



Standard Information

Hydraulic visual level indicators with float are commonly used to monitor fluid levels in hydraulic systems. These indicators operate using a floating device that moves with the hydraulic fluid level, allowing operators to visually check the fluid level within the reservoir.

General Safety Precautions

- **System Depressurization:** Before installing, inspecting, or servicing a visual level indicator with a float, ensure the hydraulic system is depressurized. Working on a pressurized system may result in fluid leakage or cause injury.
- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including gloves, safety glasses, and protective clothing, to prevent injury from hydraulic fluid, especially if it is under pressure or at high temperatures.
- **Avoid Contaminating the Fluid:** Ensure that no dirt, dust, or other foreign materials come in contact with the float or the indicator, as this can affect the accuracy of the fluid level reading and contaminate the hydraulic fluid.
- **Avoid Overfilling:** Do not overfill the reservoir. Follow the recommended fluid levels indicated by the float to avoid potential overflow, damage to seals, or system malfunctions.

Installation Safety

- **Correct Mounting:** When installing the visual level indicator, ensure it is properly aligned and securely mounted to the reservoir. Misalignment or improper mounting can result in inaccurate readings or damage to the float and housing.
- **Ensure Proper Sealing:** Double-check that the seals and gaskets are intact and properly positioned during installation to prevent leaks around the level indicator.
- **Verify Compatibility:** Ensure that the indicator is compatible with the type of hydraulic fluid being used and that it is rated for the operating temperature and pressure of the system. Use only manufacturer-approved components for installation.
- **Torque Specifications:** When installing or tightening the level indicator, adhere to the manufacturer's recommended torque settings to avoid damaging the housing or sealing components.

Operation Safety

- **Monitoring Fluid Levels:** Regularly inspect the visual level indicator to ensure that the float is freely moving and the level indicator window remains clean and unobstructed. Proper fluid levels are crucial to maintaining hydraulic system efficiency and preventing damage.
- **Observe Float Movement:** The float should move smoothly and freely with changes in the fluid level. If the float becomes stuck or restricted, the level indicator will not show accurate readings, which may lead to system failure.



Maintenance Safety

- **Cleaning and Inspection:** Regularly clean the level indicator and its components to maintain accurate fluid level readings. Ensure that the indicator window is free from dirt, grime, or fluid build-up. Use non-abrasive materials to clean the window to avoid scratching.
- **Check for Leaks:** Inspect the level indicator and surrounding seals periodically for any signs of leakage. Fluid leaks can pose safety risks, and ongoing leakage may indicate damaged seals or gaskets that need to be replaced.
- **Float Functionality:** Periodically check the float for signs of wear, corrosion, or damage. A damaged float may cause inaccurate readings or fail to operate correctly.
- **Replace Worn Components:** If any part of the visual level indicator is damaged, including the float, housing, or seals, replace the component immediately with the manufacturer-approved replacement part.

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

- **Float Sticking or Binding:** If the float becomes stuck or fails to move freely, inspect the indicator and reservoir for debris or damage. Clean the float and housing to restore its functionality.
- **Incorrect Fluid Level Readings:** If the indicator shows inaccurate fluid levels, check for float damage, air bubbles in the indicator window, or leaks around the housing. Address any issues to ensure reliable readings.
- **Leaking Indicator Housing:** If there is fluid leakage around the housing of the indicator, inspect the seals and gaskets for wear. Replace any damaged seals to prevent fluid loss.

Please note:

- **Proper Fluid Disposal:** Always dispose of used or contaminated hydraulic fluids according to local environmental regulations. Hydraulic fluid leaks should be contained and cleaned promptly to minimize environmental impact.
- **Consult the manufacturer** for any uncertainties or application-specific guidelines.

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