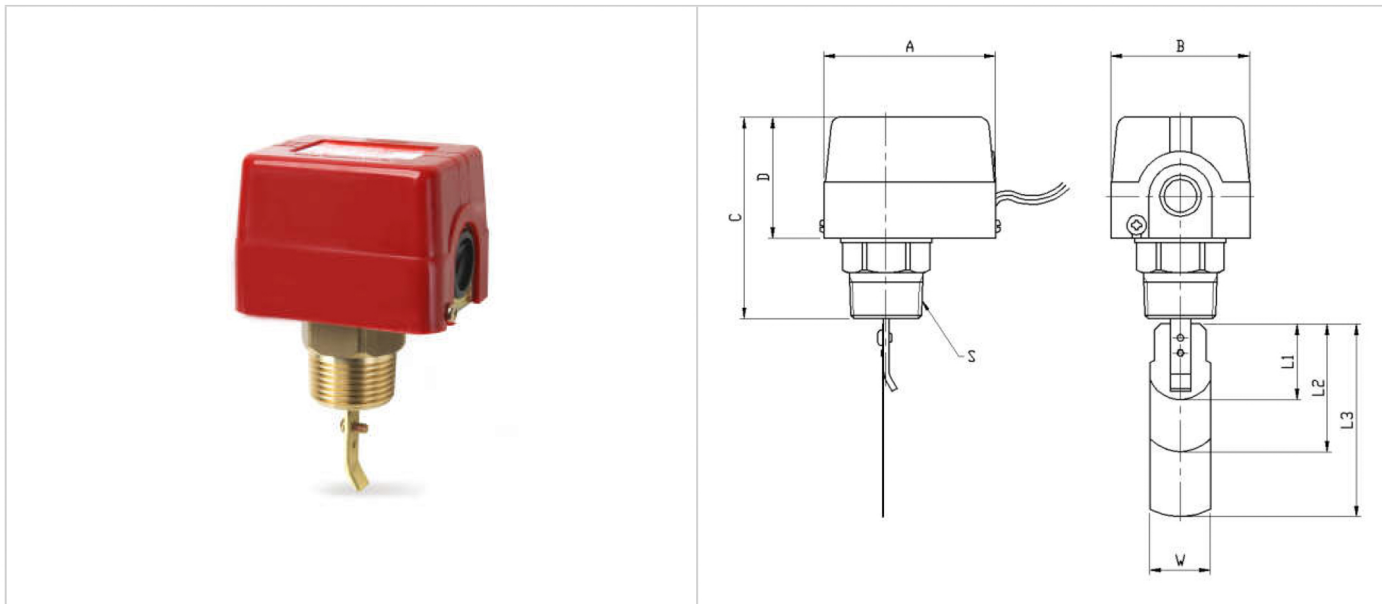


FLOW SWITCH

HFS-15 / 20 / 25

FEATURES

- The paddle type SPDT HFS series are designed to provide excellent performance where accuracy, reliability, and rugged construction are required in liquid flow lines carrying water for 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 the other 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 fluid below 0°C
- These series may be used on liquids with high salt or chlorine content but is not for use in hazardous atmospheres.
- Flow switches are designed for use only as operating controls.
- Since control failure can cause personal injury or property damage, users should use the monitoring system to alert control failure or the safety equipment.



DIMENSION

MODEL	A	B	C	D	CONNECTION	L1	L2	L3	W
HFS-15	79	64	93	56	R 1/2" (PT 1/2")	50	43	-	28
HFS-20	79	64	93	56	R 3/4" (PT 3/4")	50	43	40	28
HFS-25	79	64	93	56	R 1" (PT 1")	89	59	35	28

SPECIFICATION

OPERATING PRESSURE	1.0 MPa (10bar)
WITHSTANDING PRESSURE	1.75 MPa (17.5bar)
INSULATION RESISTANCE	Over 100Ω (DC 500Vm)
WITHSTANDING VOLTAGE	AC 1500V / Min
CONTACT POINT LIFE	1000K Cycle
BELLOWS LIFE	500K Cycle
TEMPERATURE of FLUID	Max. 100°C (212 °F)

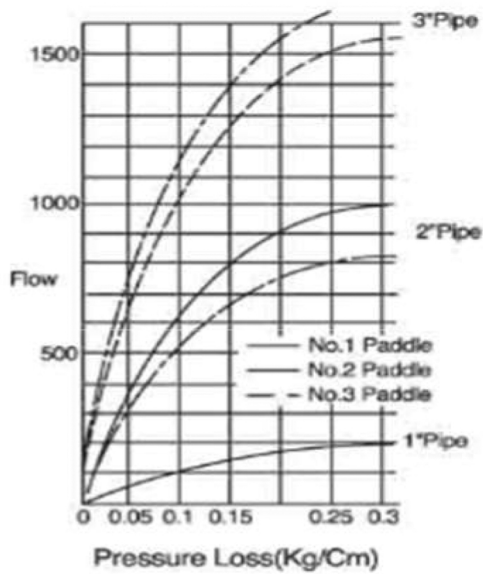
ELECTRICAL FUNCTION

RATED AMPS. (A)	VOLTAGE	RESISTANCE	LAMP LOAD	MOTOR LOAD
AC	AC 125V	5A	44A	5A
	AC 250V	2.5A	22A	2.5A
DC	DC 115V	0.3A	-	-
	DC 230V	0.15A	-	-

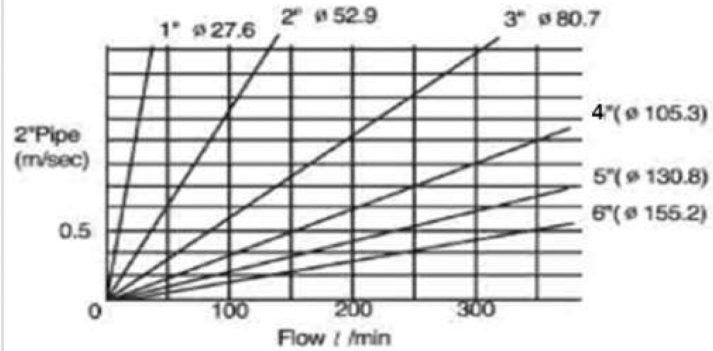
INDIVIDUAL SPECIFICATION

BASIC OPTIONAL	CLASSIFICATION		FLOW CONTROL RANGE (LPM)			
	PIPE DIAMETER mm (inch)	PADDLE	MINIMUM		MAXIMUM	
			ON-FLOW	OFF-FLOW	ON-FLOW	OFF-FLOW
STANDARD	25.4 (1")		15	8	45	41
	31.7 (1"1/4)	1	26	13	75	68
	38.1 (1"1/2)		29	20	105	94
	50.8 (2")	2	34	17	120	105
	63.5 (2"1/2)		60	34	210	188
	76.2 (3")	3	68	30	288	275
	101.6 (4")		128	65	412	360
	121.0 (5")		225	113	750	652
	152.4 (6")		346	172	1125	975

PRESSURE LOSS RATE



FLOW-VELOCITY

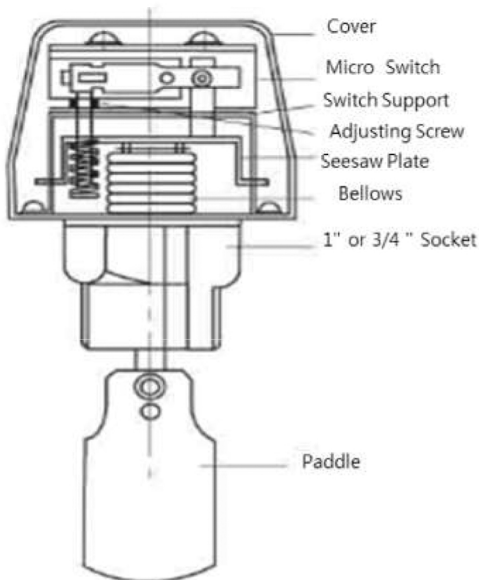


$$Q(\text{Flow}) = D^2 / 4 \times v \times 10^{-2} \text{ l /min}$$

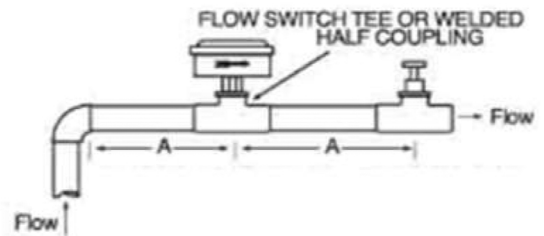
$$V(\text{Velocity}) = \text{m/sec}$$

$$D = \text{Inner Diameter of Pipe (mm)}$$

STRUCTURE

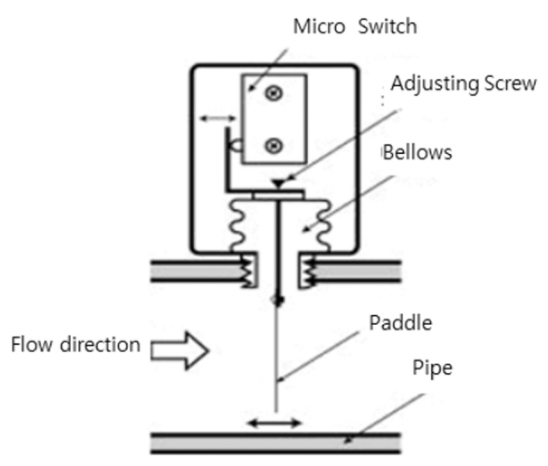


TYPICAL INSTALLATION

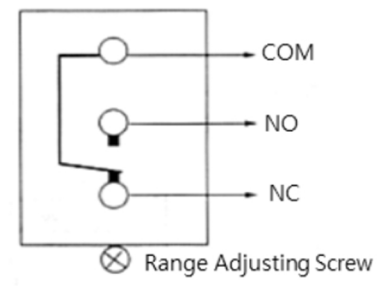
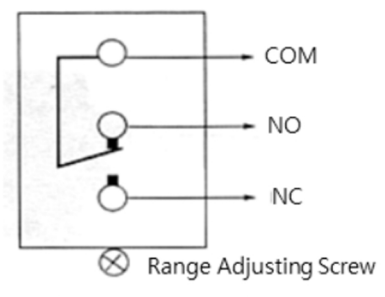


Dimension "A" must be at least 5 times of pipe diameters to the nearest elbow, valve or other pipe restriction.

INSTALLATION EXAMPLES



CIRCUIT DIAGRAM



* Specification of the products are subject to change without prior notice for quality improvement.

