

FS50 Series Paddle Flow Switch



Nanjing Hangjia Electronic Technology Co.,Ltd.

Product Description

FS50 series liquid flow switches are used to change the flow of liquids through pipes, such as water, glycol, or other non-hazardous liquid. When the liquid flow exceeds or falls below the set flow value, the SPDT enables one circuit to be switched on and the other circuit to be cut off. The flow switch is commonly used where interlocking or "cut-out" protection is required.

Features

- The liquid pressure can be as high as 1MPa and has a wide range of applications.
- The stainless steel blade has three sections and is used for pipes with a diameter of 25-75mm.
- The number of blade sections can be removed or the blade length can be modified as needed;
- The HF series liquid flow switch has an additional 6-inch blade and can be used in pipelines of 100-150mm. The set point can be adjusted, and the user can trim the flow value as needed;
- A fully enclosed structure, which is effectively dust proof and waterproof for electrical devices (there may be a small amount of condensation)

Application

A typical application is when the cooling water in the refrigerator system is cut off. The FS50 flow switch can effectively cut off the compressor current to protect the refrigerator and the entire system from damage.

Flow Control Range Table

FLOW CONTROL RANGE (m ³ /h)															
Nominal Diameter (mm)		25	32	40	50	65	80	100	125	150	200	100*	125*	150*	200*
Minimum Adjustment	On-Flow	0.95	1.32	1.70	3.11	4.09	6.24	14.8	28.4	43.2	85.2	8.4	12.9	16.8	46.6
	Off-Flow	0.57	0.84	1.14	2.16	2.84	4.32	11.4	22.9	35.9	72.7	6.13	9.31	12.26	38.6
Maximum Adjustment	On-Flow	2.0	3.02	4.36	6.6	7.84	12.0	29.1	55.6	85.2	172.6	13.4	26.8	32.7	94.26
	Off-Flow	1.93	2.84	4.09	6.13	7.23	11.4	27.7	53.4	81.8	165.8	17.3	25.21	30.66	90.85
Paddle		3										4			

Notes:

1. The above flow values are for selection reference;
2. The value with * is the value when all 4 propeller blades are installed, and the value without * is the value when 3 blades (1, 2, 3) are installed.
3. The flow switch can use different paddle blades according to the flow rate of the installed main pipeline.

Performance Parameters

Electrical load	AC250V 10A
Maximum working pressure	10.34Bar
Fluid temperature	0-120C
Ambient temperature	0-60°C
Bellows life	500,000 times
Protection standard	IP53

Installation

1. Pipe joint series water flow switch adopts NPT sealed thread pipe joints, which are available in three specifications: 1", 1/2" and 3/4". When ordering, users should choose the joint that matches the pipe diameter.
2. The direction of the arrow on the shell should be consistent with the flow direction in the pipeline
3. The water flow switch should be installed on a horizontal pipeline. If it must be installed on a vertical pipeline, the liquid flow direction should be downward and upward. It is never allowed to be installed in a vertical pipeline that flows from top to bottom.
4. The flow switch must never be allowed to flow in the opposite direction during use to avoid causing reverse breakage of the paddles.