

STEALTH ABS™

ACTIVE RESERVOIR BREATHER SYSTEM



Effortless Reservoir Headspace Maintenance

The presence of contaminants in reservoirs can cause corrosion, degradation of oil, and wear on bearings. The reservoir headspace itself may well be a major source of this contamination. As a result, controlling moisture and particulate levels in the reservoir headspace requires constant vigilance.

Active Dehydration

The patented Stealth ABS (Active Breather System) eliminates the need to continually replace conventional desiccant breathers. Conventional desiccant breather devices are passive by nature, relying on reservoir level changes to draw in air. The Stealth ABS enhances reservoir breathing systems by actively and continuously purging and dehydrating the reservoir headspace. In addition, desiccants

will eventually become ineffective - so unless they are monitored and changed periodically, they can allow moisture to enter the reservoir. With the Stealth ABS system, headspace dehydration is continuous and virtually maintenance-free.

Moisture Control

Reservoir fluids with an exceptionally high affinity for water, such as the phosphate ester-based fluids which are often used in steam turbine control systems, tend to readily absorb moisture from the ambient environment. The Stealth ABS combats ambient ingress by introducing a steady stream of clean, dry air within the reservoir. This constant air flow helps sustain optimal conditions within the reservoir.

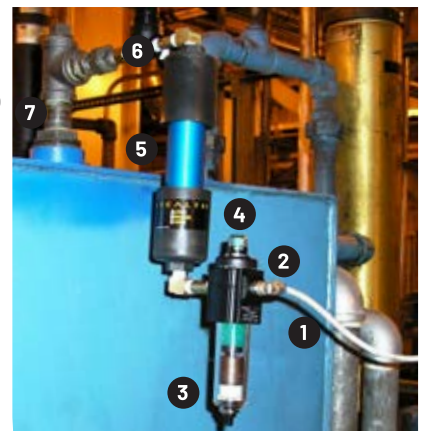
As an added benefit, the Stealth ABS has proven to be very effective at improving oil quality, by removing a portion of moisture that is already in the oil!

Key Benefits

- Eliminates the need to replace costly desiccant style breathers
- Minimizes the potential for particulate or water ingress through reservoir access points
- Prevents the formation of condensate and rust in the oil reservoir
- Helps to reduce dissolved moisture in oil
- Approved by GE Energy for Hydraulic Control Oil Reservoirs

Features (numbers follows air flow)

1. The STEALTH ABS is designed to work with standard plant air - Instrument quality air is not required!
2. Submicron COALESCING AIR FILTER collects oil and water droplets and fine particles present in the inlet air.
3. AUTOMATIC DRAIN purges captured liquids. No intervention required!
4. VISUAL INDICATOR monitors filter condition.
5. Advanced MEMBRANE AIR DRYER reduces the plant air dew point by as much as 66oC.
6. PRESSURE REGULATOR, partnered with a precision sonic orifice, depressurizes the air and ensures that the proper volume of air is introduced into the reservoir.
7. The CLEAN DRY AIR SWEEP dehydrates the reservoir headspace and removes dissolved moisture from exposed oil.



Market Applications

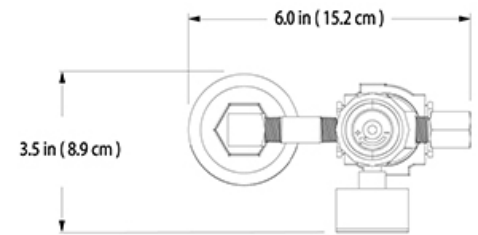
- Lube and Hydraulic Reservoirs
- Phosphate Ester Reservoirs

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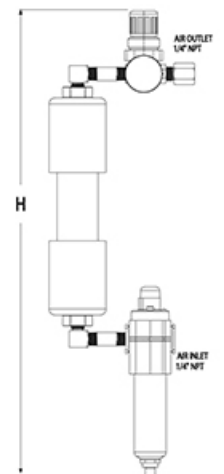
Specifications

Component	Material / Value
Prefilter Media Type	Borosilicate Glass
Prefilter Housing	Polycarbonate, Zinc (Black)
Particle Removal	0.3 micron
Max Oil Carryover @ 20 °C	0.01 mg/m ³
Filter Condition	Visual Indication (red when fouled)
Coalescer Drain	Automatic Float Type
Air Dryer Shell Material	Anodized Aluminum (Blue)
Air Dryer End Cap Material	Nylon (Black)
Fittings Material	Brass
Seals Material	Buna-N
Mounting Orientation	Vertical
Mounting Bracket	9.5 - 406.40 mm Threaded Nut
Maximum Operating Temperature	51 °C
Maximum Operating Pressure	8 barg
Pressure Regulator	Dial Gauge
Electrical Requirements	None
Weight	3 kg



Performance and Ordering Information

Component	Reservoir Headspace liters	System Height (H) cm	Inlet Air Required (@ 7 barg) slpm	Outlet Flow Volume (@ 7 barg and dew point suppression from 27 °C) slpm	Air Outlet Dew Point °C
LSAB-50-AN	190	48	14	6	-57
SAB-50-BN	380	48	23	14	-57
LSAB-100-DN	950	58	42	28	-57
LSAB-200-GN	2800	76	88	59	-57
Replacement coalescing filter element - PCNR05023K01B					



If reservoir is prone to rapid liquid volume changes, it may be necessary to up-size the Stealth ABS.

Please contact Pentair for assistance.

Need a customized solution to meet performance, design, and space constraints?

Please contact your Pentair representative or email EFCustomerService@pentair.com



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