

General

Explosion proof Paddle type Magnetic Flow Switches are rugged in construction. Model EPMFSPT is **Magnetically coupled explosion proof flow switch**. EPMFSPT series flow switches are suitable for non-corrosive, non-sticky fluids. This includes water, glycol, solvents, gasoline, diesel etc.

Explosion-proof cable glands are not in our scope of supply. User must procure the same at their end.



Operating Principle

The flow monitoring switch comprises a paddle system to whose end a permanent magnet attached. This paddle is pivoted on the circular disc attached beneath the Hexagonal connector. Above this magnet is a Micro Switch, located outside the flow of fluid. A second magnet 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 changes the position of the lever magnet in relation to the micro switch and this activates the contact.

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

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	: <80 mbar at Qmax
Accessories	: Refer ordering information
Material of construction	: SS 316
Enclosure	: Die cast aluminum weatherproof to IP 67
Ex-proof Class	: Explosion proof to Gr. IIA/IIB 7 IIC with CCOE approval
Set point tolerance	: + - 10%
Repeatability	: + - 5%
Contact Rating	: 5A 230VAC SPDT Microswitch

Advantages

- Low pressure drop
- Instant response
- High repeatability
- 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 Rates

For custom flow rates please contact us. We can provide you the customized flow settings.

Low Flow settings(Multiplying factor -20 for water) – for other liquids multiply by fluid density.

½” – 10 LPM, ¾” – 15 LPM, 1”-20LPM, 1.25”-25LPM, 1.5”-30LPM, 2”-40LPM, for other use multiplying factor.

Standard flow setting (Multiplying factor -40 for water) – for other liquids multiply by fluid density.

½” – 20 LPM, ¾” – 30 LPM, 1”- 40LPM, 1.25”-50LPM, 1.5”-60LPM, 2”- 80LPM, for other use multiplying factor.

For oil a viscosity in centistokes @40°C should be mentioned in your enquiry / order.

Ordering Information

Example :WP-MFSPT- 25L2A1

Basic Model **EP-MFSPT-25 L2 S2 C1**

Enclosure / Protection

- EP-MFSPT- Explosion Proof To Group IIA/IIB
- GEP-MFSPT- Explosionproof to Group IIC

EP-MFSPT

Process Connection

- 25- Threaded to 1" BSPT - Male
- 25N- Threaded to 1" NPT - Male
- 15- Threaded to 1/2" BSP- Female
- 15N- Threaded to 1/2" NPT - Female

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Line Size

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

L2

**Cable Glands Are Not In Our Scope Of Supply.
User Must Procure The Same At Their End.**

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 304 body, SS 316 Paddle

S2

Switch Rating

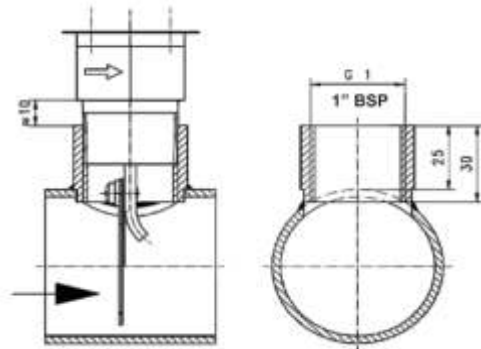
- C1 - 5A 250VAC, Snap acting instrument quality SPDT Microswitch
- C2 - 5A X 2, 250VAC, Snap acting instrument quality SPDT Microswitch

C1

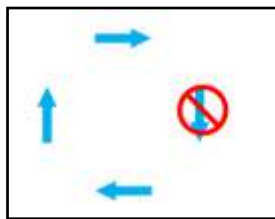
Installation Instructions

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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