



## **Features**

- Low Cost Model
- Universal Mounting
- Convenient Maintenance

# M-701 Series Shuttle Type Non-Adjustable Flow-Switch

## **Description**

The M-701 offers low cost flow monitoring with a variety of switch actuation points and low pressure drop. M-701 is designed for ease of maintanance, as the bonnet and shuttle can be removed, leaving the housing and pipe work connections intact. All wetted parts are polypropylene or stainless steel, making this switch ideal for a wide range of chemical and temperature requirements. The M-701 is suitable for potable water treatment applications including chlorinators, purifiers and heaters. The M-701 is ideal for equipment cooling including welding machines, lasers, etc.

# **Applications**

- Equipment Cooling
  - Welding machines
  - Lasers
  - Heat Exchangers
- Water treatment systems
  - Chlorinators
  - Purifiers
  - Heaters

## **Measurement Specifications**

| Operating Pressure     | 100 psig@70°F, 50 PSIG@180°F, 40 PSIG@210°F |  |  |  |  |  |
|------------------------|---|--|--|--|--|--|
| Temperature            | 60° to 212°F                                |  |  |  |  |  |
| Set Point Hysteresis   | ± 20% maximum                               |  |  |  |  |  |
| Set Point Accuracy     | 5% - 20% maximum                            |  |  |  |  |  |
| Switch                 | SPST- N.O or N.C, SPDT 10W, 0.5 ADC, 200VDC |  |  |  |  |  |
| Inlet/Outlet Ports     | 3/4" FNPT                                   |  |  |  |  |  |
| Electrical Termination | 26" long 22 AWG Teflon insulated wire       |  |  |  |  |  |
| Mounting Orientation   | Any Orientation                             |  |  |  |  |  |

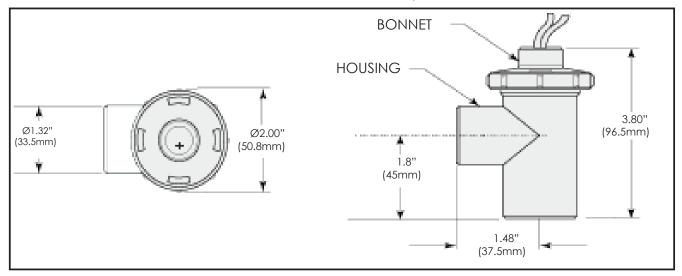
# **Standard Specifications by Materials**

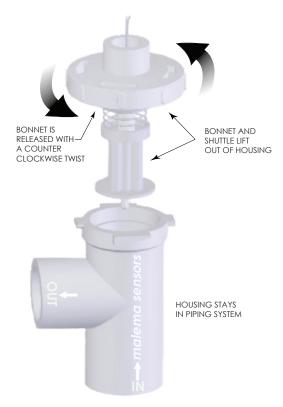
| DC Resistive AC Resistive Switching Current       | 10 Watts (3 Watts for SPDT) 10 VA (3VA for SPDT) 0.5 A (0.25 A for SPDT) 1.2 A (0.5A for SPDT) |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| Switching Voltage<br>Breakdown Voltage            | 200 VDC (170 VDC for SPDT)<br>250 VDC (200 VDC for SPDT)                                       |  |  |  |  |  |  |  |
| Reed Switch Data (Electrical Ratings) Reed Switch | 10 Watts SPST or 3 Watts SPDT (Hermetically Sealed) UL Recognized. File E47258.                |  |  |  |  |  |  |  |
| Retainer Ring                                     | SS   |  |  |  |  |  |  |  |
| Spring  | SS   |  |  |  |  |  |  |  |
| O-ring  | Viton  |  |  |  |  |  |  |  |
| Piston cap  | Polypropylene  |  |  |  |  |  |  |  |
| Piston  | Polypropylene  |  |  |  |  |  |  |  |
| Bonnet  | Polypropylene  |  |  |  |  |  |  |  |
| Housing   | Polypropylene  |  |  |  |  |  |  |  |

<sup>\*</sup> For custom calibiration requirements, contact factory

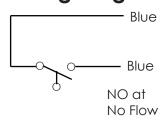
# **Dimensional Drawings**

Illustrated is the M-701 Model with 3/4" FNPT.

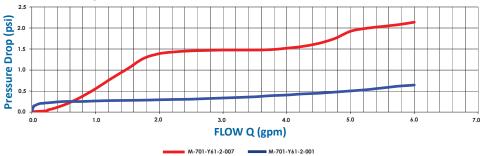




# **Wiring Diagram**



# **Pressure Drop Chart**



Please contact factory for pressure drop information for other set points

## Corporate Headquarters

1060 S Rogers Circle Boca Raton, FL 33487 P: (561) 995-0595 F: (561) 995-0622

### West Coast Headquarters

2329 Zanker Road San Jose, CA 95131 P: (408) 970-3419 F: (408) 970-3426

### Asia Pacific Headquarters

35 Marsiling Industrial Estate Road 3 #02-06 Singapore 739257 P: (65) 6482-3533 F: (65) 6484-4231

## India Headquarters

#1433, 3<sup>rd</sup> and 4<sup>th</sup> Floor, Pipeline Road, Mahalakshmipuram, Bangalore 560086 P:(91) 80 2349-9362

## **Ordering Information**

Specify Part Number based on switch actuation set point. Set points other than those listed are available as special order; contact MALEMA with your requirements. Normaly closed switch logic units available as special orders.

|   | Standard Part Numbering |       |   |                   |           |  |   |                    |   |   |  |  |
|---|-------------------------|-------|---|-------------------|-----------|--|---|--------------------|---|---|--|--|
| N | 1 -                     | Model | - | Material          | Port      | Switch                                     | - | O-ring<br>Material |   | Set Point   |  |  |
| N | ۱ -                     | 701   | - | Υ                 | 6         | 1  | - | 2                  | - | XXX   |  |  |
|   |                         | 701   |   | Y - Polypropylene | 3/4" FNPT | 1 - SPST N.O.<br>2 - SPST N.C.<br>3 - SPDT |   | 2 - Viton          |   | 001 - 0.25 gpm Water Increasing<br>002 - 0.5 gpm Water Increasing<br>003 - 1.0 gpm Water Increasing<br>004 - 1.5 gpm Water Increasing<br>005 - 2.0 gpm Water Increasing<br>006 - 2.5 gpm Water Increasing<br>007 - 5.0 gpm Water Increasing |  |  |

NOTE: Specifications are subject to change without notice.

Malema Sensors, and Malema Engineering Corporation are service marks of Malema Engineering Corporation. All other trademarks are property of their respective owners. Malema supplies this publication for informational purposes only. While every effort has been made to ensure accuracy, this publication is not intended to make performance claims or process recommendations. Malema does not warrant, guarantee, or assume any legal liability for the accuracy, completeness, timeliness, reliability, or usefulness of any information, product, or process described herein. We reserve the right to modify or improve the designs or specifications of our products at any time without notice. For actual product information and recommendations, please contact your local Malema representative.

<sup>© 2020</sup> Malema Engineering Corporation. All rights reserved.