Liquid Flow Switch

Description

This unit is waterproof liquid flow switches which can be used in control and monitor liquid flow of boilers, pumps, etc..., of heating, cooling, and air conditioning equipment.

Features:

Flow control of water and normal media Renovated SPDT micro switch ensures the reliable switch function 15(8A) 250VAC switch rating IP65 enclosure Flammability rating UL 94V0 file E194560 Setpoint adjustable Stainless steel paddle Brass material Pipe Connection: 1" NPT Max. liquid temp 120C



Specifications

Max working pressure 13.5 Bar

Type of operation	On/Off, single-stage, micro switch
Output	SPDT 15(8)A, 24/250VAC
Flow rates	See flow rate table
Flow rate setting adjustment	Internal screw
Sensing element	Paddle
Liquid applications	Hot, chilled, well, pool and sea water, brine or ethylene glycol
Parts material in contact with fluid	Brass
Pipe Connection	1" NPT
Paddle material	Stainless steel
Liquid temperature	-20C~120C
Permissible ambient temperature	-40C~85C
Permissible ambient humidity	10~90% RH, non-condensing
Housing	Resistance ABS
Protection	IP65

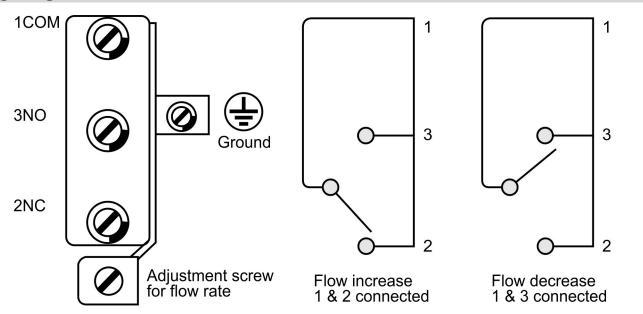
Liquid Flow Rate Table

	ne Pipe ize(in.)	1	1 1/4	1 1/2	2	2 1/2	3	4	4Z	5	5Z	6	6Z	8	8Z
Min. flow	Flow Increase 1&2 Con- nected	4.2 (1.0)	5.8 (1.3)	7.5 (1.7)	13.7 (3.1)	17.6 (4.0)	27.5 (6.2)	64.7 (14.7)	35.2 (8.0)	12.5 (28.4)	57.01 (12.9)	90.0 (43.1)	74.0 (16.8)	374.7 (85.1)	204.7 (46.5)
	Flow De- crease 1&3 Con- nected	2.5 (0.6)	3.7 (0.8)	5.0 (1.1)	13.7 (2.2)	11.9 (2.7)	19 (4.3)	50.1 (11.4)	26.9 (6.1)	101.1 (22.9)	41.0 (9.3)	158.0 (35.9)	54.0 (12.3)	319.7 (72.6)	170.0 (38.6)
Max. flow	Flow Increase 1&2 Con- nected	9.2 (2.1)	13.3 (3.0)	17.6 (4.0)	26.9 (6.1)	30.8 (7.0)	50.2 (11.4)	127.6 (29.0)	81.0 (18.4)	245.0 (55.6)	118.0 (18.4)	374.7 (85.1)	144.0 (32.7)	759.5 (172.5)	415.0 (94.2)
	Flow De- crease 1&3 Con- nected	8.1 (1.9)	12.5 (2.8)	16.3 (3.7)	25.1 (5.7)	28.6 (6.5)	471 (10.7)	122.0 (27.7)	76.2 (17.3)	234.7 (53.3)	111.0 (25.2)	359.7 (81.7)	134.7 (30.6)	729.6 (165.7)	400.6 90.8)

Notes:

For flow rates with suffix "Z", the 6 inch paddle must be installed.

Wiring Diagram

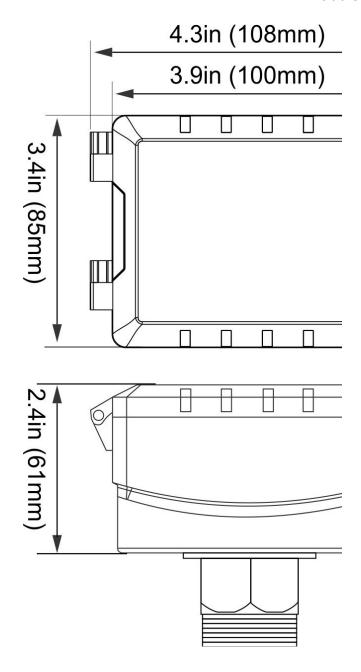


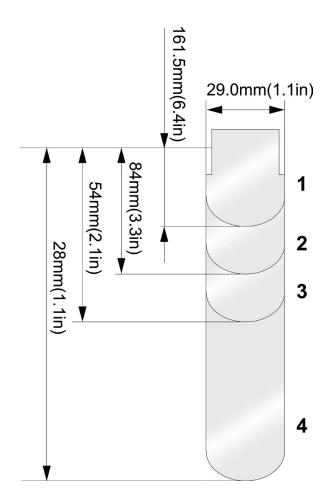
Installation

The flow switch can be installed in every position far from elbows or throttlings, with arrow on flow direction. If pipe is vertical, recalibrate range to balance paddle weight. If the device is downwards mounted, take care to slags and apply it in a straight pipe that is far from fiters, valves, etc., with length at least 5 times the diameter of pipe upstream and downsteam the unit. Notes:

The flowswitch is factory calibrated at its minumum sensitivity. To increase the set valve, turn the adjustment screw clockwise. The cut-out valve must be ≥the minimum flow necessary to guarantee the protection of the plant.

Paddles





Install Paddle					
Pipe	No.				
1"	1				
1 1 /4"	1				
1 1 /2"	1				
2"	1,2				
2 1 /2"	1,2				
3"	1,2,3				
4"	1,2,3				
4"Z	1,2,3,4				
5"	1,2,3				
5"Z	1,2,3,4				
6"	1,2,3				
6"Z	1,2,3,4				
8"	1,2,3				
8"Z	1,2,3,4				