Caleffi 2021

Caleffi 626600 Fluxostat 1" User Manual

Model: 2021

1. Product Overview

The Caleffi 626600 Fluxostat is a flow switch designed for use with pipes of 1 inch diameter. This device is crucial for monitoring fluid flow within a system, ensuring proper operation and safety.

Key Features:

- Designed for 1-inch pipes.
- Electrical rating: 250 V (AC) – 15 (5) A.
- Maximum operating pressure: 10 bar.
- Temperature range: -30 °C to 120 °C.
- Protection rating: IP 54.



Image 1: The Caleffi 626600 Fluxostat, showing its brass body, black electrical housing, and the paddle sensor. This device is used to detect the presence or absence of flow in a pipe system.

2. Safety Information

Please read all safety instructions carefully before installation, operation, or maintenance of the Caleffi 626600 Fluxostat. Failure to follow these instructions may result in property damage, injury, or death.

- **Electrical Safety:** Ensure power is disconnected before performing any wiring or maintenance. All electrical work must be performed by a qualified electrician in accordance with local codes and regulations.
- **Pressure Safety:** Do not exceed the maximum operating pressure of 10 bar. Depressurize the system before installation or removal.
- **Temperature Safety:** Operate within the specified temperature range of -30 °C to 120 °C. Extreme temperatures can damage the device.
- **Installation:** Install the device in a location where it is protected from physical damage and extreme environmental conditions.
- **Chemical Compatibility:** Ensure the fluid flowing through the pipe is compatible with the materials of the fluxostat to prevent corrosion or damage.

3. Setup and Installation

Proper installation is critical for the accurate and reliable operation of the fluxostat.

1. **System Preparation:**
    - Turn off and lock out all power to the system where the fluxostat will be installed.
    - Depressurize and drain the section of the pipe where the installation will occur.
2. **Mounting Location:**
    - Select a straight section of 1-inch pipe, ensuring sufficient space for the device and its paddle.
    - Avoid locations immediately downstream of pumps, valves, or elbows that could cause turbulence and affect accuracy.
3. **Mechanical Installation:**
    - Thread the fluxostat into the appropriate 1-inch female pipe fitting. Use thread sealant (e.g., PTFE tape) to ensure a watertight seal.
    - Ensure the paddle is correctly oriented within the pipe to detect flow. The arrow on the fluxostat body (if present) should align with the direction of flow.
    - Tighten the fluxostat securely, but do not overtighten, which could damage the threads or the device.
4. **Electrical Wiring:**
    - Open the electrical housing of the fluxostat.
    - Connect the electrical wires according to the wiring diagram provided with the product or system. The fluxostat is rated for 250 V (AC) – 15 (5) A.
    - Ensure all connections are secure and insulated.
    - Close the electrical housing, ensuring the IP 54 protection rating is maintained.
5. **System Test:**
    - Slowly repressurize the system and check for leaks around the fluxostat.
    - Restore power to the system and verify the fluxostat's operation by initiating flow and observing the connected control system's response.

4. Operating Principles

The Caleffi 626600 Fluxostat operates on a simple mechanical principle. Inside the pipe, a paddle is positioned in the flow path. When fluid flows through the pipe, it exerts pressure on the paddle, causing it to pivot. This pivoting action activates an internal switch (typically a microswitch).

- **No Flow:** When there is no fluid movement, the paddle remains in its resting position, and the switch is in one state (e.g., normally closed or normally open).
- **Flow Detected:** As fluid begins to flow and reaches a certain velocity, the paddle is pushed, changing the state of the internal switch. This signal can then be used by a control system to activate or deactivate other components, such as pumps, alarms, or safety shutdowns.

The device is designed to provide a reliable indication of flow presence, not flow rate. Its IP 54 rating ensures protection against dust ingress and splashing water, making it suitable for various industrial and HVAC applications.

5. Maintenance

The Caleffi 626600 Fluxostat is designed for minimal maintenance. However, periodic checks can ensure its longevity and reliable operation.

- **Visual Inspection (Annually):**
  - Check for any signs of external damage, corrosion, or leaks around the fitting.
  - Inspect the electrical housing for cracks or loose connections.
- **Functional Test (Annually):**
  - If possible and safe, simulate a flow condition and a no-flow condition to verify the switch activates and deactivates correctly.
  - Ensure the connected control system responds as expected.
- **Cleaning:**
  - If the system fluid contains particulates, the paddle mechanism may become fouled over time. If performance degrades, the unit may need to be removed and the paddle cleaned. Ensure the system is depressurized and drained before removal.
- **Replacement:**
  - If the fluxostat shows signs of significant wear, damage, or consistent malfunction, it should be replaced with an original Caleffi part.

6. Troubleshooting

If you encounter issues with your Caleffi 626600 Fluxostat, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Fluxostat not activating with flow.	• Insufficient flow rate. • Paddle obstructed or damaged. • Incorrect wiring. • Internal switch failure.	• Verify flow rate meets minimum requirements. • Depressurize, drain, and inspect/clean the paddle. • Check wiring against diagram. • Replace the fluxostat if internal switch is faulty.

Problem	Possible Cause	Solution
Fluxostat remains activated without flow.	• Paddle stuck in activated position (e.g., due to debris). • Internal switch failure.	• Depressurize, drain, and inspect/clean the paddle. • Replace the fluxostat if internal switch is faulty.
Leaks around the fluxostat.	• Improperly tightened fitting. • Damaged threads or sealant.	• Depressurize and retighten the fitting. • Depressurize, remove, reapply thread sealant, and reinstall.

If problems persist after attempting these solutions, contact a qualified technician or Caleffi customer support.

7. Specifications

Parameter	Value
Model Number	2021
Pipe Diameter	1 inch
Electrical Rating	250 V (AC) – 15 (5) A
Max Operating Pressure	10 bar
Temperature Range	-30 °C to 120 °C
Protection Rating	IP 54
Manufacturer	CALEFFI
ASIN	B07C9DJ4N6

8. Warranty and Support

For information regarding warranty coverage, please refer to the specific terms and conditions provided at the time of purchase or contact your authorized Caleffi distributor. Generally, products purchased may be eligible for a refund or replacement within 30 days, subject to seller policies.
For technical support, spare parts, or further assistance, please contact Caleffi customer service or your local authorized service center. When contacting support, please have your product model number (2021) and ASIN (B07C9DJ4N6) ready.
Manufacturer: CALEFFI

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