



## High Sensitivity Pressure Sustaining Pilot Valve

### Model #83

This pilot integrates all principal functions of a 2-Way control circuit in a single assembly.

It is a high sensitivity, direct acting pilot valve, actuated by a pressure responsive diaphragm, which tends to reach equilibrium with the set spring force.

The pilot modulates open as upstream pressure rises above set point. An integral needle valve acts as an upstream flow restrictor as well as a closing speed control.

### Typical Applications

- Modulating Altitude Level Control Valves (at reservoir outlet) sizes 1 1/2-14"
- High Sensitivity Pressure Sustaining Valves sizes 1 1/2-14"

### Technical Data

**Pressure Rating:** 16 bar; 230 psi

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

**Flow Factor:** Kv 1.1 m<sup>3</sup>/h @ 1bar ΔP; Cv 1.3 GPM @ 1psi ΔP

**Standard Materials:**

**Body & cover:** Brass

**Diaphragm Covers:** Fusion bonded epoxy coated Steel

**Elastomers:** NBR

**Internals:** Stainless Steel & Brass

**Spring:** Galvanized Steel

**Optional Materials:**

**Metal Parts:** Stainless Steel, Nickel Aluminum Bronze, Hastalloy

**Elastomers:** FPM (Viton®)

### Adjustment Range

Code	Pilot	
	Meter	Feet
M6	2-14	7-46
M5	5-22	17-72
M4	15-35	49-115
M8	25-70	82-230

Standard

Optional

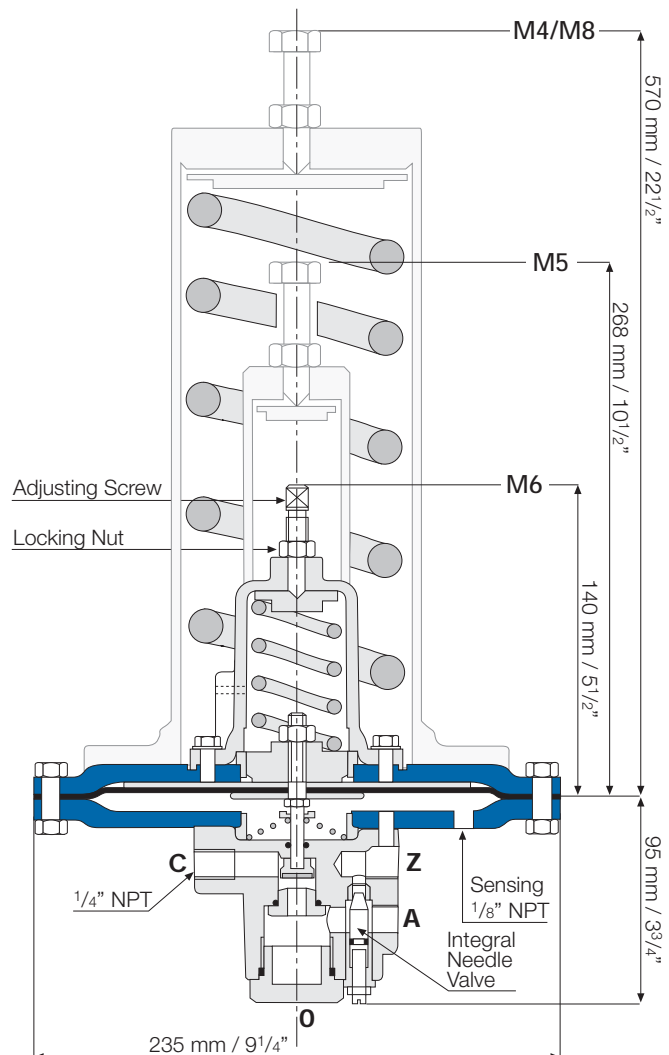
### Connections

Z - Upstream

A - Valve control chamber

C - Downstream

**Sensing** - For altitude control – still point at reservoir bottom  
For pressure sustaining – to valve upstream



Weights: M6 -10 Kg; 22 lbs. M5 -11 Kg; 24 lbs.  
M4 -19 Kg; 42 lbs. M8 -22 Kg; 49 lbs.

