# BT Breathers with T.R.A.P.<sup>TM</sup> Technology

# Self-Regenerating Moisture and Particulate Breathers

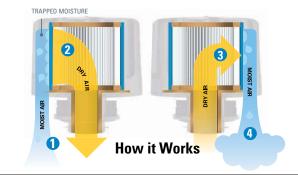
Protect your uptime, critical hydraulic & lube assets and fluid life. Hy-Pro Thermally Reactive Advanced Protection (T.R.A.P) breathers are critical in Hy-Pro's Total System Cleanliness approach as a barrier preventing airborne particles and water from entering reservoirs and gearboxes. Unlike traditional dessicant breathers, T.R.A.P breathers can self-regenerate their water-holding capacity, extending the life of the breather and lowering the total cost of ownership.



## Long life, fewer change-outs.

Unlike traditional silica gel breathers, Hy-Pro T.R.A.P. breathers utilize a technology that allows the breather to continuously regenerate its water absorbing capacity. This technology allows the breather life to be extended up to 6 months. By reducing the number of change-outs required, money is saved in both parts and labor.



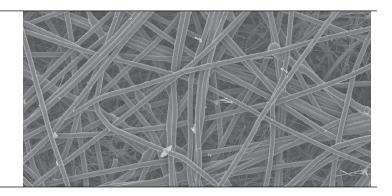


# Self-Regenerating Water Absorbing Capacity.

Atmospheric moisture is a continuous threat to efficient operations of your equipment and machinery. Hy-Pro T.R.A.P Breathers absorb water from the air coming into the reservoir. Air is heated and dried in the warm hydraulic reservoir. As the tank exhales, the dry air strips the moisture from the saturated T.R.A.P. media, regenerating it's life.

## Dual contamination prevention.

Each Hy-Pro T.R.A.P. Breather is equipped with an internal 3 micron particulate filter along with a proprietary water absorbing media to keep your system both clean and dry. T.R.A.P. Breathers utilize a full pleated media pack to maximize dirt holding capacity and minimize pressure drop.





## Complete drying system.

Achieve the ultimate head space drying system when paired with the TMR-Air or TMR-N<sub>2</sub> reservoir driers. The combination of the two technologies will eliminate condensation issues in tanks and reservoirs.

### The perfect fit for your system.

Hy-Dry Breathers come in a variety of sizes, connections, and other options designed for countless applications. Whether you're installing on a small gearbox reservoir or on-board a high vibration mobile application, there's a Hy-Pro T.R.A.P. Breather suited perfectly to fit your needs.





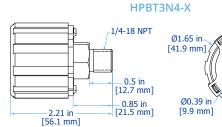
## **Total Systems Cleanliness**

Used in conjunction with more robust particulate filtration, Hy-Pro T.R.A.P. Breathers are a pivotal component to achieving Total Systems Cleanliness and ensuring your equipment is protected from all forms of airborne contamination.

# **BT Reservoir Adapters**

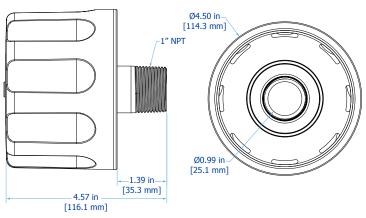
Element Connection	Reservoir	Material	Indicator	Use with	
connection	Connection	material	Set Point	Breather	
3/4" FNPT	3/4" MNPT	Stainless Steel	Indicator Kit Included 20" H2O/5 kPa Trip Point	HPBT25N12-X	
1" FNPT	1" MNPT	Plastic	Indicator Kit Included 20" H2O/5 kPa Trip Point	HPBT45N16-X	
3/8-12 UN		Plastic	20" H2O/5 kPa Trip Point	Replacement Indicator	<u></u>
1" FNPT & 1 ½-16 UN	Bayonet	Plastic	N/A	HPBT45	t <sub>e</sub>
_	3/4" FNPT 1" FNPT 3/8-12 UN 1" FNPT &	3/4" FNPT   3/4" MNPT     1" FNPT   1" MNPT     3/8-12 UN   1" FNPT & Bayonet	3/4" FNPT 3/4" MNPT Stainless Steel   1" FNPT 1" MNPT Plastic   3/8-12 UN Plastic   1" FNPT & Bayonet Plastic	3/4" FNPT3/4" MNPTStainless SteelIndicator Kit Included 20" H2O/5 kPa Trip Point1" FNPT1" MNPTPlasticIndicator Kit Included 20" H2O/5 kPa Trip Point3/8-12 UNPlastic20" H2O/5 kPa Trip Point1" FNPT &BayonetPlasticN/A	3/4" FNPT3/4" MNPTStainless SteelIndicator Kit Included 20" H2O/5 kPa Trip PointHPBT25N12-X1" FNPT1" MNPTPlasticIndicator Kit Included 20" H2O/5 kPa Trip PointHPBT45N16-X3/8-12 UNPlastic20" H2O/5 kPa Trip PointReplacement Indicator1" FNPT &BayonetPlasticN/AHPBT45

# **BT** Installation Drawing

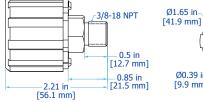






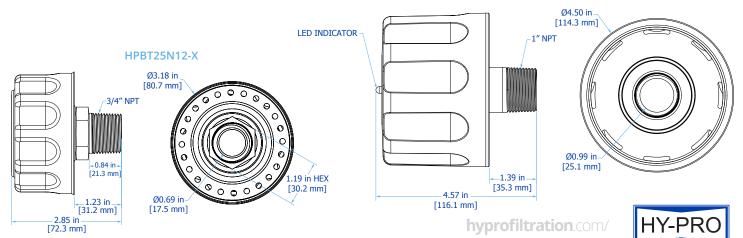


HPBT3N6-X





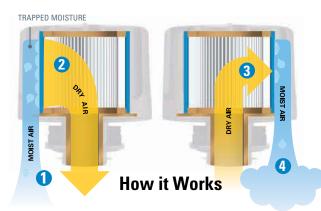
HPBT45N16-DX



# BT Disposable Cartridge Breathers

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Model	HPBT3N4-X	HPBT3N6-X	HPBT25N12-X	HPBT45N16-X	HPBT45N16-DX
Height	2.21″	2.21"	2.85"	4.57"	4.57"
	5.6 cm	5.6 cm	7.2 cm	11.6 cm	11.6 cm
Diameter	1.65″	1.65″	3.18″	4.5″	4.5″
	4.2 cm	4.2 cm	8.1 cm	11.4 cm	11.4 cm
Connection	1/4" MNPT	3/8" MNPT	3/4" MNPT	1" MNPT	1" MNPT
Allowable Tank Connections	1/4" BSPT 1/4" FNPT	3/8" BSPT 3/8" FNPT	3/4" BSPT 3/4" G 3/4" FNPT SAE-12	1" BSPT 1" G 1" FNPT SAE-16	1" BSPT 1" G 1" FNPT SAE-16
Airflow	3 cfm	3 cfm	25 cfm	45 cfm	45 cfm
	5 m³/h	5 m³/h	42 m³/h	76 m³/h	76 m³/h
Reservoir Flow	22 gpm	22 gpm	337 gpm	337 gpm	337 gpm
	85 lpm	85 lpm	1274 lpm	1274 lpm	1274 lpm
Particulate Efficiency	3µ <sub>[C]</sub> @ 97%	3µ <sub>[C]</sub> @ 97%	3µ <sub>[C]</sub> @ 97%	3µ <sub>[C]</sub> @ 97%	3µ <sub>[C]</sub> @ 97%
Material	ABS Plastic	ABS Plastic	Steel E-coated	ABS Plastic	ABS Plastic
Indicator	None	None	None	None	Electric LED light

For all up to date option details and compatibilites, please reference our Contamination Solutions Price List or contact customer service.



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#### **INTAKE CYCLE (INHALATION)**

1 The circuit "breathes in" air containing moisture vapor.

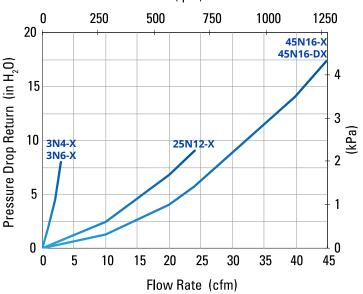
The T.R.A.P. breather strips moisture and particulate from the incoming air, allowing only clean, dry air to enter the circuit.

#### **OUTFLOW CYCLE (EXHALATION)**

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 breather's water-holding capacity.

### T.R.A.P. Performance Data (Ipm)





#### Want to find out more? Get in touch.

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