



## FLOW SWITCH MODEL FS1-6

### DESCRIPTION

The **FS1-6 Flow Switch** is designed to prove liquid flow in a wide variety of HVAC and industrial applications. The corrosion resistant flow switch is mounted in a weatherproof box for simple wiring connections. The PPS plastic vane is field trimmable for 1" and larger pipes and is magnetically coupled to the SPDT switch to prevent liquid from entering the switch housing.

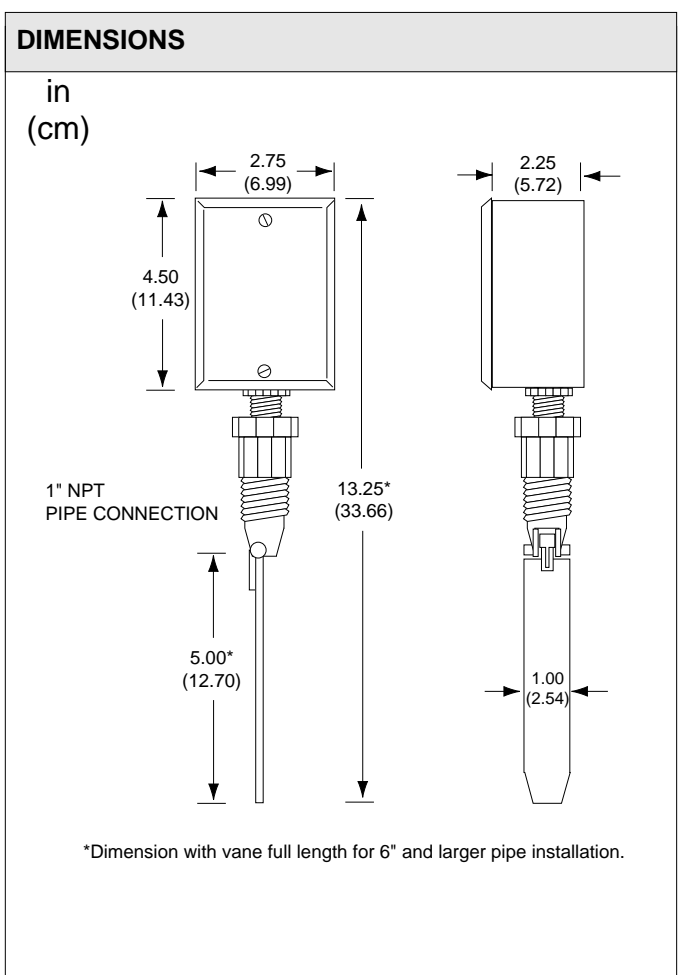
### FEATURES

- **Waterproof construction**
- **Simple installation**
- **Leak proof magnetic switch operation**
- **Field adjustable for 1" and larger pipes**
- **SPDT snap-acting switch**
- **Operating pressures to 150 psig**
- **Operating temperatures to 212°F**



| SPECIFICATIONS               |   |
|------------------------------|---|
| <b>Piping connection</b>     | 1" NPT  |
| <b>Operating pressures</b>   | 150 psig (10 bar)   |
| <b>Operating temperature</b> | 212°F (100°C) max   |
| <b>Wetted materials</b>      | Polyphenylene sulfide, ceramic 8 magnet, 316SS spring and pin |
| <b>Vane</b>                  | Field trimmable for pipes 1" and larger                       |
| <b>Electrical rating</b>     | SPDT snap-acting switch<br>5 amp, 125/250 VAC                 |
| <b>Electrical connection</b> | 18 AWG leads,<br>18" (46 cm) long                             |
| <b>Weight</b>                | 1 lb. (0.45 kg)   |

| WIRING       |                             |
|--------------|-----------------------------|
| <b>BLACK</b> | – Common                    |
| <b>RED</b>   | – Normally Open (No flow)   |
| <b>BLUE</b>  | – Normally Closed (No flow) |





## FLOW SWITCH MODEL FS1-6

### INSTALLATION

1. Carefully unpack switch, making sure to remove any packing from the lower housing. Adjust the actuation or deactuation point by trimming the vane to the length desired. If using a pipe with a weld-o-let, cond-o-let, or plastic PVC fittings, use graduations indicated on the vane. If using standard 125 lb or 250 lb bronze, iron or steel fittings, trim the vane 0.125 inch above the marking provided. Because of the great variation in fittings and process connections, it is recommended the unit be checked when installed to ensure proper operation and that there is no interference between the vane and the fittings. For pipes larger than 6", leave the vane full length.
2. This flow switch is intended to be used in clean process media where particles, scale, and debris are not present. Build up of such materials may cause inaccurate signals.
3. The switch must be indexed during installation in the line with the flow arrow on the side of the switch pointing in the direction of the flow. Pipe sealant is required at the one inch NPT thread connection. It is important to not get the sealant in the vane assembly as it may prevent proper operation and cause misleading signals. When installing the unit, be certain not to over-torque the housing. Damage may occur if excessive force is used.
4. Connect the switch wires in accordance with local electrical codes. The **FS1-6** is not intended to be a load carrying conduit connection. Loads may damage the switch and stop operation.

### PERFORMANCE CHART

| Pipe size | Actuation<br>GPM (LPM) | De-actuation<br>GPM (LPM) |
|-----------|------------------------|---------------------------|
| 1         | 10.7 (40.5)            | 9.3 (35.2)                |
| 1.25      | 9.5 (36.0)             | 7.7 (29.1)                |
| 1.5       | 8.1 (30.7)             | 6.3 (23.9)                |
| 2         | 9.8 (37.1)             | 8.5 (32.2)                |
| 3         | 12.4 (46.9)            | 8.9 (33.7)                |
| 4         | 20.2 (76.5)            | 12.7 (48.1)               |
| 6         | 43.0 (163)             | 32.8 (124)                |
| 8         | 74.2 (281)             | 56.6 (214)                |
| 10        | 116.7 (442)            | 89.0 (337)                |
| 12        | 167.1 (632)            | 127.4 (482)               |

When the flow increases to the actuation GPM (LPM) the switch makes.

When the flow decreases to the de-actuation GPM (LPM) the switch breaks.

Flow rates are approximate and are based on 60°F water.

### ORDERING INFORMATION

**FS1-6**

**Waterproof Flow Switch**