## Specifications - Installation and Operating Instructions



## INSTALLATION

1. The Model V8 Flow Switch is intended for use in clean, compatible process media free from scale, debris and other foreign matter which might collect on the vane and impede its movement. Buildup from such materials will prevent proper operation.
2. Carefully unpack the switch being certain to remove any packing material which might have become lodged between the switch housing and the vane assembly. Note the pipe size indicators molded into the vane. By trimming at the mark corresponding to the pipe size being used, approximate actuationdeactuation flows will be as shown in the charts at right. These values apply to installations with a thred-o-let, branch connection or plastic fitting. If using standard $125-250 \mathrm{lb}$. bronze, iron or steel fittings, trim the vane $0.125^{\prime \prime}$ above the mark. Due to variations in fittings and amount of thread engagement, vane must be checked for proper operation.
3. The flow switch must be properly indexed during installation. The arrow on the side must point in the direction of flow.

## SPECIFICATIONS

Maximum Temperature: $212^{\circ} \mathrm{F}\left(100^{\circ} \mathrm{C}\right)$
Maximum Pressure: 150 pstg (10.3 bas)
Process Connection: 1" NPTM
Switch Type: SPDT snap acting
Electrical Rating: 5A © 125/250 VAC
Wire Leads: 18 AWG $\times 18^{\circ}(45.7 \mathrm{~cm})$
Overall Length: 9.375 in . ( 23.8 cm )
Switah Body: Polypherytene sulphide (PPS)
Wetted Materials Polyphermlene sudphide, ceramic 8 magnet, 316 staintess steel
Vane: Fiold timmable
Installation: Install with index arrow pointing in drection of fow
Weight: 4.5 ounces (128 gramis)

| Cold Water Flow Rates |  | Air Flow Rates |  |
| :---: | :---: | :---: | :---: |
| Approx. Actuation/Deactuation GPM Upper, LPM Lower |  | Approx. Actuation/Deactuation SCFM Upper, NM3/H Lower |  |
| Pipe Size |  | Pipe Stze |  |
| 10 | $\begin{aligned} & 10.8 / 9.1 \\ & 40.9 \sqrt{34} .6 \end{aligned}$ | 1* | $\begin{array}{r} 3932.6 \\ 68.3 \sqrt{55} .4 \end{array}$ |
| $11 /{ }^{\prime \prime}$ | $\begin{gathered} 9.6 / 8.3 \\ 37.2 / 31.4 \end{gathered}$ | $1 \%$ | $\begin{array}{r} 37.5332 .2 \\ 63.7 / 54.7 \\ \hline \end{array}$ |
| 1\% | $\begin{gathered} 8.8 / 8.8 \\ 32.4 / 25.7 \end{gathered}$ | 11/20 | $33.4 \sqrt{26} .7$ |
| $\chi^{2}$ | $\begin{aligned} & 10.9 / 8.8 \\ & 41.2 / 33.4 \end{aligned}$ | 2 | $\begin{array}{r} 43 / 38.8 \\ 73.1 / 625 \end{array}$ |
| $3{ }^{\circ}$ | $\begin{aligned} & 12.9 \sqrt{8.9} \\ & 48.8 / 33.5 \end{aligned}$ | $3^{\prime \prime}$ | $\begin{aligned} & 52.7 / 38.9 \\ & 89.6 / 66 \end{aligned}$ |
| 4* | $\begin{aligned} & 21.1 / 13.8 \\ & 79.7 / 52.2 \end{aligned}$ | 4* | $\begin{gathered} 87.8 / 63.6 \\ 148.9 / 108.1 \end{gathered}$ |
| $6{ }^{\prime \prime}$ | $\begin{gathered} 45 / 33 \\ 170.2 / 124.7 \end{gathered}$ | $6^{\prime \prime}$ | $\begin{aligned} & 168.8 / 137.4 \\ & 286.5 / 233.4 \end{aligned}$ |

4. Use Teflon thread tape or other suitable pipe joint compound to seal the 1" NPT mounting connection. Avoid excess sealant which could interfere with vane movernent and prevent proper operation. Do not exceed 50 ft/lbs. (40 $\mathrm{n} / \mathrm{m}$ ) torque on the switch housing. Damage can result.
5. Wire in accordance with local electrical codes. Lead wire colors are as follows: Black - Common, Red - Normally Open, Blue - Normally Closed. Normal is the contact condition with no flow in the system. Closed contacts open and open contacts close when increasing flow reaches the actuation point.
6. Switch electrical components must be protected from moisture at all times. If necessary, install a lightweight waterproof junction box over the $1 / 2^{\prime \prime}$ NPT threaded stem. Do not place mechanical loading on the switch housing. Permanent darnage can occur. Use flexible Romex sheathing or equivalent.
