Moisture Meets Its Match

Donaldson T.R.A.P.™ breathers collect and expel moisture out of reservoirs. This means you won’t need to change the breather due to water saturation, unlike desiccant filters which require frequent change-out.

TRAP water and particulate before it gets in without restricting air flow – letting your hydraulic and lube oil reservoirs breathe easy.
Superior Moisture Removal
Advanced Particulate Filtration and Oil Mist Control

Thermally Reactive Advanced Protection (T.R.A.P.™)

Water has a way of sneaking into your hydraulic circuits – unless you have a Donaldson T.R.A.P. breather standing guard over your system.

Donaldson’s T.R.A.P. breather removes moisture at relative humidity levels as low as 15%. T.R.A.P. filtration technology reacts instantly to changes in thermal conditions – blocking moisture.

T.R.A.P. breathers strip moisture vapor from intake air and release it back into the atmosphere on the outflow cycle. The filter continuously regenerates its water holding capacity. T.R.A.P. breathers expel the moisture back out, eliminating the need to change the breather due to water saturation - unlike desiccant filters that require frequent change-out. T.R.A.P. breathers not only protect against moisture but also provide advanced particulate filtration.

TRAP water before it gets in without restricting air flow, letting your hydraulic and lube oil reservoirs BREATHE.

<table>
<thead>
<tr>
<th>Compare</th>
<th>T.R.A.P. Technology</th>
<th>Desiccant Filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Life</td>
<td>Extended life (expels moisture and refreshes its holding capacity on each cycle).</td>
<td>Shorter life (due to saturation of filtering material), leading to frequent replacement.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Reacts instantly to conditions in the hydraulic circuit, creating a moisture barrier without impeding airflow.</td>
<td>Requires extended exposure to the air stream before absorption begins. Restricts airflow.</td>
</tr>
<tr>
<td>Maintenance costs</td>
<td>Increased service hours.</td>
<td>Reduced service hours.</td>
</tr>
<tr>
<td>Technology</td>
<td>Thermally reactive barrier that removes moisture at relative humidity levels as low as 15%.</td>
<td>Absorbent filtering material that loses holding capacity with each cycle.</td>
</tr>
<tr>
<td>Filtration</td>
<td>Superior moisture blocking and particulate filtration, down to 3 microns at 97% with up to 7x the media area.</td>
<td>Less effective moisture blocking and particulate filtration with smaller filtration area.</td>
</tr>
<tr>
<td>Oil Mist</td>
<td>Built-in coalescing stage.</td>
<td>No oil mist control.</td>
</tr>
<tr>
<td>Rugged Design</td>
<td>Effective to -40°F (-40°C). Robust housing protects media. Because it withstands high vibration, T.R.A.P. is suitable for both stationary and mobile applications.</td>
<td>Subject to freezing in winter conditions.</td>
</tr>
</tbody>
</table>
Moisture Meets its Match
How it Works

T.R.A.P.™ breathers from Donaldson are the only breathers on the market that literally strip moisture vapor from intake air and expel the moisture back to the atmosphere on the outflow cycle. The filter continuously regenerates its water holding capacity!

1 The circuit “breathes in” air containing moisture vapor.
2 The T.R.A.P. breather strips moisture and particulate from the incoming air, allowing only clean, dry air to enter the circuit.
3 During the “exhalation” cycle, the T.R.A.P. breather allows unrestricted airflow outward.
4 The outflow of dry air picks up the moisture collected by the T.R.A.P. breather during intake, and “blows it back out” – fully regenerating the T.R.A.P. breather’s water-holding capacity.
# Extended Range

**T.R.A.P.™ Breather Technology**

Donaldson T.R.A.P. breathers are available in a variety of configurations:

- ABS plastic, nylon or epoxy-coated steel construction
- NPT, BSP, UN straight thread or bayonet connections
- With and without electronic indicator options to fit a broad range of applications

## T.R.A.P. Breather Sizing

<table>
<thead>
<tr>
<th>Trap Model</th>
<th>Hydraulic System (gal/l)</th>
<th>In-plant Lube (gal/l)</th>
<th>Outside (gal/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>100/375</td>
<td>500/1875</td>
<td>250/938</td>
</tr>
<tr>
<td>Metal</td>
<td>40/150</td>
<td>200/750</td>
<td>100/375</td>
</tr>
<tr>
<td>Mini</td>
<td>4/15</td>
<td>20/75</td>
<td>10/38</td>
</tr>
</tbody>
</table>

## Standard ABS Plastic Breathers with Oil/Splash Containment

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Connection</th>
<th>Maximum Flow (cfm/lpm)</th>
<th>Indicator</th>
<th>Moisture Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>P566151*</td>
<td>1&quot; NPT</td>
<td>45/1274</td>
<td>opt mechanical indicator kit</td>
<td>Yes</td>
</tr>
<tr>
<td>P564669</td>
<td>1&quot; NPT</td>
<td>45/1274</td>
<td>electronic</td>
<td>Yes</td>
</tr>
<tr>
<td>P566156</td>
<td>Bayonet</td>
<td>45/1274</td>
<td>none</td>
<td>Yes</td>
</tr>
<tr>
<td>P565616</td>
<td>Bayonet</td>
<td>45/1274</td>
<td>electronic</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## Medium Epoxy Coated Steel Breathers with Oil/Splash Containment

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Connection</th>
<th>Maximum Flow (cfm/lpm)</th>
<th>Indicator</th>
<th>Moisture Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>P565857*</td>
<td>3/4&quot; NPT</td>
<td>25/708</td>
<td>opt mechanical indicator kit</td>
<td>Yes</td>
</tr>
<tr>
<td>P565858</td>
<td>Bayonet</td>
<td>25/708</td>
<td>none</td>
<td>Yes</td>
</tr>
<tr>
<td>P566037</td>
<td>3/4&quot; BSP</td>
<td>25/708</td>
<td>none</td>
<td>Yes</td>
</tr>
<tr>
<td>P575077</td>
<td>Bayonet with Lock Tab</td>
<td>25/708</td>
<td>none</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## Mini Nylon Breathers with Oil/Splash Containment

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Connection</th>
<th>Indicator</th>
<th>Moisture Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>P566174</td>
<td>9/16&quot;-18 UNF</td>
<td>3/85</td>
<td>Yes</td>
</tr>
<tr>
<td>P567390</td>
<td>3/8&quot; NPT</td>
<td>3/85</td>
<td>Yes</td>
</tr>
<tr>
<td>P567392</td>
<td>1/4&quot; NPT</td>
<td>3/85</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## Mini Particulate Only Breathers with Oil Splash Containment

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Connection</th>
<th>Indicator</th>
<th>Moisture Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>P567932</td>
<td>3/8&quot; NPT</td>
<td>3/85</td>
<td>No</td>
</tr>
<tr>
<td>P567933</td>
<td>1/4&quot; NPT</td>
<td>3/85</td>
<td>No</td>
</tr>
</tbody>
</table>

### Mechanical Indicator Kit - For use with P566151 & P565857 (*requires customer-supplied 3/4"x1" NPT reducer bushing)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>P566168</td>
<td>1&quot; NPT coupling</td>
<td>20&quot; H2O/5 kPa trip point</td>
</tr>
</tbody>
</table>

## Bayonet Style Filler Basket - For use with bayonet style T.R.A.P. Breathers

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>P566321</td>
<td>3&quot; Stainless steel basket</td>
<td>6-bolt 2.81/71.4 circle</td>
</tr>
<tr>
<td>P575080</td>
<td>6&quot; Stainless steel basket with Lock Tab</td>
<td>6-bolt 2.81/71.4 circle</td>
</tr>
<tr>
<td>P563874</td>
<td>4&quot; Nylon Basket</td>
<td>6-bolt 2.81/71.4 circle</td>
</tr>
<tr>
<td>P563493</td>
<td>6&quot; Stainless steel basket</td>
<td>6-bolt 2.81/71.4 circle</td>
</tr>
</tbody>
</table>
## T.R.A.P.™ Breather Specifications

### Standard
- **P565616** (electronic indicator) Bayonet connection
- **P566156** (no indicator version) Bayonet connection

### Metal
- **P565858** Bayonet connection
- **P575077** Bayonet connection with Lock Tab
- **P565857** (3/4” NPT connection, optional mechanical indicator)
- **P566037** (3/4” BSP connection)

### Mini
- **P566174**
- **P567390**
- **P567392**

### Mechanical Indicator Kit
- **P566168** Suitable for use with **P566151** and **P565857**
  - Requires additional 3/4” x 1” reducer bushing (supplied by customer)

### Bayonet Style Filler Basket/Flange Kits
Use with any bayonet style T.R.A.P. Breather
- **P566321**
- **P575080**
- **P563874**
- **P563453**

---

**Bayonet Adaptor**
- **Ø3.38” [86mm]**
- **1.66” [42.2mm]**
- **1.36” [34mm]**
- **2.41” [61mm]**
- **3.75” [95mm]**
- **2.90” [74mm]**
- **1.20” [30mm]**

**Bayonet Flange**
- **Ø3.38” [86mm]**
- **1.66” [42.2mm]**
- **1.36” [34mm]**
- **2.41” [61mm]**
- **3.75” [95mm]**
- **2.90” [74mm]**
- **1.20” [30mm]**

**Gaskets**
- **3” Stainless Steel Basket**
- **6” Stainless Steel Basket**

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**Top View**

**Bayonet Adapter**
- **3.38” [85.8mm]**
- **6.60” [167.6mm]**
- **Ø4.50” [114mm]**

**Bayonet**
- **1.70” [43mm]**
- **1.56” [42.2mm]**

**Metal**
- **9/16-18 UNF**
- **1.62” [42mm]**
- **2.18” [55mm]**

**Mini**
- **9/16-18 UNF**
- **1.62” [42mm]**
- **2.18” [55mm]**

---

**1” NPT or 3/4” BSP**
- **1.13” [35mm]**
- **1.38” [35mm]**
- **2.87” [73mm]**

**Top View**

**Locked Tab**
- **2.41” [61mm]**
- **3.75” [95mm]**
- **2.90” [74mm]**

**Visual Indicator**
- **1/8” NPT Nipple**
- **2.41” [61mm]**
- **2.90” [74mm]**
- **3.75” [95mm]**

---

**Basket**
- **3" Stainless Steel Basket**
- **6" Stainless Steel Basket**
- **4" Nylon Basket**
- **6" Stainless Steel Basket**

**Mounting Hardware**
- **Mounting Hardware**
- **Mounting Hardware**
- **Mounting Hardware**
- **Mounting Hardware**

---

**P565616**
- **Bayonet connection**
- **Top View**

**P566156**
- **Bayonet connection**
- **Top View**

**P565858**
- **Bayonet connection**
- **Top View**

**P575077**
- **Bayonet connection with Lock Tab**
- **Top View**

**P565857**
- **3/4” NPT connection, optional mechanical indicator**
- **Top View**

**P566037**
- **3/4” BSP connection**
- **Top View**

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**Bayonet Flange**
- **Bayonet Flange**
- **Bayonet Flange**
- **Bayonet Flange**

---

**Gaskets**
- **Gaskets**
- **Gaskets**
- **Gaskets**

---

**3” Stainless Steel Basket**
- **3” Stainless Steel Basket**
- **3” Stainless Steel Basket**

---

**6” Stainless Steel Basket**
- **6” Stainless Steel Basket**
- **6” Stainless Steel Basket**

---

**4” Nylon Basket**
- **4” Nylon Basket**
- **4” Nylon Basket**

---

**3/4” NPT connection, optional mechanical indicator**
- **3/4” NPT connection, optional mechanical indicator**
- **3/4” NPT connection, optional mechanical indicator**

---

**Requires additional 3/4” x 1” reducer bushing (supplied by customer)**
- **Requires additional 3/4” x 1” reducer bushing (supplied by customer)**
- **Requires additional 3/4” x 1” reducer bushing (supplied by customer)**

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**P566321**
- **Ø3.38” [86mm]**
- **3.68” [93mm]**

**P575080**
- **Locking Tab Ø3.38” [86mm]**
- **6.74” [171.1mm]**

**P563874**
- **Locking Tab Ø3.38” [86mm]**
- **4.50” [114mm]**

**P563453**
- **Locking Tab Ø3.38” [86mm]**
- **6.74” [171mm]**
# T.R.A.P.™ Breather Technology
Eliminates Moisture and Particulate from Reservoirs

<table>
<thead>
<tr>
<th>Technical Features</th>
<th>Service Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Temperature Range</strong></td>
<td></td>
</tr>
<tr>
<td>• -40°F to 200°F / -40°C to 93°C</td>
<td>• Optional mechanical indicator available</td>
</tr>
<tr>
<td>• Intermittent operation to 250°F / 121°C</td>
<td>• Models with no indicator: change breather every 6 months.</td>
</tr>
<tr>
<td><strong>Connection Sizes</strong></td>
<td></td>
</tr>
<tr>
<td>• 1” and 3/4” NPT, 3/4” BSP Bayonet</td>
<td><strong>Electronic Indicator</strong></td>
</tr>
<tr>
<td>• 1/4” and 3/8” NPT, 9/16”-18UN</td>
<td>• Actuated by pressure differential, flashes red to indicate change out is needed. Indicator setting, 1 psid (6.9kPa). Indicator power source: 3V lithium battery CR2032.</td>
</tr>
<tr>
<td><strong>Flow Rates</strong></td>
<td></td>
</tr>
<tr>
<td>• 45 cfm / 1274 lpm</td>
<td><strong>Mechanical Indicator Kit</strong></td>
</tr>
<tr>
<td>• 25 cfm / 708 lpm</td>
<td>• Install kit between reservoir and T.R.A.P. breather. Lock-up style indicator with manual reset. Highly visible, bright red band shows when restriction limit is reached. Indicator setting 20” H₂O (5.0 kPa).</td>
</tr>
<tr>
<td>• 3 cfm / 85 lpm</td>
<td><strong>Caution!</strong></td>
</tr>
<tr>
<td><strong>Particulate Filter</strong></td>
<td>In environments with combustible dusts or vapors, use non-electrical models only.</td>
</tr>
<tr>
<td>• Highly efficient pleated particulate filter stops particle sizes down to 3 μm at 97%.</td>
<td></td>
</tr>
</tbody>
</table>
Activation Instructions for T.R.A.P.™ Breathers with Electronic Indicator

The T.R.A.P. breather has a service indicator that will indicate when it is time to replace the T.R.A.P. This indicator should be activated before the T.R.A.P. is put into service. Before the T.R.A.P. is activated, it is in a sleep mode to conserve the battery. The T.R.A.P. can remain in a sleep mode for over 6 months without detriment to the battery. While in sleep mode, the LED light will not flash until it is activated.

Activation

1. Remove the T.R.A.P. from the box and turn it upside down - with the neck and thread up.

2. Using a forefinger, insert into the neck of the T.R.A.P. and press on the plastic screen until the LED light begins to flash. The light will flash three times with a short flash followed by a long flash and then another short flash.

3. Release pressure from the switch immediately after the light begins flashing.

The T.R.A.P. is now activated.

Replacement

Replace T.R.A.P. with a new one when the light begins to blink.
Finding your Donaldson filter online has never been easier.

DISCOVER.
Looking for a complete filtration system or advice on choosing the right filter option? Go online to donaldson.com to learn about the broad range of filtration solutions offered by Donaldson – and to help you decide which option is right for your application.

DECIDE.
If you’re an equipment owner that needs to purchase filters and parts – it’s easy to find the right Donaldson part, make an online shopping list and even request a quote from one of our distributors. We make finding filters easier than easy at shop.donaldson.com.