

## WATER FLOW SWITCH

### FS6-1

PRODUCT DATA



### Application

FS6-1 series may be used on liquids with high salt or chlorine content but is not for use in hazardous atmospheres.

They may be also used outdoors but must be protected from weather or splashing water.  
All series FS6-1 flow switches are designed for use only as operating controls.  
They required used in liquid flow lines carrying water or any fluid neither harmful to brass and phosphor bronze nor classified as a hazardous fluids.

### Features

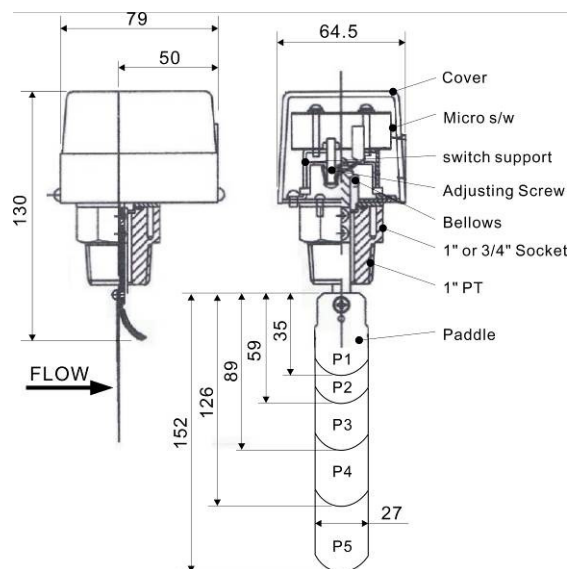
- High reliability & accuracy & rugged construction
- Micro Switch SPDT
- Adjust flow rate
- Connection of screw terminals
- Rapid response
- Provide paddle size 35 & 59 & 89 & 126 & 152mm
- Set on vertical & horizontal inside tube

### Specifications

Operating Pressure	10kg/cm <sup>2</sup> (1000KPa)
Withstand Pressure	17.85 kg/cm <sup>2</sup> (1750Kpa)
Insulation Resistance	Over 100Ω, DC500VM
Withstand Voltage	AC1500V/1 minute
Contact Point Life	1000K cycle
Bellows Life	500K cycle
Temperature of Fluid	Max.100°C(212°F)
Temperature of Ambient	0~60°C(32~140°F)
Setting	Close 0.5N Open 1.5N
Airproof Pressure of test	Max. 1.6 Mpa Min. 1.0 Mpa
Certification	CE
Material	Housing:ABS Body: Brass Paddle: stainless steel
Protection Level	IP54

### Appearance and Dimension

(Dimension in mm)

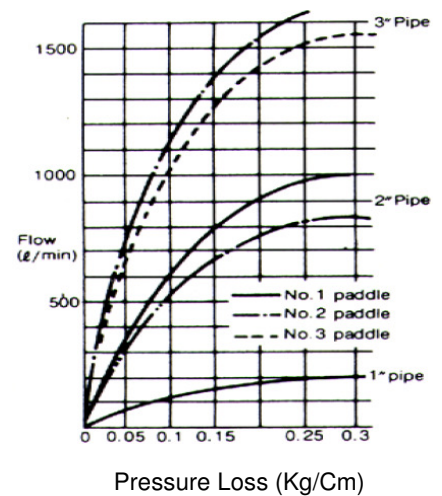


## Flow control range table

Classification			Flow control range		Unit: LPM(GPM)	
Pipe diameter		Paddle	Minimum		Maximum	
(mm)	(inch)		On-Flow	Off-Flow	On-Flow	Off-Flow
DN25	1	1	15(4.0)	8(2.0)	45(12.0)	41(11.0)
DN32	1-1/4		26(6.9)	13(3.4)	75(20.0)	68(18.0)
DN40	1-1/2		29(7.0)	20(5.3)	105(28.0)	94(25.0)
DN50	2	2	34(9.0)	17(4.5)	120(32.0)	105(28.0)
DN65	2-1/2		60(16.0)	34(9.0)	210(55.0)	188(50.0)
DN80	3	3	68(18.0)	30(8.8)	288(76.0)	275(73.0)
DN100	4		128(34.0)	64(17.0)	412(109.0)	360(95.0)
DN125	5		225(59.0)	113(30.0)	750(198.0)	652(172.0)
DN150	6		345(91.0)	172(45.0)	1125(297.0)	975(258.0)

This table illustrates the flow control range obtained from experimental data.  
A variation of up to 10% can be expected, depending on operating conditions.  
Final adjustments should be made on site using a flow meter.

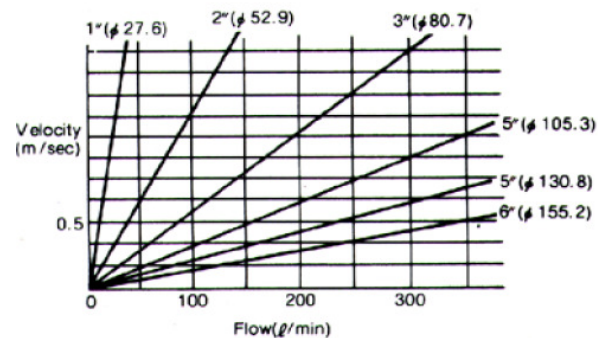
## Pressure Loss Rate



## Electrical Ratings

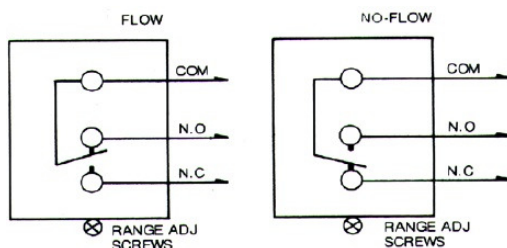
Nominal voltage Nominal current		POWER COS Ø	AC 125V	AC 250V
Not sensor current		1A	15A	15A
sensor current	Nominal	0.75A	3.5A	2.5A
	Moment	0.45A	21A	15A

## Flow-Velocity

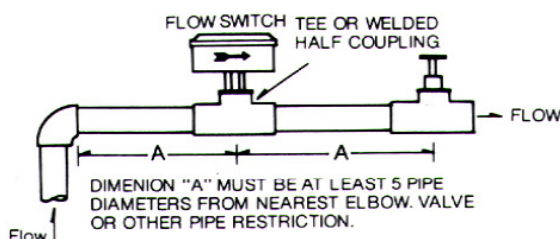


Calculate:  
 $O(\text{Flow}) = D^2/4 \times V \times 10^{-2} (\text{L/min})$   
 $V(\text{Velocity}) = \text{m/sec}$   
 $D = \text{Inner diameter of pipe (mm)}$

## Wiring



## Typical Installation



## Adjust Setting

1. Remove switch cover.
2. For higher flow rate-turn range adjust screw clockwise.
3. For lower flow rate-turn range adjust screw counter clockwise.
4. Be sure flow cover is replaced before leaving job.