Donaldson
FILTRATION SOLUTIONS

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.

T.R.A.P.™ THERMALLY REACTIVE ADVANCED PROTECTION

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.

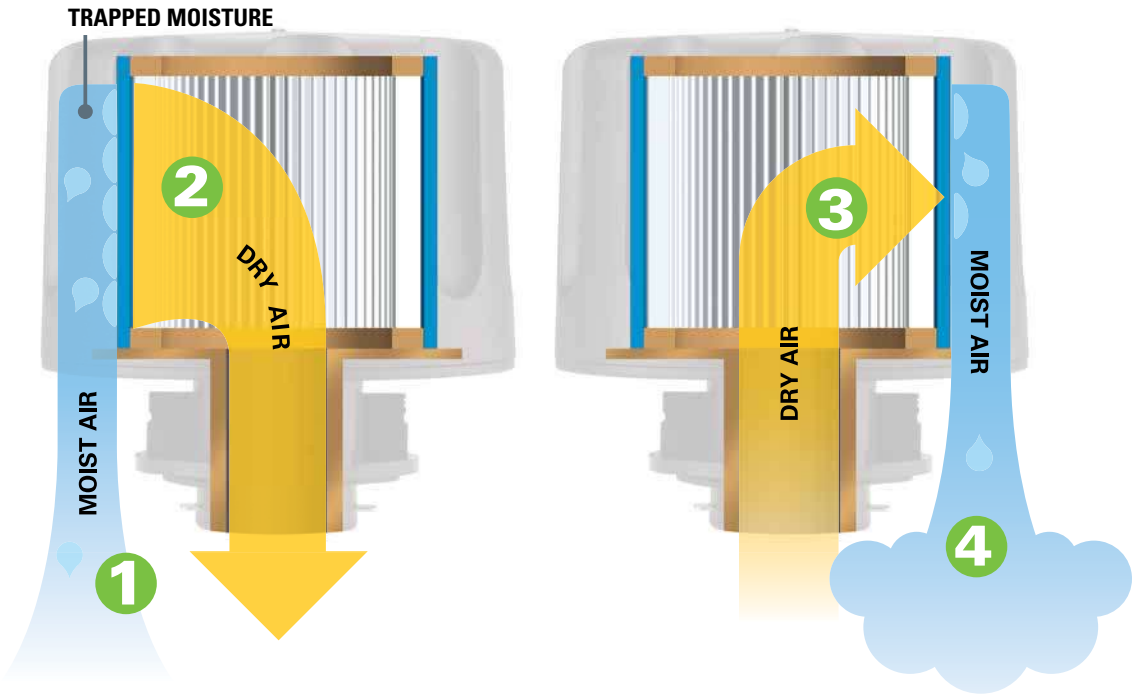
TRAP water before it gets in without restricting air flow, letting your hydraulic and lube oil reservoirs BREATHE.

Compare	T.R.A.P. Technology	Desiccant Filters
Service Life	Extended life (expels moisture and refreshes its holding capacity on each cycle).	Shorter life (due to saturation of filtering material), leading to frequent replacement.
Effectiveness	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.
Maintenance costs	Increased service hours.	Reduced service hours.
Technology	Thermally reactive barrier that removes moisture at relative humidity levels as low as 15%.	Absorbent filtering material that loses holding capacity with each cycle.
Filtration	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.
Oil Mist	Built-in coalescing stage.	No oil mist control.
Rugged Design	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.

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!



INTAKE CYCLE (INHALATION)

OUTFLOW CYCLE (EXHALATION)

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.

T.R.A.P.™ THERMALLY REACTIVE ADVANCED PROTECTION

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

Standard

Medium Metal

Mini

Part No.	Connection	Maximum Flow (cfm/lpm)	Indicator	Moisture Removal
Standard ABS Plastic Breathers with Oil/Splash Containment				
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
Medium Epoxy Coated Steel Breathers with Oil/Splash Containment				
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
Mini Nylon Breathers with Oil/Splash Containment				
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
Mini Particulate Only Breathers with Oil Splash Containment				
P567932	3/8" NPT	3/85	none	No
P567933	1/4" NPT	3/85	none	No

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

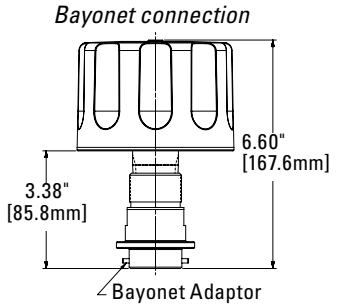
Part No.	Description	Connection
Bayonet Style Filler Basket - For use with bayonet style T.R.A.P. Breathers		
P566321	3" Stainless steel basket	6-bolt 2.81/71.4 circle
P575080	6" Stainless steel basket with Lock Tab	6-bolt 2.81/71.4 circle
P563874	4" Nylon Basket	6-bolt 2.81/71.4 circle
P563453	6" Stainless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

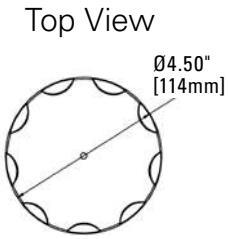
T.R.A.P.™ Breather Specifications

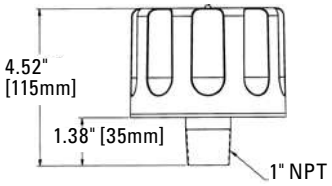
Standard

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

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

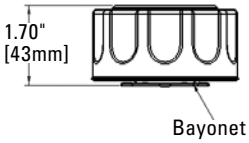




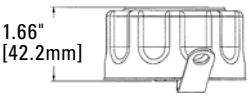


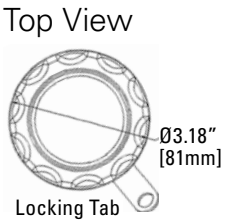
Metal

P565858
Bayonet connection

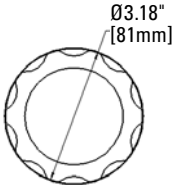


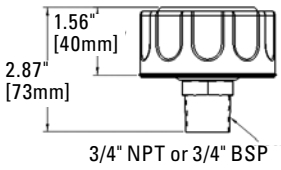
P575077 Bayonet connection with Lock Tab





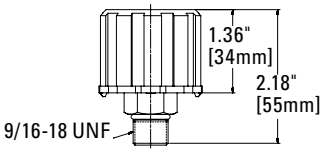
P565857 (3/4" NPT connection, optional mechanical indicator)
P566037 (3/4" BSP connection)

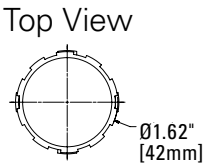




Mini

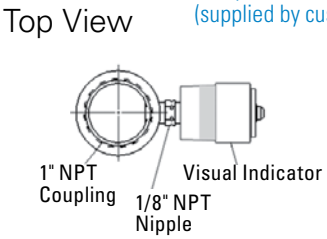
P566174
P567390
P567392

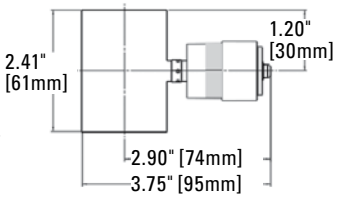




Mechanical Indicator Kit

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

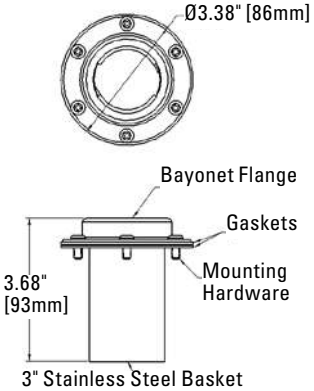




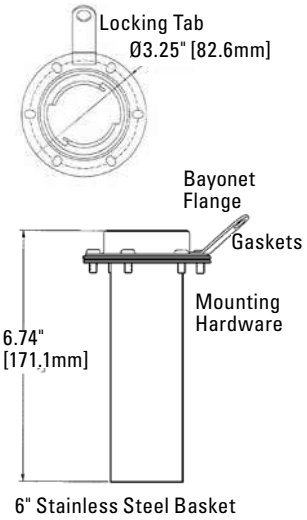
Bayonet Style Filler Basket/Flange Kits

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

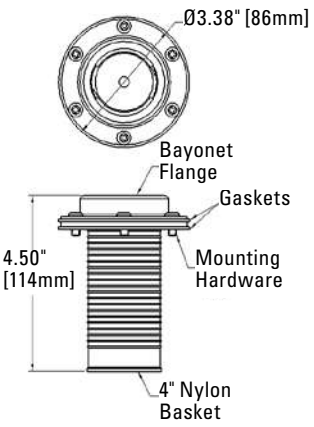
P566321



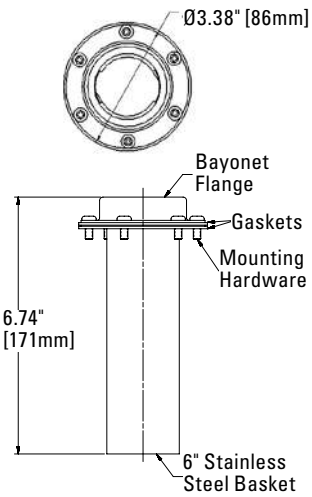
P575080



P563874



P563453



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
- Change breather every 6 months.

Electronic Indicator

- Actuated by pressure differential or 6 month time interval, whichever comes first. Light flashes red to indicate change out is needed*. Indicator setting, 1 psid (6.9kPa).

Mechanical Indicator Kit

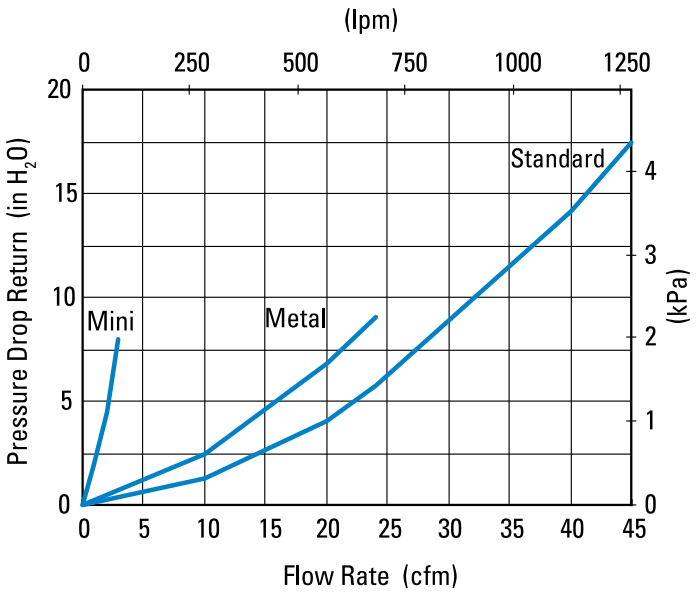
- Install kit between reservoir and T.R.A.P. breather. Lock-up style indicator with manual reset. Highly visible, bright red band shows when restriction limit is reached. Indicator setting 20" H_2O (5.0 kPa).

Caution!

In environments with combustible dusts, vapors or high moisture, use non-electrical models only.
Indicator light failures due to corrosion from environments with high moisture will not be covered by warranty.

*Once actuated, indicator light will flash until battery dies (30-60 days).

T.R.A.P. Performance Data



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 shortflash 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.

Donaldson
FILTRATION SOLUTIONS

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Brochure No. F111221 ENG (12/21)