KC-WFS Liquid Flow Switch



KC-WFS-51 KC-WFS-52

KC-WFS liquid flow switch is designed for managing the flow changes when the liquid flows in the pipe, such as water, ethylene glycol or other non-hazardous liquids. When the liquid flow is higher or lower than the setting value, the single-pole double-throw contacts (SPDT) can get through one circuit and at meantime to break the other circuit. KC-WFS liquid flow switch is commonly used for chain reaction or “no flow” protection.

FEATURES:

Max liquid pressure: 1MPa, can be used in multiple applications.
There are 3 stainless steel paddles, can be used in 25 to 75mm diameter pipe.
Number of paddles is changeable and length of paddle is trim-able according to customer requirements.
With additional 6” paddle, KC-WFS liquid flow switch can be used in 100 to 150mm diameter pipe.
Adjustable flow setting, users can set the flow value according to their requirements.
For user convenience, KC-WPS-52 flow switch has large room for wiring.
KC-WFS-51/KC-WFS-52 can also be provided with stainless steel connection, which is suitable for ammonia and other medium.

APPLICATION:

The typically application is used to protect the cooling system, when the cooling water is off, KC-WFS flow switch can shut off the compressor current efficiently in order to protect the freezer and entire system from being damaged.

PERFORMANCE PARAMTER:

Electric Load: AC250V 10A
Max working pressure: 10.34Bar
Flow temperature: 0-120°C
Environment temperature: 0-60°C
The endurance of bellows: 500000 cycles
Ingress protection: IP53

SPECIFICATION (KC-WFS flow switch)

Actuate flow (m^3/h)															
Pipe Diameter (mm)		25	32	40	50	65	80	100	125	150	200	100*	125*	150*	200*
Min Adjustment	Flow increase (red blue closed)	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
	Flow decrease (red yellow closed)	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
Max Adjustment	Flow increase (red blue closed)	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
	Flow decrease (red yellow closed)	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

1. Above flow values are for the reference of choice
2. The figures with"*" symbol are for the 4 paddles flow switch. While, the figures without "*" symbol are for the 3 paddles (1, 2, 3) flow switch.
3. The paddles will be chose according to the flow in the main pipe where the flow switch is installed in.

INSTALLATION:

1. Pipe connection: KC-WFS series flow switch be provided with 1", ½", ¾" NPT connections.
2. The arrow direction in the cover must be as same as the flow direction in the pipe.
3. The flow switch is suggested to be installed on horizontal pipes, if it have to be on vertical pipes, then the direction in the pipe must be upward flow. It is not allowed to be installed on the vertical lines with downward flow.
4. To avoid the paddle damage, flow reversal is not allowed when the flow switch is working.