

HIGH SENSITIVITY PRESSURE SUSTAINING PILOT VALVE

Model 83 Pilot

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

It is a high sensitivity, direct acting 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.

Features

- Integral Needle Valve

Typical Applications

- Modulating Altitude Level Control Valves (at reservoir outlet)
- High Sensitivity Pressure Sustaining Valves

Technical Data

Pressure Rating: 16 bar

Water Temperature Range: 0-60 °C

Flow Factor: Kv 1.1

Weight: M1/M6 - 10 Kg; M5 - 11 Kg; M4 - 19 Kg; M8 - 22 Kg

Standard Materials:

Body: Brass or Stainless Steel 316

Cover: Brass or Stainless Steel 316

Diaphragm Covers: Epoxy coated steel

Diaphragm & Seals: NBR or EPDM

Internal Parts: Stainless Steel & Brass

Spring: Stainless or Galvanized Steel

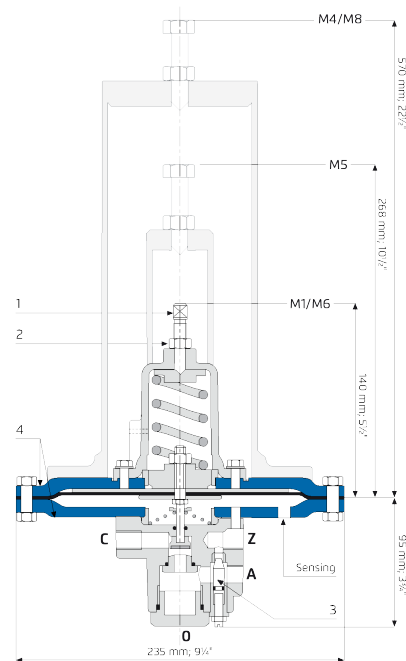
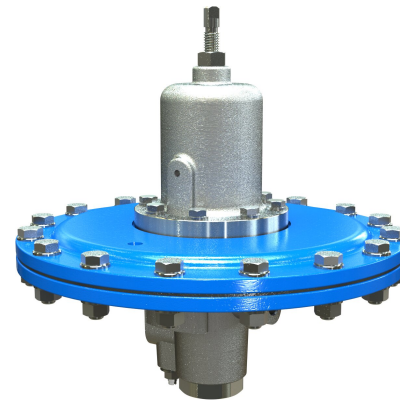
Optional Materials:

Diaphragm & Seals: FPM (Viton®)

Adjustment Range:

Spring	Setting range
M1	2-8 meter
M6	2-14 meter
M5	5-22 meter
M4	15-35 meter
M8	25-70 meter

Standard spring - marked in bold



Part	Description
1	Adjusting screw
2	Locking nut
3	Integral needle-valve
4	Diaphragm covers

Port	Size	Connections
A	1/4" NPT	Valve Control Chamber
C	1/4" NPT	Downstream
Z	1/4" NPT	Upstream
Sensing	1/8" NPT	For altitude control– still point at reservoir bottom. For pressure sustaining– to valve upstream

Always recommended to refer to control diagram