



### Paddle Flow Rate Pilot

**Model PC-70-P**

This flow rate pilot is a direct acting pilot valve, 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 increases control water flow into the control chamber, causing the main valve to throttle closed limiting system flow to pilot setting. The pilot's unique internal design dynamically increases and decreases the main valve response speed in direct proportion to the discrepancy between actual demand and pilot setting flowrate.

#### Typical Applications

- Flow Control Valves
- Flow Control and Pressure Reducing 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:** Polyamide 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 - Downstream
- 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 11/16              | 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.

