



M-61 Series

Fixed setting flow switch with in-line flow



Operating Instructions and Quick Start Guide

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Table of Contents

| | |
|---------------------------------|----------|
| Introduction | 3 |
| Operation | 3 |
| Storage and Handling | 3 |
| Installation Instruction | 3 |
| Construction | 3 |
| Dimensional drawings | 4 |
| Warranty | 5 |

Introduction

The M-61 flow switch monitors increasing or decreasing fluid flow in right angle flow path. The M-61 flow switch's construction comprises of an all-PFA molded body with a PTFE encapsulated magnetic piston. The all PFA and PTFE design makes the M-61 flow switch compatible with caustic fluids. The magnetized piston actuates a hermetically sealed reed switch in response to fluid flows. The M-61 switch is suitable for a wide range of applications in industrial, biomedical and semiconductor industries, especially where highly corrosive fluids are used.

Operation

The operating principle is based on a free floating magnetic piston which responds only to the motion of fluids within the line, not to static or system pressures. In the presence of fluid flow, controlled movement of the piston actuates an external hermetically sealed reed switch thus producing the required signal. This signal can be used to actuate audible or visual alarms as well as relays, or other controls. Piston travel is short which insures low hysteresis.

Storage and Handling

Storage conditions

Store the product under packed condition in an anti-static bag. The storage place shall be free from moisture, mechanical shock and vibration. The ambient temperature shall be between 0°C and 60°C and the humidity between 5% and 80% R.H. without condensation.

Unpacking and Product Inspection

On delivery, check the product for damage. Confirm that the model code on the label matches the specification in the purchase order.

Installation Instructions

The standard switch has to be mounted vertically in the position for normally open conditions. Adequate filtration and sealing procedures should be used when mounting in flow lines.

A ten micron or better filter is recommended.

Construction

The piston is available is a PTFE Encapsulated. This piston is a magnet that has PTFE molded around it and then machined to the appropriate configuration. These pistons are primarily used in PTFE flow switches. where customers prefer a piston that does not have epoxy in the fluid path; as well as a piston that is impervious to aggressive fluids and gases. This piston is highly recommended for medical applications.

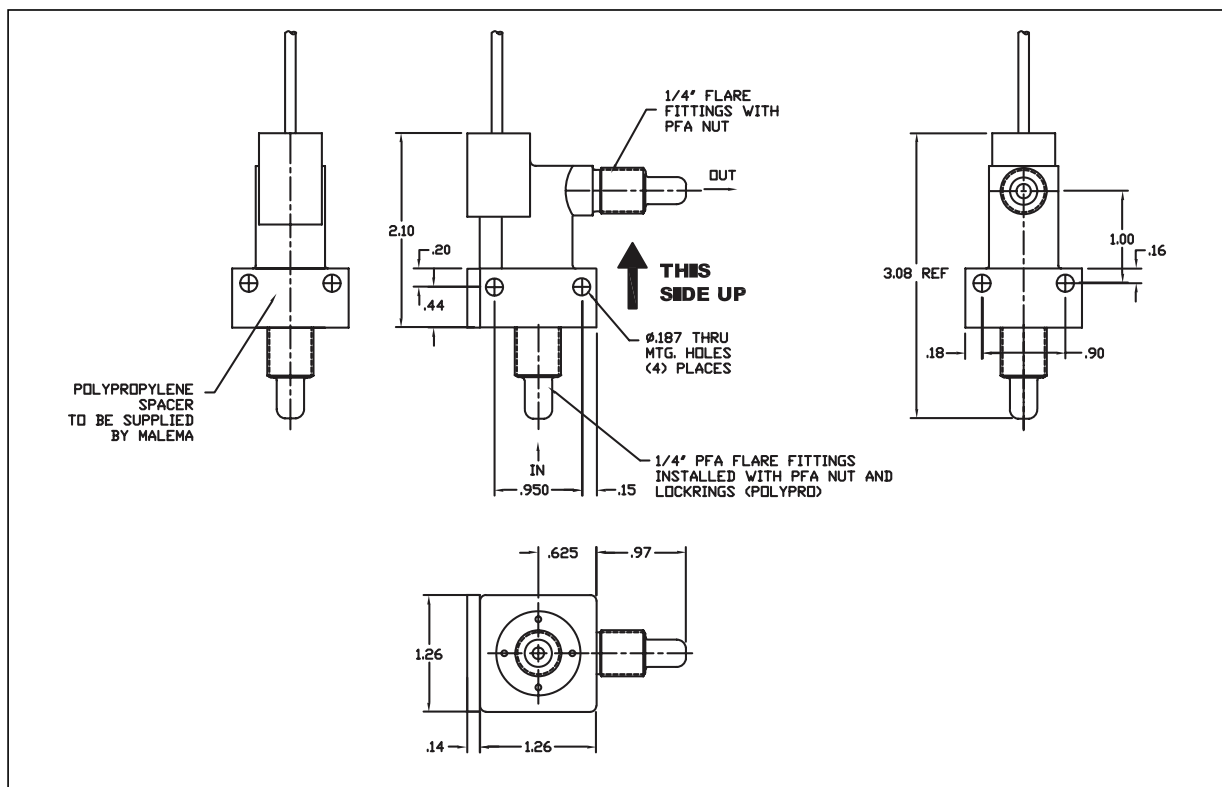
CONTACT ARRANGEMENT

Electrical Color Coding

| | |
|------|--|
| SPST | 2 Blue Wires |
| SPDT | Orange - Normally Open Yellow - Normally Closed Green - Common |

Dimensional and Cut-Away drawings

Illustrated Below is the M-61 Model with 1/4" flare fitting.



Fixed Flow Setting Information

This model is a FIXED flow switch. The flow set point is fixed at the factory and is NOT field adjustable. Proper calibration of the set point requires the following information.

- Calibration set point,
- Increasing or decreasing flow,
- Fluid type (i.e. liquid or gas),
- Density or specific gravity,
- Viscosity,
- System pressure and temperature.

Warranty

Malema Sensors warrants to the buyer that its products are free from defects in materials and workmanship at the time of shipment and during the WARRANTY PERIOD. Malema Sensors obligation under this warranty is limited to the replacement of the product(s) by same product(s) manufactured by Malema Sensors or repair of the product(s) at the Malema Sensors facility. Malema Sensors products are sold with the understanding that the buyer has determined the applicability of the product(s) to its intended use. It is the responsibility of the buyer to verify acceptability of performance to the actual conditions of use. Performance may vary depending upon these actual conditions.

Warranty Period

This warranty is in effect for twelve (12) months from the date of shipment from Malema Sensors place of business.

Warranty Claim

If Malema Sensors products are found to be defective in materials or workmanship within twelve (12) months of the date of shipment, they will be repaired or replaced with same product at the discretion of Malema Sensors at its place of business at no charge to the buyer.

Service and Repair

To return the products, please obtain an RMA number for the product by contacting Malema Sensors (Corporate Office), Boca Raton at (800) 637-6418 or (561) 995-0595.

All returns of equipment must go to the following address:

Malema Sensors,
1060 S Rogers Circle
Boca Raton, FL 33487, USA

NOTE: Specifications are subject to change without notice.

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