# FLOW SWITCH

| HFS 15/ 20/ 25 |
| --- |
| |

## Feature

The paddle type SPDT HFS series are designed to provide excellent performance shere accuracy, reliability, and rugged construction are required used in liquid flow lines carrying water or any fluid neither harmful to brass and prosphor 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 recommanded for liquid pressure and temperature as mentioned below and must not be used on lines carrying liquids below 0¡É.

These series may be used on liquids with high salt or chlorine contact 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 HFS flow switches are designed for use only as operating controls.

Where an operating control failure would result in personal injury and / or loss of properly, it is responsibility of user to add safely devices that protect against, or supervisory systems that warm of control failure.

Electric Zone Valve(Motor Valve)

## Specification

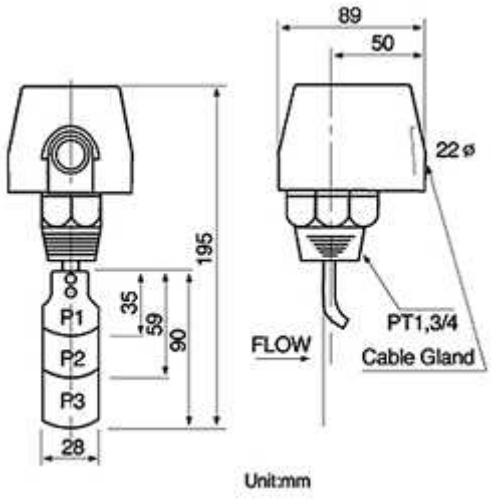
| | |
| --- | --- |
| **Operating Pressure** | 10 kgf/㎠ (10 bar) |
| **Withstand Pressure** | 17.5 kgf/㎠ (17.7 bar) |
| **Insulatiion Resistence** | Over 100 ℓ㎠ (DC 500VM) |
| **Withstand Voltage** | AC100V / 1 minute |
| **Contact Point Life** | 1000 k Cycle |
| **Bellows Life** | 500k Cycle |
| **Temperature of Fluid** | Max 100 ℃ (212°F) |

## Electrical Function

| Type | Voltage | Resistence Load | Lemp Load | Motor Load |
| --- | --- | --- | --- | --- |
| AC<br>(Standard) | AC 125V<br>AC 250V | 5A<br>2.5A | 44A<br>22A | 5A<br>2.5A |

| | | | | |
|---|---|---|---|---|
| DC | DC 115V<br>DC 230V | 0.3A<br>0.15A | - | - |

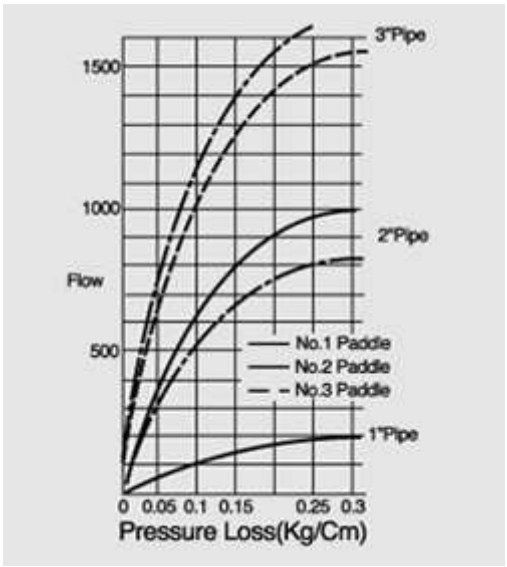
## Appearance

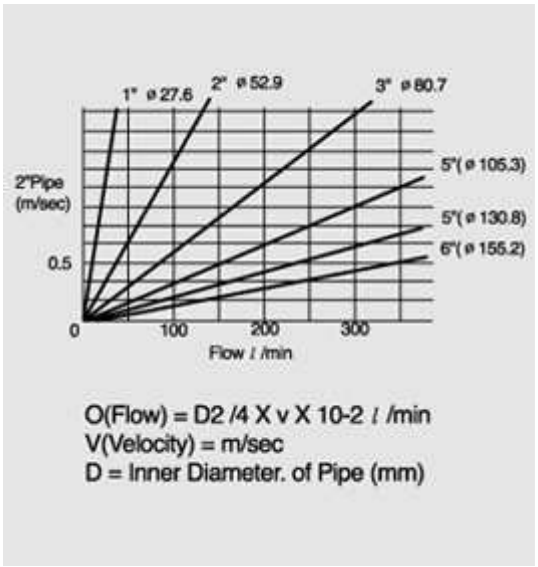



| CLASSIFICATION | | FLOW CONTROL RANGE | | LPM | |
|---|---|---|---|---|---|
| Pope Diamter (inch) | Paddle | Minimun | | Maximum | |
| | | ON FLOW | OFF FLOW | ON FLOW | OFF FLOW |
| 1/2 | 1 | | | | |
| 3/4 | | | | | |
| 1 | | 15 | 8 | 45 | 41 |
| 1 -1/4 | | 26 | 13 | 75 | 68 |
| 1-1/2 | | 29 | 20 | 105 | 94 |
| 2 | 2 | 34 | 17 | 120 | 105 |
| 2-1/2 | | 60 | 34 | 210 | 188 |
| 3 | 3 | 68 | 30 | 288 | 275 |
| 4 | | 128 | 65 | 412 | 360 |
| 5 | | 225 | 113 | 750 | 652 |
| 6 | | 345 | 172 | 1125 | 975 |

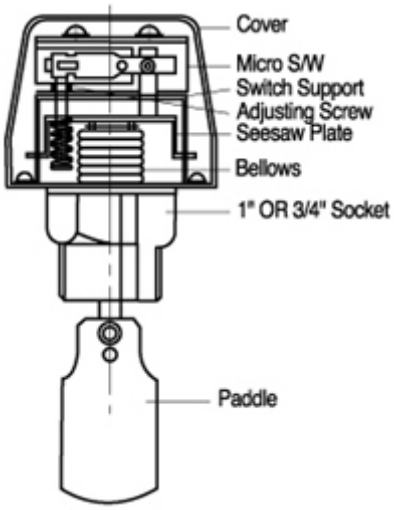
## Pressure Loss Rate

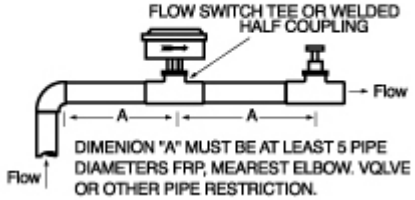
## Flow-Velocity




O(Flow) = D2 /4 X v X 10-2 *l* /min
V(Velocity) = m/sec
D = Inner Diameter. of Pipe (mm)




## Typical Installation.