



Donaldson Delivers

## T.R.A.P.™ Breather Technology For Hydraulic and Lube Oil Reservoirs

### Moisture Meets Its Match

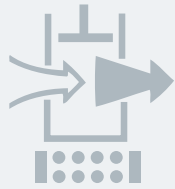
Donaldson T.R.A.P.™ breathers collect and expel moisture out of reservoirs. This means you won't need to change the breather due to water saturation, unlike desiccant filters which require frequent change-out.

TRAP water and particulate before it gets in without restricting air flow – letting your hydraulic and lube oil reservoirs breathe easy.

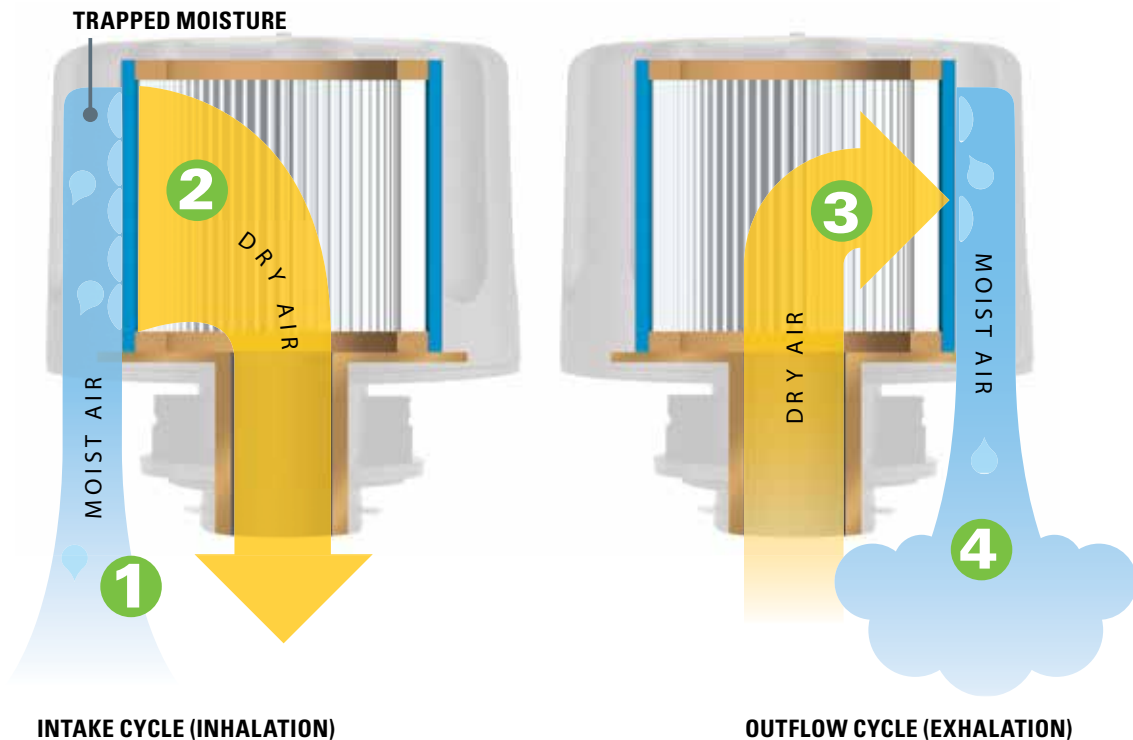


# Moisture Meets its Match

## How it Works



T.R.A.P.<sup>™</sup> 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.



# 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.

Compare	T.R.A.P. Technology	Desiccant Filters
<b>Service Life</b>	Extended life (expels moisture and refreshes its holding capacity on each cycle).	Shorter life (due to saturation of filtering material), leading to frequent replacement.
<b>Effectiveness</b>	Reacts instantly to conditions in the hydraulic circuit, creating a moisture barrier without impeding airflow.	Requires extended exposure to the air stream before absorption begins. Restricts airflow.
<b>Maintenance costs</b>	Increased service hours.	Reduced service hours.
<b>Technology</b>	Thermally reactive barrier that removes moisture at relative humidity levels as low as 15%.	Absorbent filtering material that loses holding capacity with each cycle.
<b>Filtration</b>	Superior moisture blocking and particulate filtration, down to 3 microns at 97% with up to 7x the media area.	Less effective moisture blocking and particulate filtration with smaller filtration area.
<b>Oil Mist</b>	Built-in coalescing stage.	No oil mist control.
<b>Rugged Design</b>	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.	Subject to freezing in winter conditions.

# 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

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

	Part No.	Connection	Maximum Flow (cfm/lpm)	Indicator	Moisture Removal
 <b>Standard</b>	<b>Standard ABS Plastic Breathers with Oil/Splash Containment</b>				
	P566151*	1" NPT	45/1274	opt mechanical indicator kit	Yes
	P564669	1" NPT	45/1274	electronic	Yes
	P566156	Bayonet	45/1274	none	Yes
	P565616	Bayonet	45/1274	electronic	Yes
 <b>Medium Metal</b>	<b>Medium Epoxy Coated Steel Breathers with Oil/Splash Containment</b>				
	P565857*	3/4" NPT	25/708	opt mechanical indicator kit	Yes
	P565858	Bayonet	25/708	none	Yes
	P566037	3/4" BSP	25/708	none	Yes
	P575077	Bayonet with Lock Tab	25/708	none	Yes
 <b>Mini</b>	<b>Mini Nylon Breathers with Oil/Splash Containment</b>				
	P566174	9/16"-18 UNF	3/85	none	Yes
	P567390	3/8" NPT	3/85	none	Yes
	P567392	1/4" NPT	3/85	none	Yes
<b>Mini Particulate Only Breathers with Oil Splash Containment</b>					
P567931	9/16"-18 UNF	3/85	none	none	No
P567932	3/8" NPT	3/85	none	none	No
P567933	1/4" NPT	3/85	none	none	No

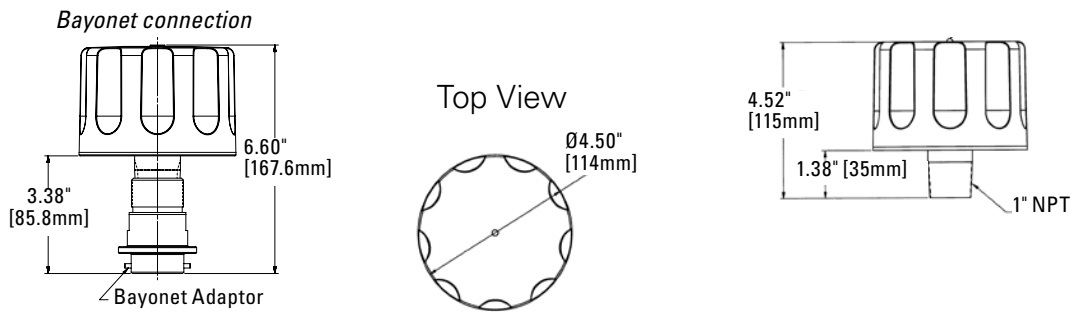
Part No.	Connection	Indicator
<b>*Mechanical Indicator Kit - For use with P566151 &amp; P565857 (*requires customer-supplied 3/4"x1" NPT reducer bushing)</b>		
P566168	1" NPT coupling	20" H2O/5 kPa trip point

Part No.	Description	Connection
<b>Bayonet Style Filler Basket - For use with bayonet style T.R.A.P. Breathers</b>		
P566321	3" Stainless steel basket	6-bolt 2.81/71.4 circle
P575080	6" Stainless steel basket with Lock Tab	6-bolt 2.81/71.4 circle
P563874	4" Nylon Basket	6-bolt 2.81/71.4 circle
P563453	6" Stainless steel basket	6-bolt 2.81/71.4 circle

# T.R.A.P.™ Breather Specifications

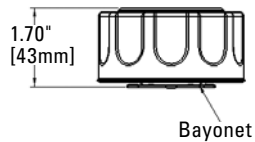
**Standard** **P565616** (electronic indicator) Bayonet connection  
**P566156** (no indicator version) Bayonet connection

**P564669** (optional mechanical) 1" NPT connection  
**P566151** (no indicator version) 1" NPT connection



## Metal

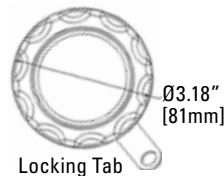
**P565858**  
 Bayonet connection



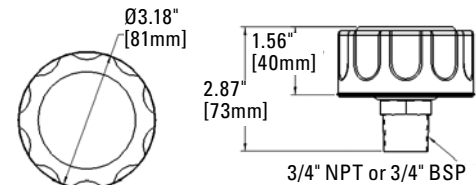
**P575077** Bayonet connection with Lock Tab  
**P570353**



### Top View

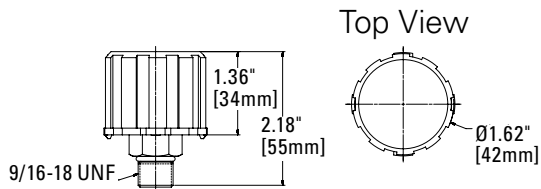


**P565857** (3/4" NPT connection, optional mechanical indicator)  
**P566037** (3/4" BSP connection)



## Mini

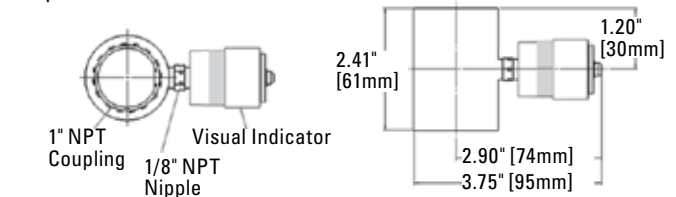
**P566174**  
**P567390**  
**P567392**



## Mechanical Indicator Kit

**P566168**  
 Suitable for use with **P566151** and **P565857**\*  
 \*Requires additional 3/4" x 1" reducer bushing (supplied by customer)

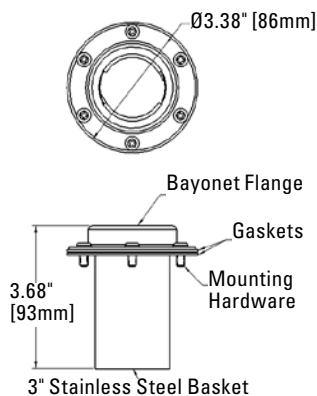
### Top View



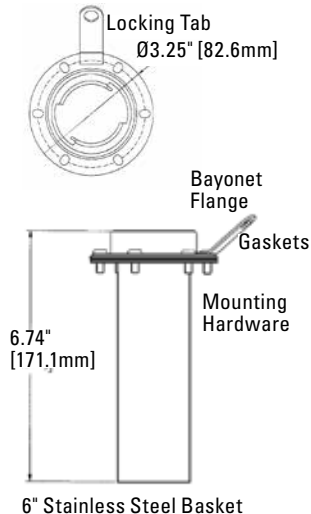
## Bayonet Style Filler Basket/Flange Kits

Use with any bayonet style T.R.A.P. Breather

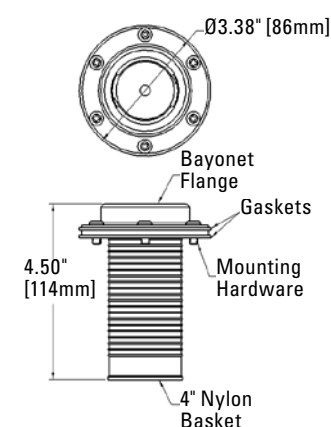
**P566321**



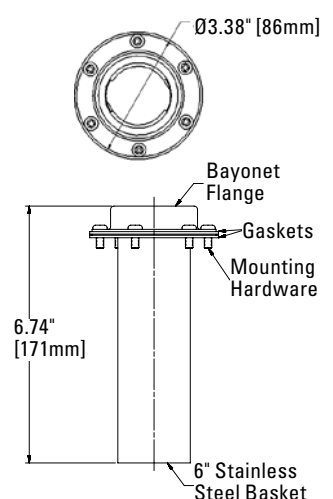
**P575080**



**P563874**



**P563453**



# T.R.A.P.™ Breather Technology

## Eliminates Moisture and Particulate from Reservoirs

### Technical Features

#### Operating Temperature Range

- -40°F to 200°F / -40°C to 93°C
- Intermittent operation to 250°F / 121°C

#### Connection Sizes

- 1" and 3/4" NPT, 3/4" BSP Bayonet
- 1/4" and 3/8" NPT, 9/16"-18UN

#### Flow Rates

- 45 cfm / 1274 lpm
- 25 cfm / 708 lpm
- 3 cfm / 85 lpm

#### Particulate Filter

- Highly efficient pleated particulate filter stops particle sizes down to 3 µm at 97%.

### Service Interval

- Optional mechanical indicator available
- Models with no indicator: change breather every 6 months.

### Electronic Indicator

- 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.

### Mechanical Indicator Kit

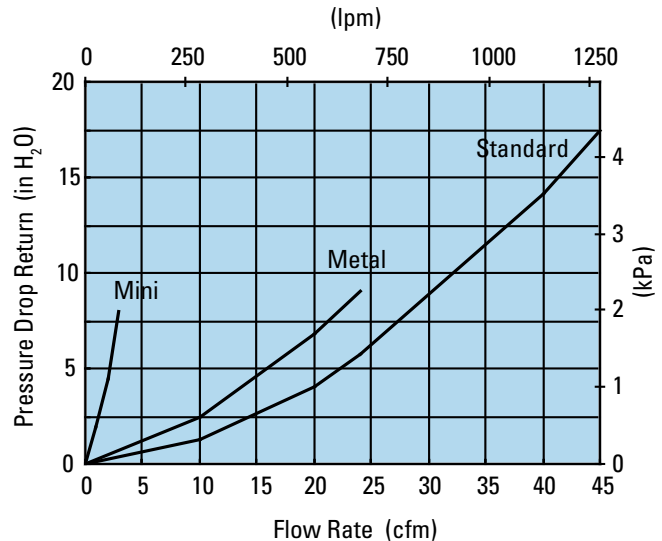
- Install kit between reservoir and T.R.A.P. breather. Lock-up style indicator with manual reset. Highly visible, bright red band shows when restriction limit is reached. Indicator setting 20" H<sub>2</sub>O (5.0 kPa).

### Caution!

In environments with combustible dusts or vapors, use non-electrical models only.



### T.R.A.P. Performance Data



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