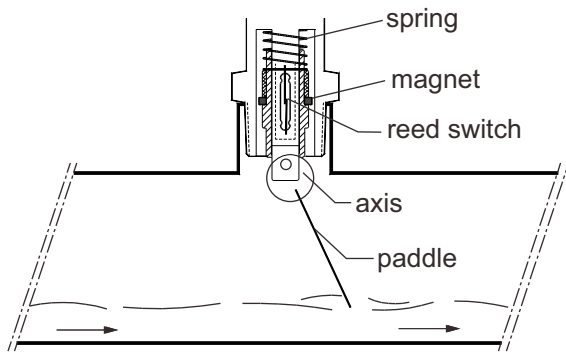


# PADDLE TYPE FLOW SWITCH

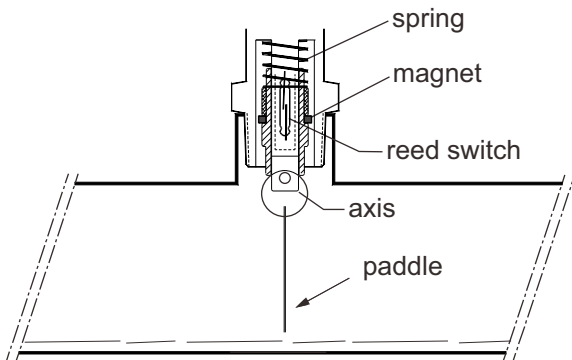
## PRINCIPLE

Flow switch can detect liquid movement in pipes. When the liquid is static or nonexistent, the spring is fully extended pulling the magnet downward and opening the switch.

As flow occurs and the paddle is thrust forward 20°~30° (or more) the paddle will push the magnet upward and actuate the switch (closing the circuit) The length of paddle can be adjusted to the pipe's diameter.



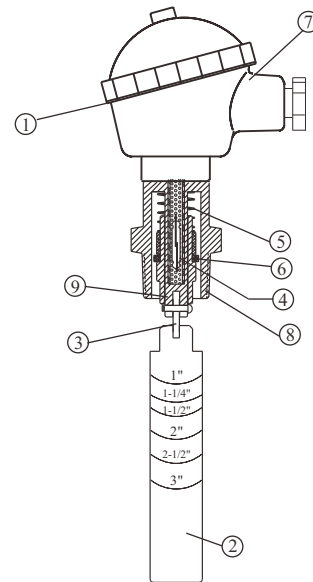
Switch on in case of liquid flowing in pipes



Switch off in case of no moving liquid in pipes

## SECTIONAL DRAWINGS

1. O-Ring
2. Paddle
3. Axis
4. Reed switch
5. Spring
6. Magnet
7. Housing
8. Screw
9. Center rod



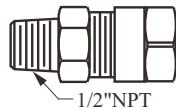


# PRODUCT SPECIFICATIONS

NEPSI Ex d IIC T4~T6 Gb

Drawings			
Model	SF1710		SF1800
	Explosion-Proof type	Enhance type	Standard type
Housing material	Stainless steel, IP65	Aluminum Alloy, Ex d	Aluminum Alloy, IP65
Process temp.	-30 ~ 130°C	-30 ~ 150°C	-30 ~ 150°C
Wetted material	SUS304		
Operation pressure	Max.355 PSIG		
Pressure drop allowance	3 PSIG		
Set point tolerance	±25%		
Repeatability tolerance	±5%		
Contact capacity	1A,40W 230Vac / 30Vdc SPDT	1A,60W 220Vac / 200Vdc SPDT	
Certification	NEPSI Ex d IIC T4~T6 Gb	N/A	

\* Optional part



## FLOW CONTROL RANGE TABLE

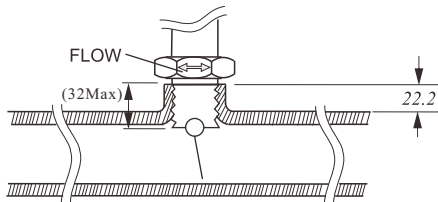
Paddle Length Flow Volume Gallon / Min.	1"		1-1/2"		2"		2-1/2"		3"	
	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.
1"	4.7	3.9	10.9	8.3	19.9	16.1				
1-1/4"			7.7	6.1	16.5	12.3	31.3	22.8		
1-1/2"			5.7	4.5	13.4	9.5	25.2	18.5		
2"					8.4	6.3	15.1	12.8	29.7	21.9
2-1/2"							13.9	10	20.4	15.4
3"									17.1	12.8

※1 Gallon=3.7854 Litter

## INSTALLATION

1. The paddle length is dependent on the lowest paddle point to actuate the switch. Cut the paddle at appropriate pipe size mark or wherever desired. The minimum is 1".
2. The paddle must be at a right angle to the direction of flow
3. The FLOW mark on the screw must be parallel to the pipe.
4. Before installing the unit to a tee pipe, apply thread seal tape to the screw and then tighten.

- Not recommended for 1" or smaller NPT plastic pipes.



## CAUTION

1. The pressure and temperature ranges as shown in the catalog, must not be exceeded and also take the abrupt pressure and temperature into considerations.
2. Large sudden changes in liquid temperature and density (specific gravity) changes will influence the flow switch accuracy
3. Although highly rigid and durable, shock and vibration should be minimized.
4. Excessive fluid debris might inhibit paddle operation. Occasionally remove switch and clean off any debris.
5. Sealing electrical connections and the connection will reduce moisture damage.