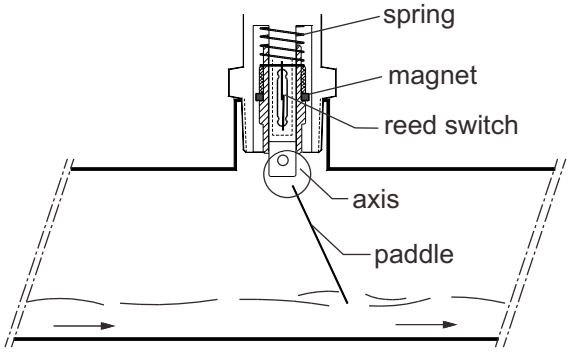
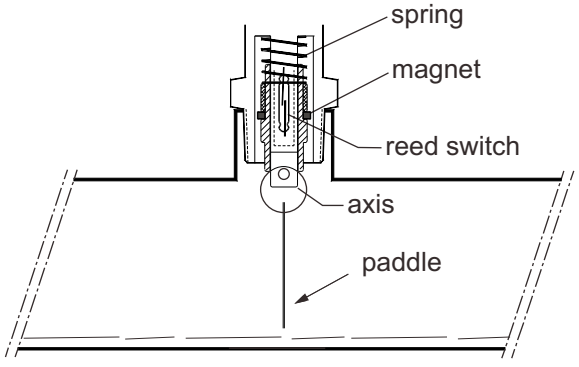
PADDLE TYPE FLOW SWITCH

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 thrusted forward 20 ~ 30 degrees (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.



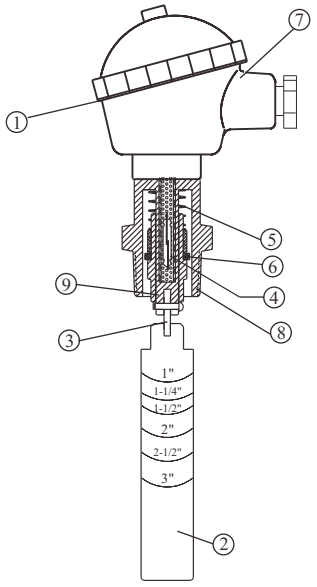
Switch on in case of liquid flowing in pipes



Switch off in case of no moving liquid in pipes

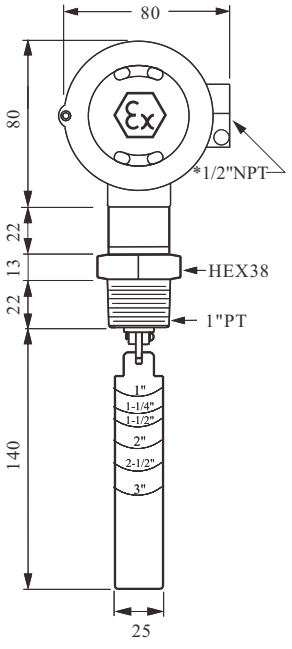
SECTIONAL DRAWINGS

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



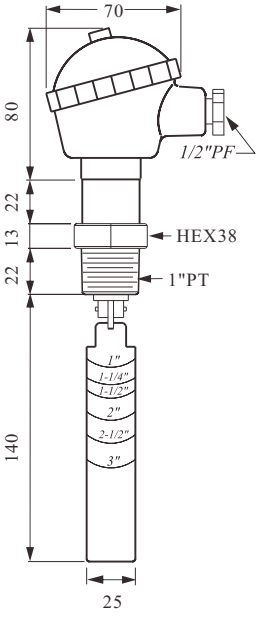
NEPSI Ex

MODEL: SF1710
Explosion proof model



*Optional part

MODEL: SF1800
Standard model



FineTek

Spec. \ Model	SF1710	SF1800
Housing material	Aluminum Alloy, Ex d IIC T6~T4	Aluminum Alloy, IP65
Operation temp.	-30°C~100°C	-30°C~150°C
Wetted material	SUS304	SUS304
Operation pressure	Max. 355 PSIG	Max. 355 PSIG
Pressure drop allowance	3 PSIG	3 PSIG
Set point tolerance	±25%	±25%
Repeatability tolerance	±5%	±5%
Contact capacity	60W 220Vac/200Vdc, SPDT	60W 220Vac/200Vdc, SPDT

FLOW CONTROL RANGE TABLE

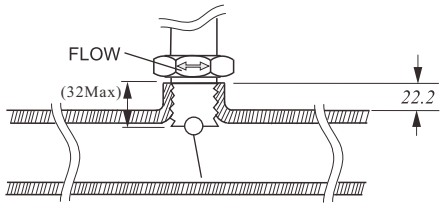
Paddle Length \ Flow Volume Gallon/Min.	1"		1-1/2"		2"		2-1/2"		3"	
	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.
1"	4.7	3.9	10.9	8.3	19.9	16.1				
1-1/4"			7.7	6.1	16.5	12.3	31.3	22.8		
1-1/2"			5.7	4.5	13.4	9.5	25.2	18.5		
2"					8.4	6.3	15.1	12.8	29.7	21.9
2-1/2"							13.9	10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