

MECHANICAL FLOW

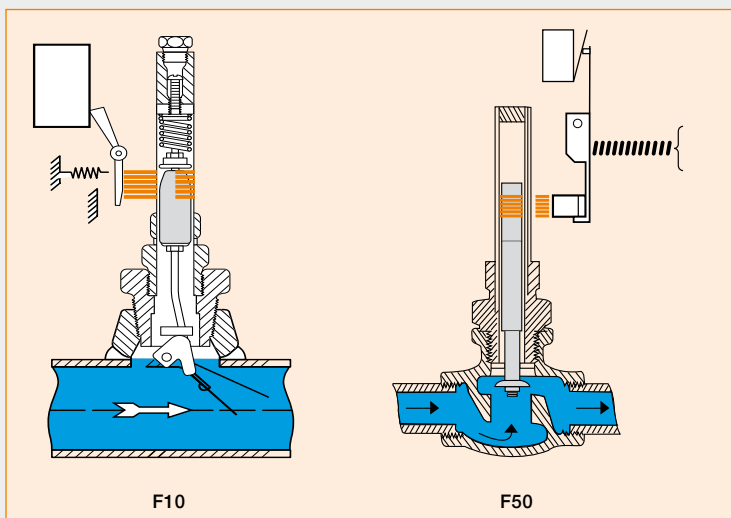


F10

The actuating vane is magnetically linked to a pivoted electric (or pneumatic) switch, which is isolated from the process by a non-magnetic barrier tube. As the actuating vane moves with an increase in flow, it drives a magnetic sleeve into the field of a permanent magnet located outside the barrier tube which trips the switch. As flow decreases, the actuating vane returns to a vertical position, allowing the magnet and switch assembly to return to the "No Flow" position.

F50

The rate of flow through the valve body raises or lowers the disc. This in turn raises or lowers the magnetic sleeve, within its sealed non-magnetic barrier tube. On an increasing flow rate, the magnetic sleeve rises into the field of the permanent magnet, located outside the barrier tube, actuating the attached switch mechanism. When the flow rate drops, below the rate for which the flow disc is calibrated, a reversal of this action occurs.



F10 - F50**Flow switch****DESCRIPTION**

Flow switches are highly reliable devices sensing the start or stop of flow in horizontal pipelines containing oil and petroleum derivatives, chemicals, water, or air.

Vane-actuated Model F10 switches are used on gas or liquid flow applications in 2" or larger pipe sizes.

Disc-actuated Model F50 switches are in-line type sensing clean liquids in 2" or smaller pipe sizes.

FEATURES

Actuation on increasing or decreasing flow

Special sensing elements for non-standard or high flow applications

Designed for horizontal pipe applications

Standard anti-corrosive protection

Model F10: - field adjustable
 - low pressure drop
 - process temperature up to +230 °C (+450 °F)
 - process pressure up to 69 bar (1000 psi)
 - standard flow vanes for 2" thru 10" flow lines
 - SIL 2 suitable (full FMEDA report available)

Model F50: - no calibration required
 - bronze or stainless steel construction
 - process temperature up to +400 °C (+750 °F)
 - process pressure up to 79.3 bar (1150 psi)
 - bodies for flow lines from ¾" to 2"

APPLICATIONS

Pump staging or failure.

Pipeline flow detection.

Valve failure.

Loss of pipeline flow.

Pipe blockage/rupture.

Pump inlet flow protection.

Check valve blockage/leakage.

Alarm on eyewash or shower safety station

AGENCY APPROVALS

	Ex d	Ex ia	Ex n	Ex t	XP	IS	NI	Other
ATEX	•	•						
CCOE	•							
CSA					•			
FM					•			
EAC (GOST)	•	•						
IEC	•	•						
Inmetro	•							
Korea	•							
NEPSI	•							

Other approvals are available; consult factory for more details.