

# HIGH SENSITIVITY PRESSURE REDUCING PILOT VALVE

## Model 82 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. When used in a pressure reducing circuit, the pilot modulates closed as downstream 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 Control Valves
- High Sensitivity Pressure Reducing Valves

### Technical Data

**Pressure Rating:** 16 bar

**Water Temperature Range:** 0-60 °C

**Flow Factor:** Kv 1.0

**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

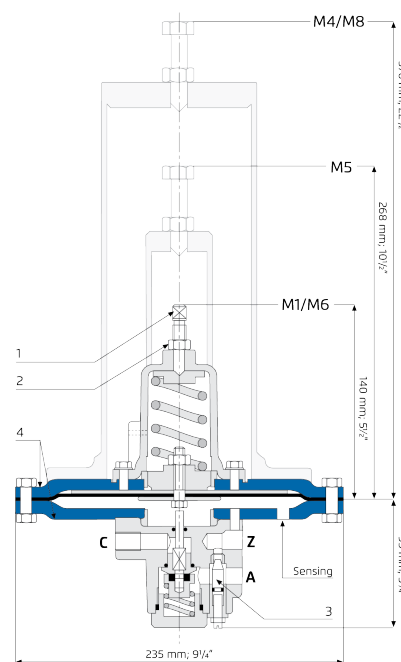
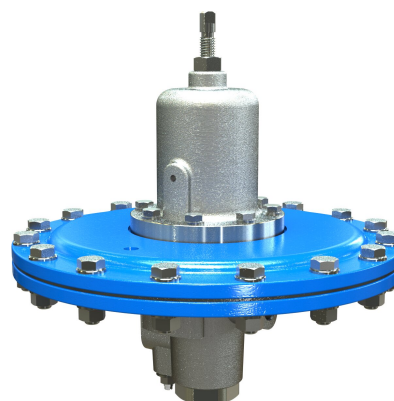
#### Optional Materials:

**Diaphragm & Seals:** FPM (Viton®)

#### Adjustment Range:

| Spring    | Setting range     |
|-----------|-------------------|
| M1        | 2-8 meter         |
| <b>M6</b> | <b>2-14 meter</b> |
| 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 reducing - to valve downstream |

Always recommended to refer to control diagram