



## FLOW SWITCH

Sigma Flow Switch is an extension of the level switches. There are two types of flow switches : one for low flow / line size up to 50 mm line size (Model FS 1000) and another from 25 mm onwards up to 800 mm or above (Model FS 1010).

### Operating Principle

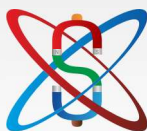
Model FS 1000 is Valve Type Flow Switch wherein an increase in flow through the body raises the valve disc depending upon the flow. This in turn raises the magnetic sleeve moving inside a non-magnetic enclosure. Movement of the sleeve attracts the magnet located outside the tube which in turn actuates a micro switch. Decrease in flow reverses the action.

Model FS 1010 is a target type which moves from a vertical position to a near horizontal position as the flow increases. This change in position moves a magnetic sleeve in a non-magnetic enclosure. The movement of the magnetic sleeve attracts a magnet which in turn actuates a micro switch. Decrease in flow brings the target back to the vertical position.

### Application:

The Flow Switches are used to sense the start or stop of **non-viscuos** liquid flow like water, gas, chemicals or any other flowing medium. They are used in interlock systems for ensuring minimum flow through pipe lines before starting equipments. In cooling water these flow switches are used to shut down the pumps, blowers, fans should the flow decreases below a predetermined limit.





## Specifications

	Model No.FS1000	Model No.FS1010
Type	Disc Type	Target Type
Size	15 to 50 mm	25 mm to 800 mm or above
Body	CS, Brass, Bronze, SS304/SS316/specified	C.S / SS 304 / SS 316 / specified
Trim	SS 304 / SS 316 / specified	SS 304 / SS 316 / specified
Connection Size	Screwed or Flanged in required size	1 - 2 1/2" screwed NPT / BSP or flanged to required standard / size.
Range Adjustment	By adjusting the screw on top of switch	By adjusting the screw on top of switch
Switch Enclosure	Weather proof IP 67 / Explosion proof IIC	Weather proof IP 67 / Explosion proof IIC
Switch Type	Micro	Micro
Contacts	SPDT 10 A / 15 A @ 250 V AC	SPDT 10 A / 15 A @ 250 V AC
Conduit	upto 3/4" NPT / 1" BS	upto 3/4" NPT / 1" BS
Max. operating Pressure	10 - 50 kg/cm <sup>2</sup> specified	10 - 50 kg/cm <sup>2</sup> specified
Max operating Temperature	150°C / specified	150°C / specified

### Note:

- Specify Line size, Material of Construction, along with Model number for ordering.
- Spool piece for Model F1010 directly connecting the flow switch in between the pipeline will be supplied with or without Sight Windows only if ordered separately.

### Sigma Advant-edge

- ✓ Flow Switches are available from 15 mm to 800 mm or more
- ✓ Flow actuation point field adjustable when switch is in operation
- ✓ Flanged or screwed connection
- ✓ By trimming the vane length, the same flow switch can be used for smaller line size in model FS 1010.
- ✓ Magnetic coupling eliminates diaphragm or bellows of conventional switches.
- ✓ Sight windows can be provided for model FS 1010 to have visual observation of the flow.

### Note

All the Flow Switch mentioned in this catalogue are our standard design. If the standard items do not meet your requirements, we can modify them to meet your specifications and would appreciate the opportunity of making suggestions to cover your application, based on engineering principles. SIGMA reserves the right to modify specification / design from time to time, which is deemed suitable for the product without prior intimation.

