

PETRO INDUSTRIAL



petroind.com

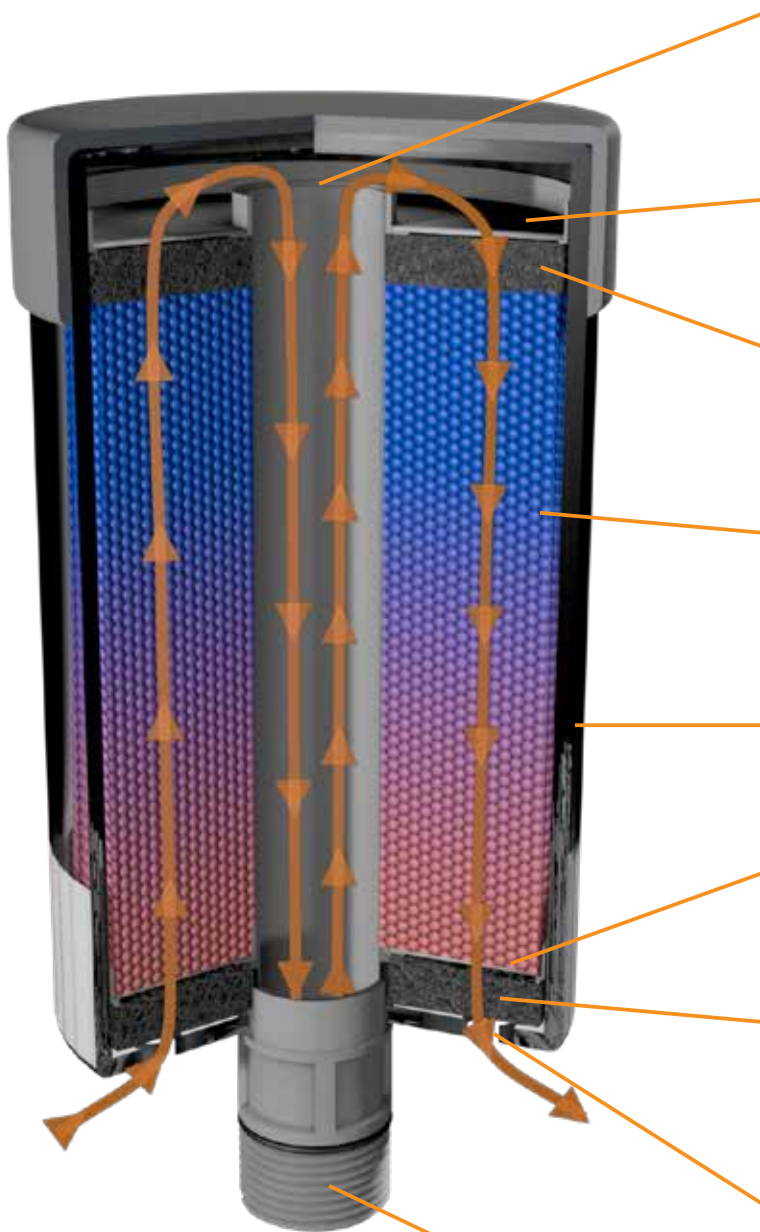


Power Breathers

Protects lubricants and equipment from moisture and particulate intrusion.
Extends service cycles and equipment life resulting in lower lifetime operating costs.

PETRO Power Breathers

This breather unit is a marked improvement over the customary dust caps or OEM breathers on equipment. When contaminated air enters the top of the breather, it passes through layered filter media, preventing solid particles from entering the breather and causing undue wear to your equipment surfaces. Filtered air passes through a bed of Power Breather silica gel, which removes harmful moisture from the air. The silica beads also work to attract moisture from inside the equipment reservoir during service or shut-down, keeping the equipment dry.



Center Tube

The center tube is constructed from rugged nylon material providing rigidity to the element and allowing for even airflow through the silica gel.

Secondary Filter Media

Second filter step prevents any possible migration of silica dust providing added system protection.

Secondary Oil Mist Collector

Polyurethane foam collects oil mist and distributes air evenly over filter media and moisture absorbing silica gel.

Moisture Absorbent

The Power Breather silica gel provides industry leading moisture removal and holds up to 40% of its weight.

ABS Outer Shell

Clear outer shell provides a visual indicator of silica gel condition allowing for optimum change out intervals.

Filter Media

3-micron absolute particulate filtration is provided by a polyester filter media.

Oil Mist Collector

Polyurethane foam collects oil mist and distributes air evenly over filter media and moisture absorbing silica gel.

Air intakes

Air intakes are opened based on flow requirements and provide moisture protection for breather while being shipped/stored.

Sure-fit Connection

Use sure-fit connections instead of filler/breather cap. Adapters also available.

Performance

The PETRO Breather offers significant performance improvements over other leading desiccant breathers.

Value add features:

Multiple head-to-head tests with leading competitors demonstrate that PETRO POWER Breather Silica Gel averages nearly 20% more moisture holding capacity than other leading brands.

The increased body length of the PETRO POWER Breather allows for 10% more volume of our silica gel when compared to leading competitors.

Materials

Body: ABS, Nylon, Polypropylene, Buna

Moisture Absorbing Media: Silica Gel

Filter Media: Polyester, Polyurethane

Filter Efficiency: 3 Micron Absolute

Operating temperatures: -20 F to 200 F / -29 °C to 93 °C

Dimensions

Model	Connection	Height	Width
TT-BB	3/8" Sure-Fit (NPT, BSPP, BSPT)	4.30"(10.92cm)	2.52"(6.40cm)
TT-1	3/8" Sure-Fit (NPT, BSPP, BSPT)	5.80"(14.73cm)	2.52"(6.40cm)
TT-2	1" Sure-Fit (NPT, BSPP, NPSM)	6.24"(15.85cm)	4.10"(10.41cm)
TT-3	1" Sure-Fit (NPT, BSPP, NPSM)	8.44"(21.27cm)	4.10"(10.41cm)
TT-4	1" Sure-Fit (NPT, BSPP, NPSM)	10.54"(26.78cm)	4.10"(10.41cm)

Sizing suggestions

Model	Max Moisture Retention	Max Airflow at 1psid
TT-BB	28ml / 1.0 fl oz	7 cfm / 198 lpm
TT-1	60ml / 2.0 fl oz	7 cfm / 198 lpm
TT-2	142ml / 4.8 fl oz	18 cfm / 510 lpm
TT-3	264ml / 8.9 fl oz	18 cfm / 510 lpm
TT-4	424ml / 14.3 fl oz	18 cfm / 510 lpm

Applications

- Hydraulic Systems
- Storage Tanks
- Totes/Drums
- Transformers

Typical Industries

- Manufacturing
- Chemical
- Pulp & Paper
- Storage Facilities
- Mining
- Power Plants
- Wind Energy



Power Breathers CV



PETRO Power Breathers

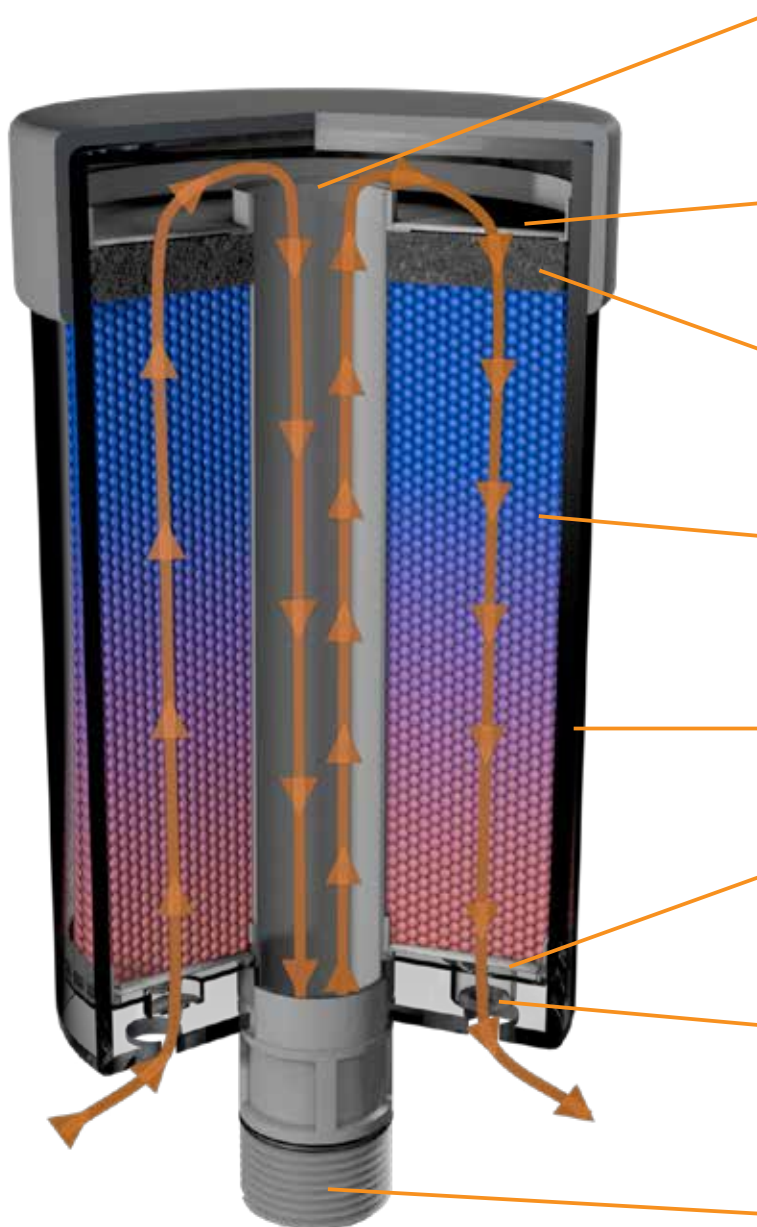
This breather unit is a marked improvement over the customary dust caps or OEM breathers on equipment.

When contaminated air enters the top of the breather, it passes through layered filter media, preventing solid particles from entering the breather and causing undue wear to your equipment surfaces.

Filtered air passes through a bed of Power Breather silica gel, which removes harmful moisture from the air.

The silica beads also work to attract moisture from inside the equipment reservoir during service or shut-down, keeping the equipment dry.

The addition of check-valves in our CV breather is ideal for low-flow and intermittent operations in high humidity conditions.



Center Tube

The center tube is constructed from rugged nylon material providing rigidity to the element and allowing for even airflow through the silica gel.

Secondary Filter Media

Second filter step prevents any possible migration of silica dust providing added system protection.

Oil Mist Collector

Polyurethane foam collects oil mist and distributes air evenly over filter media and moisture absorbing silica gel.

Moisture Absorbent

The Power Breather silica gel provides industry leading moisture removal and holds up to 40% of its weight.

ABS Outer Shell

Clear outer shell provides a visual indicator of silica gel condition allowing for optimum change out intervals.

Filter Media

3-micron absolute particulate filtration is provided by a polyester filter media.

Check-Valves

Check-valves provide protection in washdown areas. Check-valves isolate equipment from ambient conditions, prolonging life.

Sure-fit Connection

Use sure-fit connections instead of filler/breather cap. Adapters also available.

Performance

The PETRO Breather offers significant performance improvements over other leading desiccant breathers.

Value add features:

Multiple head-to-head tests with leading competitors demonstrate that PETRO POWER Breather Silica Gel averages nearly 20% more moisture holding capacity than other leading brands.

The increased body length of the PETRO POWER Breather allows for 10% more volume of our silica gel when compared to leading competitors.

Materials

Body:	ABS, Nylon, Polypropylene, Buna
Moisture Absorbing Media:	Silica Gel
Filter Media:	Polyester, Polyurethane
Filter Efficiency:	3 Micron Absolute
Operating temperatures:	-20 F to 200 F / -29 °C to 93 °C

Dimensions

Model	Connection	Height	Width
TT-BB-CV	3/8" Sure-Fit (NPT, BSPP, BSPT)	4.30"(10.92cm)	2.52"(6.40cm)
TT-1-CV	3/8" Sure-Fit (NPT, BSPP, BSPT)	5.80"(14.73cm)	2.52"(6.40cm)
TT-2-CV	1" Sure-Fit (NPT, BSPP, NPSM)	6.24"(15.85cm)	4.10"(10.41cm)
TT-3-CV	1" Sure-Fit (NPT, BSPP, NPSM)	8.44"(21.27cm)	4.10"(10.41cm)
TT-4-CV	1" Sure-Fit (NPT, BSPP, NPSM)	10.54"(26.78cm)	4.10"(10.41cm)

Sizing suggestions

Model	Max Moisture Retention	Max Airflow at 1psid
TT-BB-CV	28ml / 1.0 fl oz	5 cfm / 142 lpm
TT-1-CV	60ml / 2.0 fl oz	5 cfm / 142 lpm
TT-2-CV	142ml / 4.8 fl oz	10 cfm / 283 lpm
TT-3-CV	264ml / 8.9 fl oz	10 cfm / 283 lpm
TT-4-CV	424ml / 14.3 fl oz	10 cfm / 283 lpm

Note: Max moisture retention varies with operating conditions

Applications

- High Humidity Areas
- Washdown Environments
- Low-Flow
- Gear Boxes

Typical Industries

- Manufacturing
- Chemical
- Pulp & Paper
- Storage Facilities
- Mining
- Power Plants
- Wind Energy



Rebuildable Stainless Steel Power Breathers

Protects lubricants and equipment from moisture and particulate intrusion.

Extends service cycles and equipment life in high-flow applications.



304 SS
Housing

304 SS Construction

priced below competitors carbon steel units. PETRO believes carbon steel should be eliminated in high humidity environments.

Filter
Cartridge

20%

more Microglass Media equating to more dirt holding capacity.

Moisture
Holding

20%

more moisture holding capacity for the Power Breather Gel compared to competitors and proven in head-to-head trials.

iPETRO
Rebuild
Kits

Fully Compatible

with DES-CASE rebuildable breathers.

The PETRO Rebuildable Power Breather offers the ability to remove both particulate and moisture in high-flow and extreme humidity environments.

While in service, the Power Breather eliminates moisture and particulate intrusion into the system. During shutdown, the Power Breather silica gel attracts moisture by actively drying the system.

Rebuild Kit

Replacement Filter Cartridge

Pleated microglass filter cartridge captures airborne contaminants to 1 micron absolute.

Desiccant Bag Filter

Polypropylene bag has handles for easy removal and replacement.

Sight Glass Indicator

Silica gel changes color from blue to pink when the unit requires rebuilding.

Note: Rebuild kit also includes lid gasket, sight glass gasket and oil dispersing foam pad.



Rebuildable Breather Components

1-Pleated Filter Cartridge

Pleated microglass filter cartridge captures airborne contaminants to 1 micron absolute.

2-Desiccant

Silica gel strips moisture from incoming air.

3-Sight Glass Indicator

Silica gel changes color from blue to pink when the unit requires rebuilding.

4-Air Vents

Removable stickers keep breather inactive until installation.

5-Integrated Standpipe

Open-flow construction provides negligible resistance to air flow and allows oil mist to coalesce and drain back into the reservoir.

6-Foam Pad

Polymeric foam filter pad captures large particulate, attracts and absorbs oil, and disperses incoming air evenly across the filter cartridge and desiccant media.

7-Easy to Replace Desiccant Bag

Polypropylene bag has handles for easy removal.

8-Rugged Housing

Robust 304 SS construction eliminates chance of corrosion in high humidity environments.

Features

- 304 Stainless Steel housing.
- Easy to replace desiccant bags remove moisture from incoming air.
- Pleated filter removes particles to 1-micron absolute.
- Eliminates rust forming condensation.
- Prevents water contaminated fluid and sludge deposits.
- Reduces wear and tear on equipment prolonging life.

Materials

- **Housing:** 304 Stainless Steel
- **Moisture Absorbing Media:** Silica Gel
- **Filter Media:** Microglass, Polyurethane
- **Gasket/Seal:** Buna-N

Dimensions

Model	Height inches/cm	Width inches/cm	Approx. Dry Weight lbs/kg	Amount of Desiccant lbs/kg	Max Absorption Capacity gal/L	Max. Air Flow Rate cfm	Operating Temperature	Connect Size
TT-RS-3	11.5/29.2	10.1/25.7	16/7.26	3/1.36	0.14/0.54	85 @ 0.5psid	-20-220°F / -29-104°C	2"
TT-RS-5	13.75/34.9	10.1/25.7	20/9.07	5/2.27	0.24/0.9	85 @ 0.5psid	-20-220°F / -29-104°C	2"
TT-RS-9	18.25/45.4	10.1/25.7	27/12.25	9/4.08	0.43/1.62	80 @ 0.5psid	-20-220°F / -29-104°C	2"
TT-RS-15	19.25/48.9	15.5/39.4	49/22.23	15/6.80	0.71/2.7	205 @ 0.5psid	-20-220°F / -29-104°C	3"
TT-RS-25	22.5/57.1	15.5/39.4	64/29.03	25/11.34	1.19/4.5	140 @ 0.5psid	-20-220°F / -29-104°C	3"
TT-RS-50	31.25/79.4	15.5/39.4	100/45.36	50/22.68	2.38/9	115 @ 0.5psid	-20-220°F / -29-104°C	3"
TT-RS-75	39.75/101	15.5/39.4	144/65.32	75/34.02	3.57/13.5	80@ 0.5psid	-20-220°F / -29-104°C	3"

Rebuild Parts & Accessories

(PETRO Rebuild Kits can be used in DES-CASE Rebuildable Breathers)

Model	Description
TT-RS-*-RK	Rebuildable Stainless Steel Breather Kits
TT-RS-*-F1	Rebuildable Stainless Steel Breather Microglass Filter Cartridge
TT-RS-*-D1	Rebuildable Stainless Steel Desiccant Bag
TT-RS-*-SG1	Rebuildable Stainless Steel Breather Sight Glass
TT-RS-*-P1	Rebuildable Stainless Steel Breather Foam Pad Insert
TT-RS-*-G1	Rebuildable Stainless Steel Breather Gasket Seals

NOTE: For part codes containing an (*), substitute the appropriate RS model number.

(Example: the part code for a rebuildable stainless steel breather kit for the TT-RS-75 would be TT-RS-75-RK.)

PETRO recommends use of a pressure relief valve on any tank or storage system.

Applications

- Diesel Tank Storage
- Hydraulic Reservoir
- Bulk Storage
- Chemical & Harsh Environments

Typical Industries

- Manufacturing
- Chemical
- Pulp & Paper
- Storage Facilities
- Mining
- Power Plants
- Wind Energy

