

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 the moisture out of reservoirs, which means you won't need to change the breather due to water saturation ... unlike desiccant filters that 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 Blocking 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.

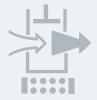
Moisture is blocked by Donaldson's T.R.A.P. breather. In fact, it removes moisture at relative humidity levels as low as 15%. T.R.A.P. filtration technology reacts instantly to changes in thermal conditions — blocking moisture.

T.R.A.P. breathers strip moisture vapor from intake air and releases the moisture back to 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.

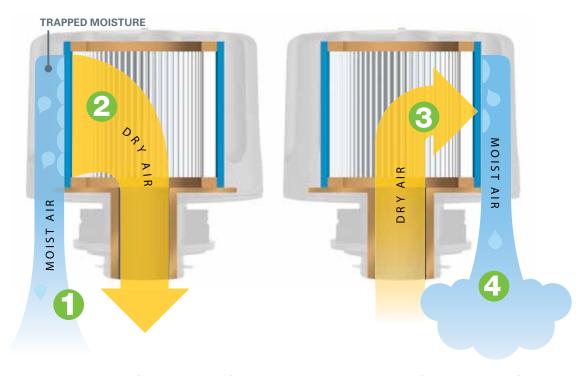
TRAP water before it gets in without restricting air flow, letting your hydraulic and lube oil reservoirs BREATHE.

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	Reduced service hours.	Increased 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.
Other Advantages	Will not freeze in winter.	Subject to freezing in winter conditions.

Moisture Meets its Match See 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)

- The circuit "breathes in" air containing moisture vapor.
- 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.
- 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 Offering

	Part Number	Construction	Connection	Max Airflow (cfm/lpm)	Indicator	Oil Splash / Mist Containment
A Th The	P566151	ABS	1" NPT	45 / 1274	Optional Mechanical	Yes
	P566156	ABS	Bayonet using adapter	45 / 1274	No	Yes
	P564669	ABS	1" NPT	45 / 1274	Electronic	Yes
Standard	P565616	ABS	Bayonet using adapter	45 / 1274	Electronic	Yes
	P565857	Epoxy Coated Steel	3/4" NPT	25 / 708	Optional Mechanical	Yes
	P565858	Epoxy Coated Steel	Bayonet	25 / 708	No	Yes
Metal	P566037	Epoxy Coated Steel	3/4" BSP	25 / 708	No	Yes
	P566174	Glass-filled Nylon	9/16"-18UN	3 / 85	No	Yes
	P567390	Glass-filled Nylon	3/8" NPT	3 / 85	No	Yes
Mini	P567392	Glass-filled Nylon	1/4" NPT	3 / 85	No	Yes

T.R.A.P. Breather Sizing

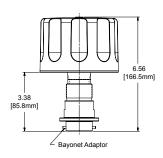
Model	Hydraulic Systems (gal/l)	In-plant lube (gal/l)	Outside (gal/l)
Standard	100/375	500/1875	250/938
Metal	40/150	200/750	100/375
Mini	4/15	20/75	10/38

T.R.A.P. Breather Specifications

Standard P565616

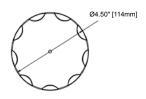
P566156 (no indicator version)

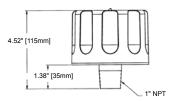
Available with or without electronic indicator



Top View

P564669 (optional mechanical) **P566151** (no indicator version)



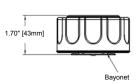


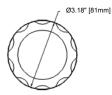
Metal

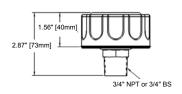
P565858

Top View

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







Mini **P566174**

P567390 P567392

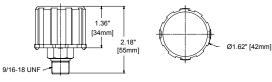
P566321

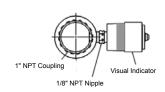
Top View

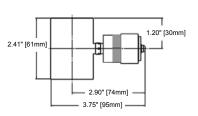
Mechanical Indicator Kit P566168

Suitable for use with P566151 and P565857*

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





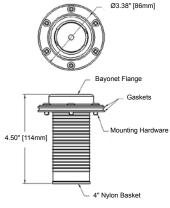


Bayonet Style Filler Basket/Flange Kits

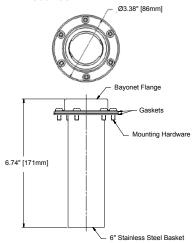
Use with any bayonet style T.R.A.P. Breather

Bayonet Flange Gaskets 3.68* [93mm] Mounting Hardware 4.1

P563874



P563453



T.R.A.P.™ Breather Technology

Eliminates Moisture and Particulate from Reservoirs



Low Restriction to Air Flow (lpm) 0 250 500 750 1000 20 Pressure Drop Return (in H,O) **Standard** 10 Metal Mini 5 15 20 25 30 35 40

Apply T.R.A.P. based on fluid exchange rate, not reservoir size.

Technical Features

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.

Operating Temperature Range

• -40°F to +200°F / -40°C to 93°C

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" H₂O (5.0 kPa).

Caution!

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



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