

Mobile Gate

MBR110

Filler Breather Assemblies



Part Number: 5002486

Mobile-gate™ reservoir breather filters out particles and moisture before it contaminates the oil. Hydraulic reservoirs “breathe” air in and out as the oil level rises and falls. This air contains particles and water. Particles “sand blast” your machinery and water attacks your oil and components. The Mobile-gate reservoir breather filters out particles and moisture. Protect your hydraulic system with a filter.

Features/Benefits:

- **Proprietary Media:** Reduces dew point temperature to prevent condensation and is 99.7% efficient in blocking particles 10µ and larger.
- **Water Regeneration:** Regenerates its water holding capacity with each cycle.
- **Reversible Flow Through Media:** Allows for moisture to exit the reservoir.
- **Easy Installation:** Lightweight design; only needs to be hand tightened.
- **Rugged Housing:** Protects the media from external splashing.

Eaton Mobile-gate™

Breather Assemblies provide low cost, high efficiency protection against airborne moisture and particulate contamination. Patented technology eliminates moisture condensation in hydraulic system reservoirs. Moisture is prevented from entering and is actually “pumped” out with each flow cycle. The media regenerates its water holding capacity with every oil return phase, ensuring long service life.

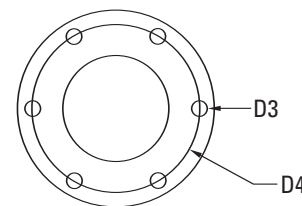
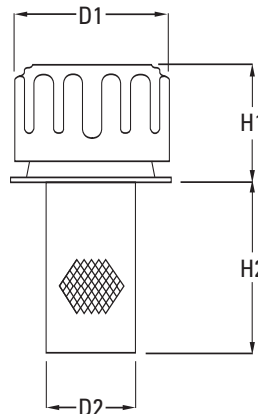
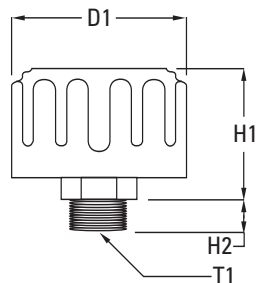
MBR120



Part Number: 5002487

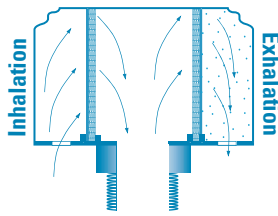
SPECIFICATIONS

PART NUMBER	FLOW		DIMENSIONS (in)						
	gpm	lpm	D1	D2	D3	D4	H1	H2	T1
MBR110	125	475	3.08	-	-		2.33	0.63	NPT 3/4
MBR120	125	475	3.08	1.88	0.25	2.81	2.50	3.50	-



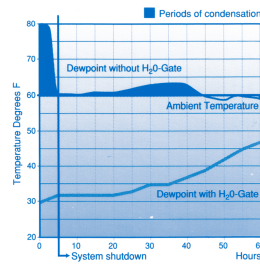
Part Numbers:
NPT Mobile-gate
Flange Mobile-gate

MBR110
MBR120



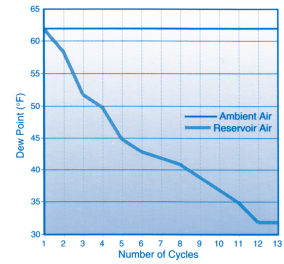
Performs as a gate

During the “inhalation” cycle, the Mobile-gate proprietary media blocks the water vapor from entering the reservoir. During the “exhalation” cycle, the media allows the moisture in the reservoir air to exit. The moisture is carried off the media by the exiting air, restoring the media’s water barrier capacity, and the moisture barrier mechanism is not affected by the amount of exposure to moisture. The reservoir air is maintained at a low relative humidity, and more importantly, at a lower dew point temperature than the ambient temperature.



Works even when the system is shut down.

The Mobile-gate Vent Breather retards the vapor equilibrium process and works to prevent condensation even after the system is shut and cooled down, such as overnight. As this chart illustrates, the dewpoint is slow to climb, even after the system temperature has dropped to the ambient temperature. Once the system has reached ambient temperature, condensation does not occur.



Reduces humidity inside reservoir.

The Mobile-gate Vent Breather lowers and stabilizes the relative humidity of air inside the reservoir, leading to a lower dewpoint ($T_{dewpoint} < T_{ambient} = \text{NO CONDENSATION}$) at a rate and amount that will be dependent upon several conditions: the ambient conditions, the internal reservoir heat, amount and frequency of reservoir air flow through the vent, and the temperature of the reservoir surfaces.

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