

## FS SERIES FLOW SWITCHES

### FLOW DETECTION SWITCHES



These flow switches are designed for use in liquid flow systems at pressures up to 10 bar and temperatures up to 85°C.

The design is based around a moving magnet and a fixed reed switch with a low flow restriction.

The switches are designed to be used in liquids only and should not be used in systems with significant amounts of solid particles.

Custom versions can be made for particular applications.

### Features

- 15mm and 22mm tube versions
- Low flow versions available
- Maximum Operating Pressure 10 bar
- WRAS approved for use in cold and hot water up to 60°C
- Operating temperature rated to 85°C

## SPECIFICATIONS

### Technical

|                                 |                    |              |               |              |               |
|---------------------------------|--------------------|--------------|---------------|--------------|---------------|
| <b>Material</b>                 | Acetal Resin       |              |               |              |               |
| <b>Color</b>                    | Black              |              |               |              |               |
| <b>Temp. Range</b>              | °C                 | -20 / +85    |               |              |               |
|                                 | °F                 | -4 / +185    |               |              |               |
|                                 |                    | <b>FS15A</b> | <b>FS15LF</b> | <b>FS22A</b> | <b>FS22LF</b> |
| <b>Must Operate Flow Rate*</b>  | liters/min         | 2.0          | 0.90          | 3.75         | 1.75          |
|                                 | US Gal/min         | 0.53         | 0.24          | 0.99         | 0.47          |
| <b>Must Release Flow Rate #</b> | liters/min         | 0.3          | 0.25          | 1.40         | 0.75          |
|                                 | US Gal/min         | 0.08         | 0.07          | 0.37         | 0.20          |
| <b>Cable</b>                    | 25cm PVC insulated |              |               |              |               |

### Electrical

|                                 |    |                  |
|---------------------------------|----|------------------|
| <b>Contact Form</b>             |    | N/O with no flow |
| <b>Switching Power Max</b>      | VA | 25               |
| <b>Switching Voltage AC Max</b> | V  | 240              |
| <b>Switching Voltage DC Max</b> | V  | 120              |
| <b>Switching Current Max</b>    | A  | 0.6              |

All ratings are resistive load only.

## STANDARD PARTS

|               | Must Operate l/min | Must Release l/min | Approvals |
|---------------|--------------------|--------------------|-----------|
| <b>FS15A</b>  | 2.0                | 0.3                | WRAS      |
| <b>FS15LF</b> | 0.90               | 0.25               | WRAS      |
| <b>FS22A</b>  | 3.75               | 1.40               | WRAS      |
| <b>FS22LF</b> | 1.75               | 0.75               | WRAS      |

\* The switch will have operated (contacts closed) when the flow rate rises above this value.

# The switch will have released (contacts open) when the flow rate falls below this value.

NB Operate and release flow rates only apply when the switch is mounted with the flow direction vertical.

The sensitivity of the switch is reduced when mounted with the flow direction horizontal.

## INSTALLATION

Flow switches can be mounted with the flow direction horizontal or vertical (upward flow). The cap with cable connection must always be upwards, as the piston is returned to its released position by gravity. When using metal compression fittings to connect flow switches to copper tube, care must be taken not to over-tighten the fittings onto the flow switch body.

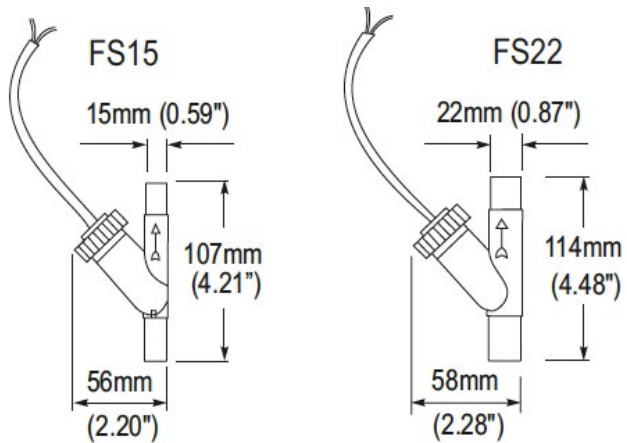
### CAUTION!

The use of plastic plumbing fittings may affect the electrical earth continuity bonding as required by IEE regulations.

If in doubt, consult a qualified electrician.

## DIMENSIONS

All dimensions are in millimeters.



Made in the UK

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

## CONTACT US

+44 (0)1202 897969  
 c3w\_sales@sensata.com  
 Cynergy3 Components Ltd.  
 7 Cobham Road,  
 Ferndown Industrial Estate,  
 Wimborne, Dorset,  
 BH21 7PE, United Kingdom