



Paddle Flow Rate 3-Way Pilot

Model PC-70-X-P

This 3-way pilot provides the valve a flow control feature combined with fully open mode, as long as demand is below setting. It is a direct acting pilot, actuated by a paddle that is positioned within the flow stream. Should demand rise above setting, the increasing flow dynamic force moves the paddle, which thereby pushes the pilot trim against the spring force. This introduces control water flow into the control chamber, causing the main valve to throttle closed, limiting system flow to pilot setting. When demand is below setting, the spring force pushes the pilot trim against the decreasing flow dynamic force on the paddle, which thereby moves back to vertical position. This vents the water from the control chamber, causing the main valve to fully open, minimizing valve head loss.



Typical Applications

- Flow Control Valves
- Flow Control and Pressure Reducing Valves
- Flow Control and Pressure Sustaining Valves
- Level and Flow Control Valves
- Burst Control Valves

Technical Data

Pressure Rating: 10 bar; 145 psi
Working Temperature: Water up to 50°C; 122°F
Flow Factor: Kv 0.07 m³/h @ 1bar ΔP; Cv 0.08 GPM @ 1psi ΔP
Standard Materials:
Body & Cover: Polymide 6+30% F.G
Elastomers: NBR
Internals: Stainless Steel & Brass
Spring: Stainless Steel
Ports: 1/8" NPT

Adjustment Range

| Spring | Flow Velocity | |
|----------|---------------|----------|
| | m/sec. | f/sec. |
| E-Purple | 1-5 | 3.3-16.4 |

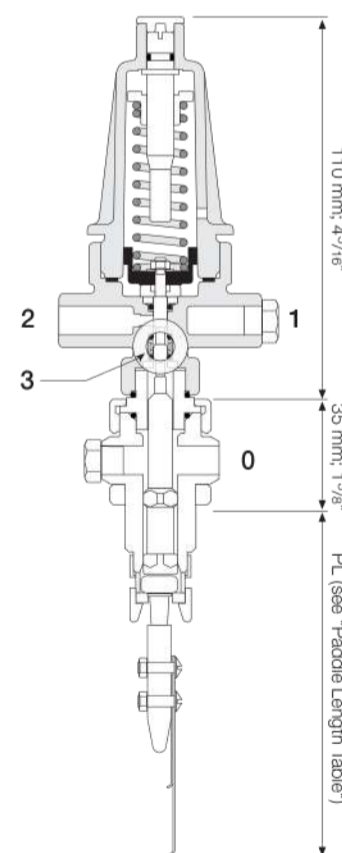
Connections

- 0 - Upstream
- 1 - Plugged
- 2 - Vent
- 3 - Valve control chamber

Paddle Length Table

| Valve size | | Paddle Length (mm) | Paddle Length (inch) | Number Leaves |
|------------|-----|--------------------|----------------------|---------------|
| inch | DN | | | |
| 1 1/2 | 40 | 74 | 2 15/16 | 1 |
| 2 | 50 | 74 | 2 15/16 | 1 |
| 2 1/2 | 65 | 84 | 3 5/16 | 2 |
| 3R | 80R | 74 | 2 15/16 | 1 |
| 3 | 80 | 89 | 3 1/2 | 2 |
| 4R | 100 | 89 | 3 1/2 | 2 |
| 4 | 100 | 104 | 4 1/8 | 3 |
| *5 | 125 | 111 | 4 3/8 | 4 |
| 6 | 150 | 119 | 5 1/4 | 4 |
| 8 | 200 | 134 | 5 7/8 | 5 |
| 10 | 250 | 149 | 4 5/16 | 6 |

* 5"; 125mm fourth Paddle leave is 3/8"; 8mm shorter than the standard fourth leave and is marked in Blue.



Weight: 0.15 Kg; 0.33 lbs.

