# **BERMAD** Irrigation



Mini-Pilots

## 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 m<sup>3</sup>/h @ 1bar ΔP; Cv 0.08 GPM @ 1psi ΔP

Standard Materials:

Body & Cover: Polymide 6+30% F.G

Elastomers: NBR

Internals: Stainless Steel & Brass

Adjustment Range

Spring: Stainless Steel Ports: 1/8" NPT

#### **Connections**

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

0	-	Upstre	eam

- 1 Plugged
- **2 -** Vent
- 3 Valve control chamber

### Paddle Length Table

Valve size		Paddle	Paddle	Number
inch	DN	Length (mm)	Length (inch)	Leaves
<b>1</b> 1/2	40	74	215/16	1
2	50	74	<b>2</b> <sup>15</sup> / <sub>16</sub>	1
21/2	65	84	<b>3</b> 5/16	2
3R	80R	74	215/16	1
3	80	89	31/2	2
4R	100	89	31/2	2
4	100	104	41/8	3
*5	125	111	43/8	4
6	150	119	51/4	4
8	200	134	57/8	5
10	250	149	<b>4</b> 5/16	6

<sup>5&</sup>quot;; 125mm fourth Paddle leave is 3/8"; 8mm shorter than the standard fourth leave and is marked in Blue.







