

# ALTITUDE POSITIONING PILOT VALVE

## Model 8

This high sensitivity, direct acting, 3-Way positioning pilot is actuated by a pressure responsive diaphragm, which tends to reach equilibrium with the set spring force. The pilot directs flow and pressure between its ports:

- When sensed pressure is above set point, it connects port "C" to "O".
- When sensed pressure is equal to set point, it blocks connections between all ports.
- When sensed pressure is below set point, it connects port "C" with "A" and "Z".

An integral needle valve restricts flow through port "Z".



### Technical Data

**Pressure Rating:** 400 psi

**Water Temperature Range:** 32-150 °F

**Flow Factor:**

Ports "O" to "C": Cv 0.3

Ports "C" to "A": Cv 0.4

**Weight:** M1/M6 - 22 Lbs; M5 - 24 Lbs; M4 - 42 Lbs; M8 - 49 Lbs

**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

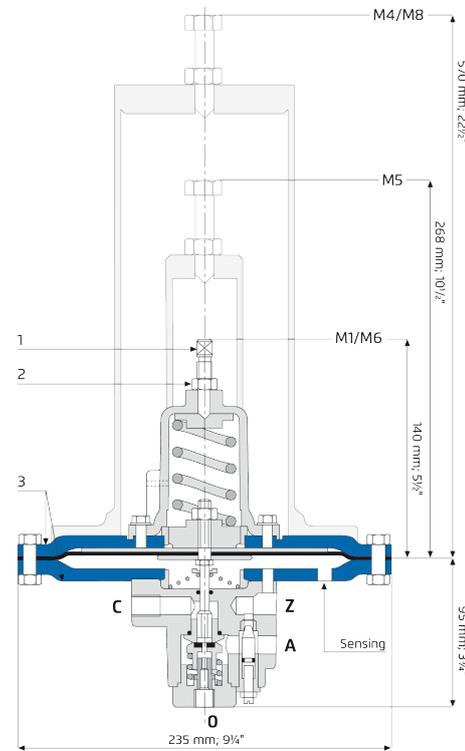
**Optional Materials:**

**Diaphragm & Seals:** FPM (Viton®)

**Adjustment Range:**

Spring	Setting range
M1	7-26 feet
<b>M6</b>	<b>7-46 feet</b>
M5	17-72 feet
M4	49-115 feet
M8	82-230 feet

Standard spring - marked in bold



Part	Description
1	Adjusting screw
2	Locking nut
3	Diaphragm covers

Port	Size	Connections
O	1/4" NPT	Upstream for reducing (reservoir filling), vent for sustaining (reservoir outlet)
A/Z	1/4" NPT	Vent for reducing, upstream for sustaining
C	1/4" NPT	Valve Control Chamber
Sensing	1/8" NPT	For altitude control - still point at reservoir bottom. For pressure reducing - to valve downstream

Always recommended to refer to control diagram