

Liquid Flow Switch

N-WFS Series

N-WFS Series 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 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. N-WFS series liquid flow switch is commonly used for chain reaction or "no flow" protection.

Features

- > Max liquid pressure 1 Mpa, can be used in multiple applications.
- > There are 3 stainless steel paddles, can be used in 25 to 75 mm diameter pipe
- > Number of paddles is changeable and length of paddle is trim-able according to requirement.
- > With additional 6" paddles, can be used in 100-150 mm diameter pipe.
- > Adjustable flow setting, can set the flow value according to requirement.
- > For use convenience, N-WFS-52 flow switch has large room for wiring.
- > Can also provided with stainless steel connection, which is suitable for ammonia and others.

Application

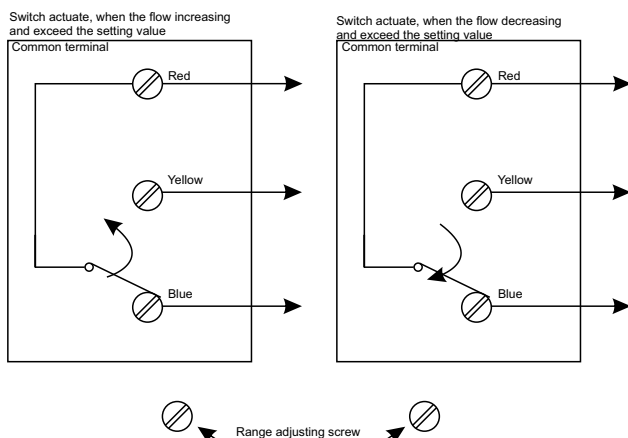
The typical application is used to protect the cooling system, when the cooling water is off N-WFS flow switch can shut off the compressor current efficiently in order the freezer and entire system from being damaged.

Specification

Pipe Diameter (mm)	Actuate flow (m ³ /h)													
	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	11.4m	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

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

Wiring Diagram



N-WFS-51



N-WFS-52



Performance Parameter

- > Electric load AC 250V / 10A
- > Max working pressure 10.34 Bar
- > Flow Temperature 0°C-120°C
- > Environment Temperature 0°C-60°C
- > The endurance of bellows 500000 cycles
- > Ingress Protection IP 53

Installation

- > Pipe connection N-WFS Series flow switch be provided with 1", 1/2", 3/4" NPT connections.
- > The arrow direction in the cover must be the same as the flow direction in the pipe.
- > The flow switch is suggested to be installed on horizontal pipes, if it has to be on vertical pipes, then the direction in the pipe must be upwards flow. It is not allowed to be installed on vertical line with downward flow.
- > To avoid the paddle damage, flow reversal is not allowed when the flow switch is working.

Flow switch

