



## **Standard Information**

Hydraulic filler breathers are critical components in hydraulic systems, serving two primary functions: allowing air exchange in the reservoir and filtering contaminants from the air entering the system.

## **General Safety Precautions**

- **System Depressurization:** Before inspecting, installing, or replacing a filler breather, ensure the hydraulic system is depressurized. This prevents sudden fluid release or air discharge that could cause injury.
- **Wear PPE:** Always wear appropriate personal protective equipment (PPE), such as gloves, safety glasses, and protective clothing, to safeguard against exposure to hydraulic fluids or contaminants.
- **Contamination Control:** Prevent dirt, dust, and other contaminants from entering the hydraulic system during breather installation or maintenance. Even small particles can lead to system inefficiency or damage.

## **Installation Safety**

1. **Location Compatibility:**
  - Install the filler breather in the designated location, typically on top of the reservoir. Ensure it is securely mounted to avoid leaks or misalignment.
  - Verify the breather's flow rate, filtration rating, and compatibility with your hydraulic fluid and system requirements.
2. **Proper Sealing:**
  - Ensure seals and gaskets are correctly installed and intact to prevent leaks or unfiltered air from entering the system.
  - Avoid over-tightening the breather, which could damage the threads or compromise the seal.
3. **Correct Orientation:**
  - Mount the breather in the correct orientation as specified by the manufacturer to ensure proper operation and filtration.

## **Operation Safety**

- Regularly check the breather to ensure it allows free airflow. Blocked or clogged breathers can create vacuum conditions that harm the hydraulic system.
- Inspect the breather for signs of oil mist, dirt, or other contaminants that may indicate system issues or breather inefficiency.
- Verify that the breather is functioning correctly to allow pressure equalization in the reservoir, preventing overpressure or vacuum conditions that could damage seals or other components.



## **Maintenance Safety**

- Clean or replace the breather according to the manufacturer's guidelines or as part of regular maintenance schedules. A clogged or dirty breather can reduce efficiency and lead to contamination.
- Before removing the breather, clean the area around it to prevent debris from entering the reservoir during maintenance.
- If the breather has a replaceable filter element, ensure it is replaced with a compatible part from the manufacturer. Improper filters can reduce performance or allow contamination.

## **Emergency Procedures**

- **Spill Containment:** Have spill kits readily available to address accidental fluid leaks or overflows.
- **Fire Safety:** Be aware of the hydraulic fluid's flammability. Keep fire extinguishers nearby, particularly in high-temperature environments.

## **Troubleshooting**

- A clogged breather may cause vacuum conditions or overpressure in the reservoir. Clean or replace the breather as needed to restore proper airflow.
- Excessive oil mist around the breather may indicate system issues, such as high operating temperatures or overfilled reservoirs. Address the root cause to prevent fluid loss.
- If the breather is leaking or not functioning effectively, check the seals and mounting hardware. Replace or re-seat the breather as required.
- Restricted airflow may indicate a dirty filter element or improper breather sizing. Verify the breather's capacity against system requirements and replace the element if necessary.

### **Please note:**

- Dispose of used breather elements, filters, and hydraulic fluids in accordance with local environmental regulations. Avoid releasing contaminants into the environment.
- Disposal: Discard plugs on inclined flange following environmental guidelines.
- Consult the manufacturer for any uncertainties or application-specific guidelines.

For additional information, contact Mintor or refer to the detailed technical manual.