



### Paddle Flow Rate 3-Way Pilot

#### Model PC-70-X-M

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:** 16 bar; 232 psi

**Working Temperature:** Water up to 80°C; 180°F

**Flow Factor:** Kv 0.07 m<sup>3</sup>/h @ 1bar ΔP; Cv 0.08 GPM @ 1psi ΔP

**Standard Materials:**

**Body & Cover:** Brass Body & Plastic Cover (optional Brass cover)

**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.

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