

# MFSPT - Installation Manual

## **Operating Principle**

MFSPT is a magnetically coupled Flow switch. In this flow switch the lever is operated by the fluid flow which further operates the repulsion magnet mounted on the micro-switch, this flow switch is very useful for high flow low pressure, high pressure low flow, low pressure low flow applications.

## **General Installation Instructions**

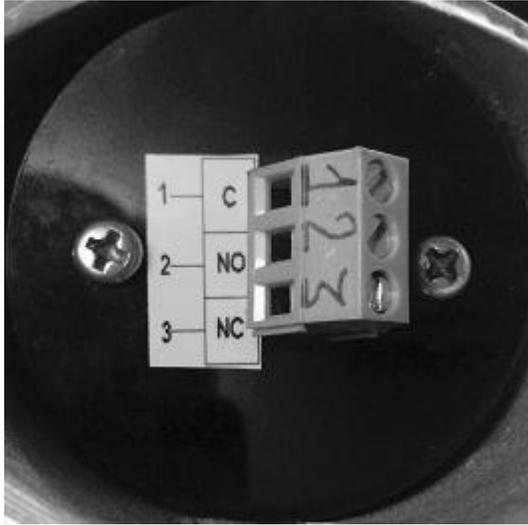
- At first clean the piping system where the flow switch should be installed and remove any magnetic particles such as weld spatters.
- Flow switch can be installed in any flow direction, except downwards.
- Make sure that there are no strong magnetic fields close to the flow switch. Such fields can affect the proper function of the instrument.
- Maintain a straight run of at least 10 pipe diameters on upstream side and 5 pipe diameters on downstream side of the flow switch to achieve streamline flow and best performance of the switch.
- Avoid installation in pipes with vibration and electrical shock.
- Weld a coupling with 1" BSP (F) thread. Please ensure that the coupling is exactly in right angle with the center of the pipe and the coupling height is 30 mm.
- Adjust the flow switch in position such that the paddle is at right angle to the flow direction and the arrow mark shown on the Flow Switch is in the direction of the flow.
- Check operation of flow switch to ensure that the paddle is free to move inside the pipe and does not rub the sides.
- Check Wiring according to Wire diagram.
- Use appropriate cable gland to maintain IP67 weatherproof condition of the enclosure.
- Ensure that the control circuit does not over-load the contacts of the micro switch.
- Ensure that the minimum and maximum pressures and operating temperature are well within the specified limits.
- Ascertain the availability of minimum flow required for proper operation.
- Replace cover after commissioning.

## **Maintenance**

- No specific maintenance is required for these switches. Check contacts of wires connected to the connector and ensure the housing cover is always tight. Ensure that the cable gland being provided by you is tight.

## Electrical Wiring

- C - Common , NO - Normally Open , NC- Normally Close.



- To get the signal at FLOW conditions please connect wires between Common (1) & Normally Open (2).
- To get the signal at NO FLOW conditions please connect wires between Common (1) & Normally Close (3).

## Switch Setting

- MFSPT Series Flow Switches are usually factory set. Not change in setting can be done on sight.
- If the Flow switch is used within the mentioned parameters like, Pressure, Temperature, Flow Direction, Flow Rate, condition of the flowing medium etc., then the flow switch will function properly for a longer duration.
- If the change in setting is at all required then the flow switch should be sent back to Factory for changes, as set point can't be changed on site. The transportation and modification charges will have to be borne by the user.

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B-501-504, 5th floor, Raunak Arcade, Near Thane Health Care Hospital, Gokhale Road, Naupada, Thane (W) 400 602. India.

Telefax nos.: 91-22-25301330 / 25301331 / 25301332 Office Cell No. : 8108125494

E-Mail: [sales@nkinstruments.com](mailto:sales@nkinstruments.com) Web: <http://www.nkinstruments.com>

Skype: [nitinkelkarskype](https://www.skype.com/name/nitinkelkarskype) GTalk: [nkinstruments2006](https://www.gtalk.com/nkinstruments2006)

