## Flow Switches - Liquid

## Series FS4-3 (W) © $\mathbf{~ C ~} \in$ <br> General Purpose Liquid Flow Switches

- Universal design serves the widest variety of applications
- For starting or stopping electrically operated equipment such as signal lights, alarms, motors, automatic burners, metering devices and others
- Replacement for Johnson Controls flow switch Model F61KB-11
- 1 " ( 25 mm ) NPT
- Two electrical knock-outs allows connection from either end
- Sensitivity adjusting screw makes flow adjustment easy

- Single pole, double throw snap switch
- Hardened stainless steel bearings minimize friction
- Sealed Monel bellows
- Four Monel paddles included-1", 2" , 3" \& 6" (25, 50, 80, \& 150 mm ) NPT
- Optional features
- Time delay (5 or 20 seconds)
- Two SPDT switches to make or break two separate circuits
- Reinforced paddles
- Materials of construction suitable for corrosive liquids
- Sprinkler service (UL \& ULC listed)-Model FS4-3F
- BSPT threads

- Minimum temperature (fluid or ambient) $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$
- Maximum temperature $300^{\circ} \mathrm{F}\left(149^{\circ} \mathrm{C}\right)$
- Maximum pressure 150 psi ( $10.5 \mathrm{~kg} / \mathrm{cm}^{2}$ )


## Electrical Ratings

| Voltage | Motor Switch Rating (Amperes) |  | Pilot Duty |
| :---: | :---: | :---: | :---: |
|  | Full Load | Locked Rotor |  |
| 12 VAC | 7.4 | 44.4 | 125 VA at |
| 240 VAC | 3.7 | 22.2 | 50 or 60 cycles |

Dimensions, in. (mm)

| A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3(76)$ | $1^{1 / 2}(38)$ | $7 / 8(22)$ | $2^{7 / 32}(56)$ | $8^{7 / 16(211)}$ | $2^{15 / 16(75)}$ | $3^{3 / 8}(86)$ |


| H | J | K | L | M | N <br> NPT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{11 / 16(43)}$ | $1^{7 / 16(37)}$ | $1^{1 / 8(29)}$ | $3^{7 / 16(87)}$ | $2^{1 / 16(52)}$ | $1(25)$ |

McDonnell \& Miller

## Flow Switches - Liquid (continued)

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Flow Rates


Values are $\pm 10 \%$

Ordering Information

| Model <br> Number | Part <br> Number | Description | Weight <br> lbs. (kg) |
| :--- | :--- | :--- | ---: |
| FS4-3 | 114400 | Liquid flow switch | $2.3(1.0)$ |
| FS4-3D | 114550 | FS4-3 w/2 SPDT switches | $3.3(1.5)$ |
| FS4-3F | 114625 | FS4-3 for sprinkler service | $2.3(1.0)$ |
| FS4-3J | 114610 | FS4-3 w/BSPT threads | $2.0(0.9)$ |
| FS4-3S | 114641 | FS4-3 w/SS/monel construction | $2.3(1.0)$ |
| FS4-3DS | 114642 | FS4-3 w/SS/monel \& w SPDT switches | $3.3(1.5)$ |
| FS4-3RP | 114650 | FS4-3 w/reinforced paddle | $2.3(1.0)$ |
| FS4-3-5R | 114405 | FS4-3 w/5 second delay on break | $2.3(1.5)$ |
| FS4-3-20 | 114425 | FS4-3 w/20 second delay on make | $2.3(1.5)$ |

NOTE: DO NOT USE LIQUID FLOW SWITCHES ON SYSTEMS WITH FLOW GREATER THAN 10 FEET (3M) PER SECOND.

For Model FS4-3F \& FS4-3DF

| NPT Pipe Size <br> In. (mm) | Paddle to use Length | $\begin{aligned} & \text { TEE } \\ & \text { Size } \end{aligned}$ |
| :---: | :---: | :---: |
| 1"(25) | 111/32" as furnished | $\begin{gathered} \hline 1 " \times 1 " \times 1 " \\ \text { NPT Te } \end{gathered}$ |
| 11/4" (32) | Trim 11/2"pipesize paddle with template furnished | 11/4" $\times 1^{11 / 4 " x} \times 1^{\prime \prime}$ NPT Te (Paddle must be bowed for insertion into $1 \frac{1}{4} / 4^{\prime \prime}$ ee) |
| 11/2" (40) | $2^{1 / 16 " \text { as }}$ furnished | 1 12" $\times 1$ ½" $\times 1$ "NPTTee (Paddle must bebowed for insertion into $1 \frac{1}{2} / 2^{\prime \prime}$ te) |

NOTE: ONLY LISTED PIPE SIZES MEET UL REQUIREMENTS FOR FIRE SPRINKLER SYSTEMS.

