

APPLICATION

The paddle type SPDT HFS series are designed to provide excellent performance where accuracy, reliability, and rugged construction are required used in liquid flow lines carrying water or any fluid neither harmful to brass and phosphor bronze nor classified as a hazardous fluids.

They can be wired to close one circuit and open a second circuit when liquid flow either exceeds or drops below the adjusted flow rate.

The HFS series are recommended for liquid pressure and temperature as mentioned below and must not be used on lines carrying liquids below 0 degree C.

These 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 HFS-flow switch Series are designed for use only as operating controls.

Where an operating control failure would result in personal injury

and/or loss of property, it is the responsibility of user to add safety

devices that protect against, or supervisory systems that warn of control

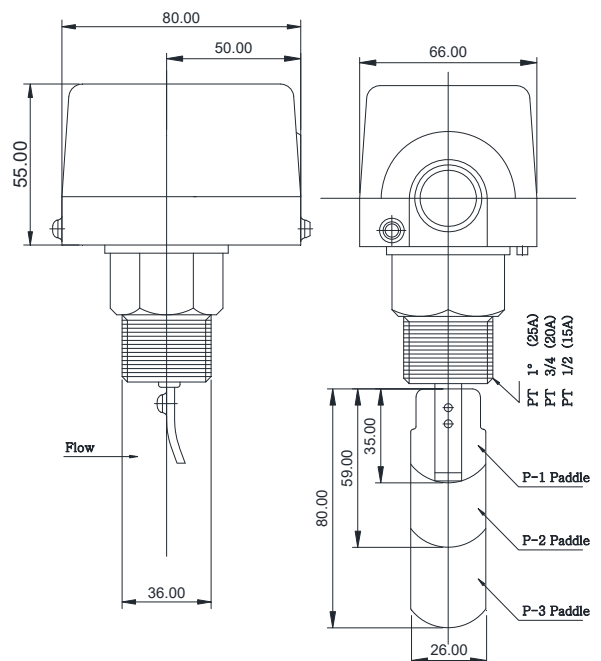
failure.



SPECIFICATION

Operating Pressure	10kgf/cm ² (1MPa)
Withstand Pressure	17.5Kgf/cm ² (1.75MPa)
Insulation Resistance	Over 100Ω, DC500VM
Withstand Voltage	AC1500V/1minute
Contact Point Life	1,000K Cycle
Temperature of Fluid	Max 100°C (212°F)
Body Size	1"
Body Material	Bronze, Stainless
Cover	ABS
IP Grade	IP43
Unit Weight	0.57KG
Unit/Box Dimension	7 X 9.5 X 16 (CM), 2.8 X 3.8 X 6.3 (IN)
Certification	CE, ROHS (CA18RoHS043)

DIMENSION



ELECTRICAL RATINGS

Type	Voltage	Resistance	Lamp Load	Motor Load
AC	AC 125 V	7.5A	44A	5A
	AC 250 V	15A	22A	2.5A
DC	DC 115 V	0.3A		
	DC 230V	0.15A		

PADDLE DIMENSION (mm)

Model	Paddle-1	Paddle-2	Paddle-3	Wide
HFS-25 (1")	35	59	80	26
HFS-20 (3/4")	30	35	40	22
HFS-15 (1/2")	38	40	43	16

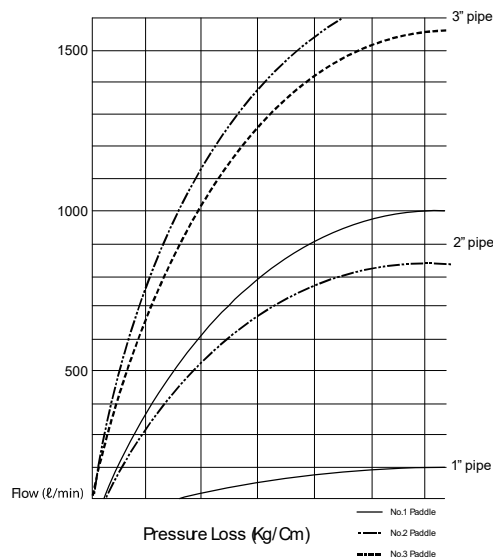
This product meets the requirements of **CE**

FLOW CONTROL RANGE TABLE

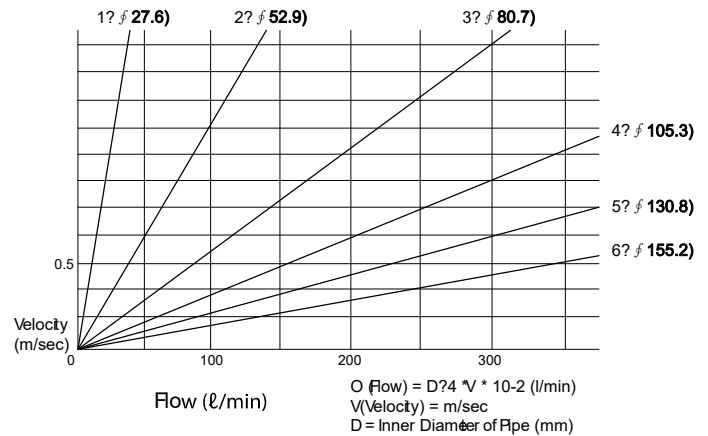
CLASSIFICATION		FLOW CONTROL RANGE		LPM (GPM)	
Pipe Diameter	Paddle	Minimum	Maximum	On-Flow	Off-Flow
1	1	On-Flow	Off-Flow	On-Flow	Off-Flow
1-1/4		15 (4.0)	8 (2.0)	45 (12.0)	41 (11.0)
1-1/2		26 (6.9)	13 (3.4)	75 (20.0)	68 (18.0)
2	2	29 (7.0)	20 (5.3)	105 (28.0)	94 (25.0)
2-1/2		34 (9.0)	17 (4.5)	120 (32.0)	105 (28.0)
3		60 (16.0)	34 (9.0)	210 (55.0)	188 (50.0)
4	3	68 (18.0)	30 (8.0)	288 (76.0)	275 (73.0)
5		128 (34.0)	64 (17.0)	412 (109.0)	360 (95.0)
6		225 (59.0)	113 (30.0)	750 (198.0)	652 (172.0)
		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, it is depending on operating conditions. Final adjustments should be made on site using a flow meter.

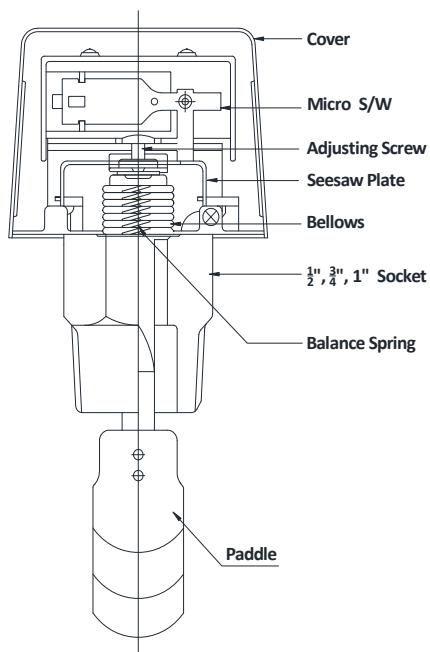
PRESSURE LOSS RATE



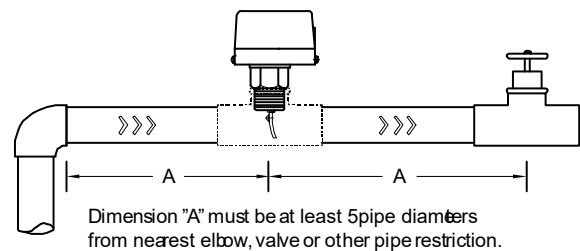
FLOW-VELOCITY



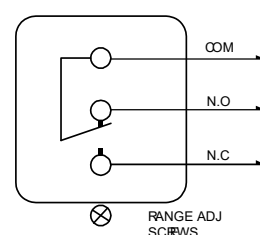
PART OF NAME



TYPICAL INSTALLATION



NO-FLOW



FLOW

