vescor/Gray     | Mini     |
| PMB-05-10          | 3/8"     | Vescor/Gray     | Mini     |
| PMB-03-10          | 1/2"     | Vescor/Gray     | Mini     |
| PMB-07-10          | 3/4"     | Vescor/Gray     | Mini     |



### Miniature Tank Breathers with Splash Guard

| Vescor Part Number | NPT Size | Style Cap Color | Breather            |
|--------------------|----------|-----------------|---------------------|
| SGB-02-10          | 1/4"     | Vescor/Gray     | Mini w/Splash Guard |
| SGB-05-10          | 3/8"     | Vescor/Gray     | Mini w/Splash Guard |
| SGB-03-10          | 1/2"     | Vescor/Gray     | Mini w/Splash Guard |
| SGB-07-10          | 3/4"     | Vescor/Gray     | Mini w/Splash Guard |

### Dimensional Details

| Vescor Part Number | A NPT | B Thread Length | C Hole Dia. | D Hex | E Flat | L Overall Length |
|--------------------|-------|-----------------|-------------|-------|--------|------------------|
| PMB/SGB-02-10      | 1/4"  | .39             | .27         | .62   | .27    | 1.53             |
| PMB/SGB-05-10      | 3/8"  | .59             | .31         | .75   | .27    | 1.73             |
| PMB/SGB-03-10      | 1/2"  | .67             | .47         | 1.00  | .27    | 1.85             |
| PMB/SGB-07-10      | 3/4"  | .70             | .70         | 1.13  | .27    | 1.85             |

NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



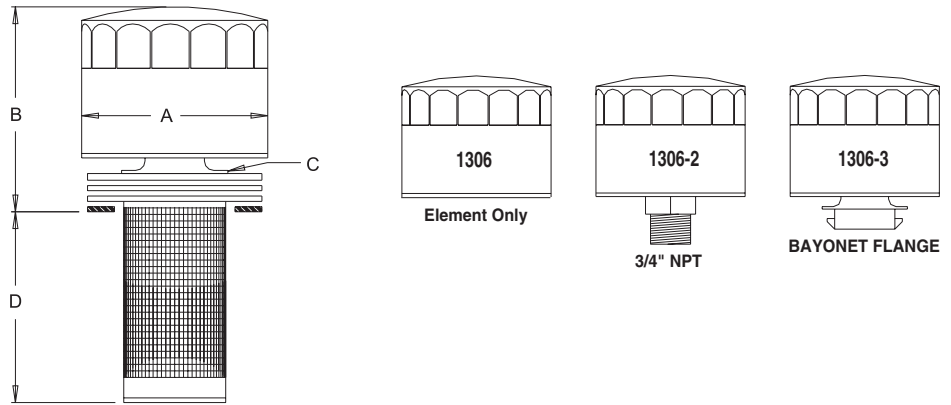
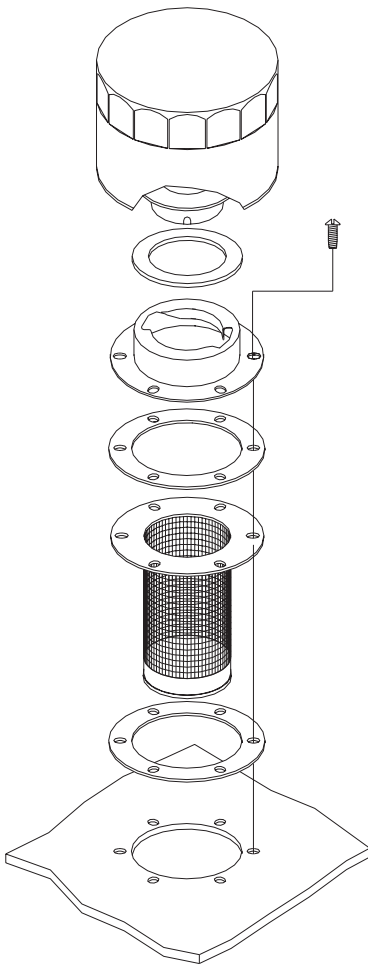
# AIR BREATHER FILTER



VESCOR® Air Breather Filter protects your hydraulic system from ingesting airborne particles. These breathers feature a large pleated surface area which remove airborne particles 3 micron and above with exceptional dirt holding capacity that extends the life of the breather and thus the length of time between servicing

### Features

- 3 micron and above filtration
- High capacity air flow
- Customer specified adapters: Bayonet flange (SAE J829)  
3/4" NPT (male)
- Heavy Duty Cork-Neoprene Gaskets provide a positive seal between flanges
- Adapters allow easy spin-on, spin-off changing of the air breather
- 4" Nylon Basket (assembly model only)



### Technical and Dimensional Details

| Part Number | Description                              | Normal Capacity | Air Flow PSI Drop                      | A Dia. | B Dim. | C Adapter       | D Dim. |
|-------------|--|-----------------|--|--------|--------|-----------------|--------|
| 1306        | Air Breather Filter Element Only         | 40 SCFM         | 4 PSI at 20 SFM<br>1.25 PSI at 40 SCFM | 3.75   | 3.25   | N/A             | N/A    |
| 1306-2      | Air Breather with 3/4 NPT Adapter        | 40 SCFM         |  | 3.75   | 4.38   | 3/4" NPT (Male) | N/A    |
| 1306-3      | Air Breather with Bayonet Flange Adapter | 40 SCFM         |  | 3.75   | 4.50   | SAE Bayonet     | N/A    |
| 1306-4*     | Air Breather Nylon Basket Assembly       | 40 SCFM         |  | 3.75   | 4.50   | SAE Bayonet     | 3.80   |

\*NOTE: 1306-4 includes (1) air breather filter, (1) cap gasket, (1) flange gasket, (1) flange SAE J829, (1) 4" nylon strainer basket, (1) tank gasket, (6) mounting screws

### Mounting Information

3/4" NPT (male) Adapter - Any standard 3/4" NPT (female) threaded pipe port  
SAE Bayonet Flange Adapter - Any mating SAE bayonet flange adapter





# DES-CASE BREATHERS

## Attack the cause of oil contamination

Industry spends millions of dollars annually treating the negative effects of oil contamination. Des-Case Breather attacks the cause as opposed to treating the problem of contamination.

Designed and developed by filtration engineers, the hygroscopic breather is a unique, patented air filter and water vapor removal system. It will virtually eliminate moisture and particulate contamination in industrial equipment reservoirs such as hydraulic tanks and gear boxes.

## Unique Filtration Process

Moisture and particulate accumulation are major factors of oil contamination in industrial equipment. Neglected, these detriments restrict equipment efficiency, causing machine downtime and significant expense in replacement oil, parts and repair labor.

Des-Case breathers incorporate a proven, field tested design. They prevent water and contaminants from entering fluid reservoirs as differential pressures occur through thermal expansion and contraction of the fluid, or during the filling or emptying process.

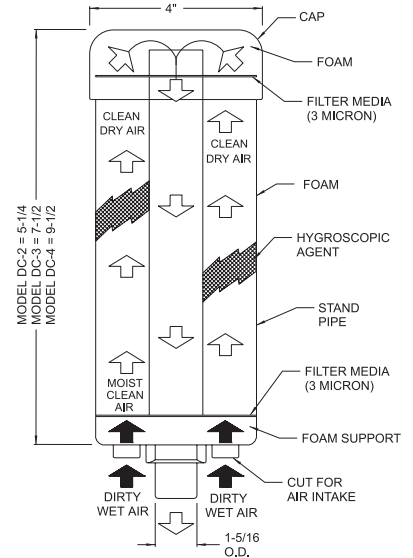
Manufactured with a hygroscopic agent, Des-Case breathers utilize the entire filter area, and have the capability of extracting water vapor from the air as it is drawn through the unit. Accompanying solid particulate is then removed by a patented polyester fabric filter, allowing only clean, dry air to enter the system.

## Change to Des-Case™ for Maximum Machine Performance

Hygroscopic breather elements are state-of-the-art in design and function, and are industry's best choice for assuring maximum machine performance.

Des-Case offers these cost-savings benefits:

- Elimination of water-contaminated oil which leads to additive stripping
- Less abrasive particles to prolong machine operating life
- Elimination of rust-forming condensation
- Longer oil and oil filter life
- Elimination of sludge deposits



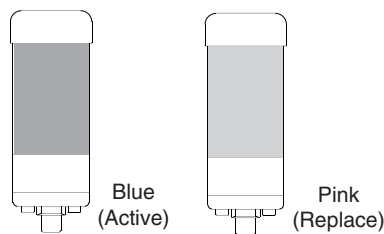
## Resilient Construction . . . Multiple Application

Every Des-Case hygroscopic breather is manufactured in a durable, shock absorbing clear plastic casing with resilient qualities to withstand the customary abuse associated with heavy manufacturing equipment. The units are disposable, and are manufactured entirely of environmentally safe components.

Des-Case disposable hygroscopic breathers are manufactured in three sizes DC2, DC3 and DC4 to accommodate different mounting space requirements. All three models are rated for 20 cfm of air in and out of the tank or reservoir (the equivalent of 150 gpm fluid level change in the reservoir). The patented air flow design produces a partial regeneration of the hygroscopic agent and a back flushing (cleaning) of the particulate filter when the air leaves the reservoir.

## Ordering Information

| Type 1 (Screw-In) 1" NPT    |  | Type 2 Bayonet Type         |   |
|-----------------------------|--|-----------------------------|---|
|                             | DES-CASE UNIT<br>THREADED ADAPTER (1" NPT) |                             | DES-CASE UNIT<br>BAYONET FLANGE ADAPTER<br>BAYONET FLANGE |
| <b>Ordering Information</b> |  | <b>Ordering Information</b> |   |
| <b>Part No.</b>             | <b>Description</b>                         | <b>Part No.</b>             | <b>Description</b>  |
| DC-2-1                      | DC2 Breather with 1" Adapter               | DC-2-B                      | DC2 Breather w/Bayonet Flange Adapter Assembly            |
| DC-3-1                      | DC3 Breather with 1" Adapter               | DC-3-B                      | DC3 Breather w/Bayonet Flange Adapter Assembly            |
| DC-4-1                      | DC4 Breather with 1" Adapter               | DC-4-B                      | DC4 Breather w/Bayonet Flange Adapter Assembly            |



## Color Visually Indicates Unit Condition

To activate the unit, the protruding air intake nipples must be opened. The more nipples cut, the greater the breathing capacity.

Every Des-Case breather will remain effective as long as the hygroscopic agent's color in the transparent unit remains **BLUE**. A light **PINK** color indicates 100% saturation and the need to replace the unit.

## Low Unit Cost . . . Long Shelf Life. . . Varied Industrial and Commercial Applications

Des-Case hygroscopic breathers are readily available and the modest price of these units is insignificant when compared to the costs associated with machine down time, replacement parts and labor. Each Des-Case breather is packaged and shipped in an airtight container for long-lasting shelf life.

Manufactured in the U.S.A., Des-Case units have excellent field test records and are utilized in a wide range of industries—food processing, automotive manufacturing, paper mills, transportation, robotics, power generation and many more.

## Design Flexibility Permits Easy Installation Regardless of Equipment Location

Des-Case hygroscopic breathers are designed for installation on most equipment regardless of location. For installation in difficult areas, Des-Case offers (2) mounting options for ease of installation and unit maintenance.