

M-62 Fixed setpoint flow switch with in-line flow and flare fittings

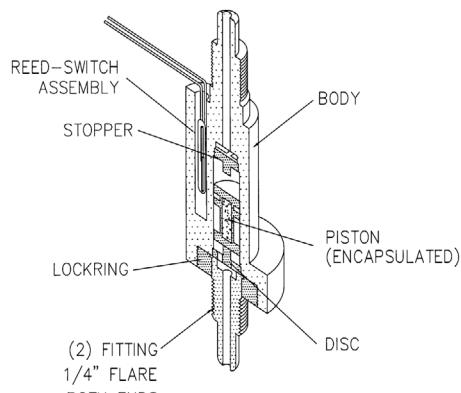
DESCRIPTION

The M-62 inline flow switches monitor increasing or decreasing flow. The M-62 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-62 flow switch compatible for caustic fluids. The magnetized piston actuates a hermetically sealed reed switch in response to fluid flows. The M-62 switch is suitable for a wide range of applications in industrial, biomedical and semiconductor industries, especially where highly corrosive fluids are used.



OPERATING PRINCIPLE

The magnetic piston moves in response to fluids with in the flow paths and actuates an external hermetically sealed magnetic reed switch. This switch contact can be used to actuate external devices such as audible/visual alarms, relays and other controls.



Illustrated is the M-62 model with 1/4" ports.

KEY FEATURES

- For corrosive and non-corrosive liquids or gases
- Senses increasing or decreasing flow
- Custom flow settings
- Ideally suited for high purity application
- Low maintenance

APPLICATIONS

- Semiconductor process equipments
- Welding systems
- Laser equipment
- Vacuum systems
- Laser cooling systems
- Water treatment
- Chillers

Measurement Specifications

| | |
|-------------------------------|--|
| Calibration Range * | Model M-62: Air : 300 - 55,000 scc/m Water : 20 -1600 cc/m |
| Set Point Accuracy | ± 10%* |
| Repeatability | ± 5% |
| Hysteresis | 15% - 30%* |
| Material | Body : PFA Wetted Parts : PTFE/PFA |
| Port Sizes | 1/4" Flare 3/8" Flare |
| Maximum Operating Pressure | 60 psig |
| Maximum Operating temperature | 40°C |

CV at typical flow

| Water cc/m | Air scc/m | Cv |
|---------------|--------------|------|
| 850 | 30,000 | 0,43 |
| 1,595 | 55,000 | 0,54 |

Specifications

| | | |
|---------------------|--------------------|---|
| Reed Switch Data | Electrical Ratings | 10 Watts SPST or 3 Watts SPDT (Hermetically Sealed) UL Recognized. File E47258 Operating temperature -40°C to 125°C |
| | Switch Voltage | 200 VDC (170 VDC for SPDT) |
| | Breakdown Voltage | 250 VDC (200 VDC for SPDT) |
| | DC Resistive | 10 VA (3 VA for SPDT) |
| | AC Resistive | 10 Watts (3 Watts for SPDT) |
| | Switching Current | 0.5 A (0.25 A for SPDT) |
| | Carrying Current | 1.2 A (0.5 A for SPDT) |
| Lead Wires | | No 24 to 18 AWG. 18" length, Polymeric UL Recognized (Belden cable or special shielded cable is available) |
| Lead Wires Color | | SPST: 2 blue wires SPDT: 3 wires Green - Common Yellow - Normally Closed Orange - Normally Open |

NOTE: Consult SPS-International for any special requirements such as fluid connections, calibration range, temperature and pressure limits.

Reed Switch Ratings as Recognized by UL

| | | |
|------|--------------------------------|---|
| SPST | 120 V ac 24 V dc 50V dc | 0.1 A general purpose 0.25 A resistive 0.25 A resistive |
| SPDT | 120 V ac 10 V dc 24 V dc | 0.1 A general purpose 0.25 A resistive 0.1 A resistive |

CERTIFICATIONS

UL and Canadian UL

UL and Canadian UL Recognized for ordinary locations. File E138467

CE Compliance

As per LVD Directive

INSTALLATION & MAINTENANCE

The standard switch has to be mounted vertically, in the position as shown on page 1, and the fluid flow is from the bottom to the top.

A ten micron or better filter is recommended.

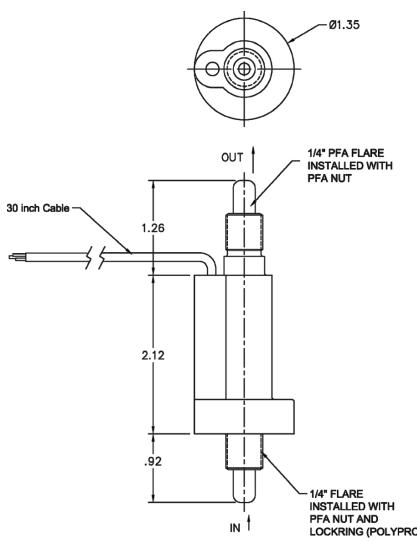
IMPORTANT ORDERING INFORMATION

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. When purchasing a flow switch, use the "Set Point Calibration" form or provide the following information on the purchase order:

- Calibration set point
- Increasing or decreasing flow
- Fluid type
- Density or specific gravity
- Viscosity
- System pressure and temperature
- Flow direction

DIMENSIONAL DRAWINGS

Illustrated is the M-62 model with a 1/4" ports.



Ordering Information

| Model Code | | | | | | | | | Option | | |
|------------------|---|---|---|---|---|-----|--|--|----------------------|--|--|
| M-62 | | | | | | | | | | | |
| | - | | | | | | | | | | |
| Material | | F | | | | | | | PFA | | |
| Fluid Connection | | 2 | | | | | | | 1/4" Flare | | |
| | | | | | | | | | 3/8" Flare | | |
| Switch | | 1 | | | | | | | SPST N.O. | | |
| | | | | | | | | | SPST N.C. | | |
| | | | | | | | | | SPDT | | |
| | | | - | | | | | | | | |
| | | | | 0 | | | | | Standard (Vertical) | | |
| | | | | | 1 | | | | PTFE Encapsulated | | |
| | | | | | | - | | | | | |
| | | | | | | XXX | | | Unique PN Identifier | | |

IMPORTANT ORDERING INFORMATION

Malema welcomes the opportunity to apply its flow sensor experience to work for its customers. Please contact SPS International for any special requirements; such as ports, extreme temperature and pressure capabilities, and others.