

Introduction

Magnetic Repulsion type Paddle type Flow switches are rugged in construction. Model MFSPT-25 is a magnetically coupled flow switch. These are used in fluid line carrying non-hazardous fluids like water, ethylene glycol, kerosene etc.

Operating Principle

The flow monitoring switch comprises a paddle system in which at one end a permanent magnet is attached and this paddle is pivoted on the circular disc attached beneath the Hexagonal housing above this assembly a magnet is attached to a Micro switch in the electrical chamber, located outside the flow of fluid. A second magnet which is installed on the lever of the micro switch with opposing poles creates the force necessary operate the flow switch.

When the flow being monitored pushes against the paddle system, the paddle swings away. This change the position of the lever magnet in relation to the micro switch and thus activates the contact.

As soon as the flow is interrupted, the paddle moves back to its starting position, thus de activates the micro switch contacts.

Using magnetic force instead of the usual leaf spring means that the switch is considerably more stable in the long term and much less sensitive to pressure peaks.



Technical Specifications

Max. System Pressure	: 20 bar (standard version) high pressure version can be provided on demand
Temperature Range	: 10-80°C
Pressure Drop	: <80 mbar at Qmax. (For Qmax. Refer flow range table)
Accessories	: refer ordering information
Material Construction	: SS 316
Enclosure	: Die Cast Aluminium Weatherproof To IP 67
Set point tolerance	: + - 10%
Repeatability Tolerance	: + - 5%
Contact Rating	: 5A 230 VAC SPDT Microswitch

Advantages

- Low pressure drop
- Instant response
- High repeatability
- Max. pressure rating 50 bar as an option
- Switching function dependent on flow rate alone, not on temperature or pressure
- Contact closed if flow is interrupted
- Specific set point adjustment, including special set points
- OEM design, can be modified as per customer requirement.

Flow Rate

For custom flow rate please contact us. We can provide you the customized flow setting.

Ordering Information

Example :MFFSPT- 25L2A1

Basic Model **MFSPTA-25 L2 S2 C1**

Enclosure / Protection

- MFSPT- Weather proof to IP 65

MFSPTA

Process Connection

- 25- Threaded to 1" BSPT - male
- 25N- Threaded to 1" NPT - Male

25

The same logic is applicable for 15,20,30,40 &50mm connection

Line Size

L1	15mm	½"	L7	65mm	2 ½"
L2	20mm	¾"	L8	80mm	3"
L3	25mm	1"	L9	100mm	4"
L4	32mm	1 ¼"	L10	125mm	5"
L5	40mm	1 ½"	L11	150mm	6"
L6	50mm	2"	L12	200mm	8"

L2

Optional Process Connection

- T1 - Integral Tee (carbon steel)
- T2 - Integral Tee (Stainless steel)
- F1 - Integral Welded Flange (carbon steel)
- F2 - Integral Welded Flange (Stainless steel)

T1

M.O.C of wetted parts

S2- SS 316 body, SS 316 Paddle

S2

Switch Rating

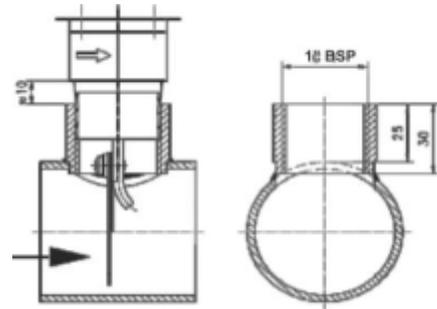
- C1 - 5A 250VAC, Snap acting instrument quality SPDT Microswitch

A1

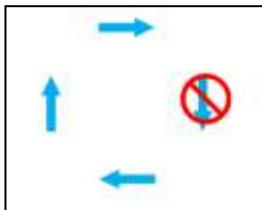
Installation Instructions

The Flow Switch can be mounted in a horizontal or vertical pipeline but must be located in a section of pipe where there is a straight run of at least 5 pipe diameters on each side of the switch.

For detailed Installation information please refer the Installation manual provided with Flow Switch.



Mounting Position



Flow switch will work only if it is installed in the direction of flow.

Continuous efforts for product development may necessitate changes in these details without notice

Authorised Dealer



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Important while ordering

For placing order please fulfill following requirement.

- System Pressure
- Desired Flow Rate
- Fluid Temperature
- Fluid Characteristics
- In case of lub -oils, viscosity must be indicated.
- Line size or pipe size.