

PRESSURE REDUCING 2-WAY MINI PILOT

Model PC-20-A-MP

This pilot integrates all principal functions of a 2-way control circuit in a single assembly - An internal restriction acts as an upstream flow restrictor. It is a direct acting pilot valve, actuated by a pressure responsive diaphragm, which seeks to reach equilibrium between hydraulic and set spring forces. When used in a pressure reducing circuit, the pilot modulates closed as downstream pressure rises above set point.

Features

- High Quality
 - All calibration springs made of Stainless Steel
- Flexibility
 - Internal or external pressure sensing
 - Internal or external upstream restriction
- Direct Pressure Gauge Installation

Typical Applications

- Pressure Reducing Valves
- Closing Surge Prevention (feature 49)

Technical Data

Pressure Rating: 232 psi

Water Temperature Range: 32-140 °F

Flow Factor:

Ports inlet to outlet: Cv 0.51

Height (H): 6.3 Inch

Weight: 1.41 Lbs

Ports: 1/4" NPT

Standard Materials:

Body: Brass

Cover: Polyamide 6 & 30% GF

Diaphragm & Seals: NBR

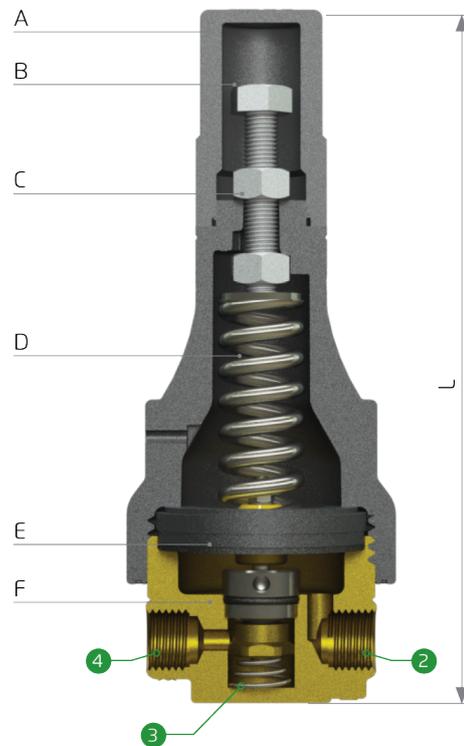
Internal Parts: Stainless Steel

Spring: Stainless Steel

Adjustment Range:

Spring	Spring Color	Setting range	Material
N	Natural	12-95 psi	St. St. 302
V	Blue & White	15-150 psi	St. St. 302

Standard spring - marked in bold



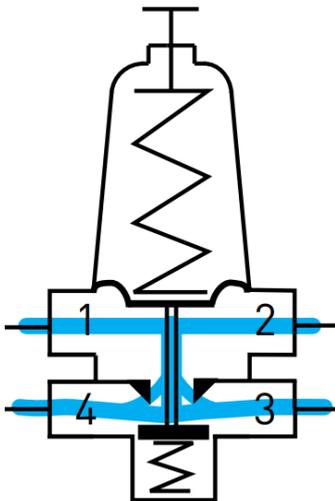
Part	Description
A	Non-tamper safety cap (Optional)
B	Adjusting screw
C	Locking nut
D	Calibration spring
E	Diaphragm
F	Body

Port	Connections
1/2	Downstream / Remote sensing / Pressure gauge
3	Valve Control Chamber
4	Upstream

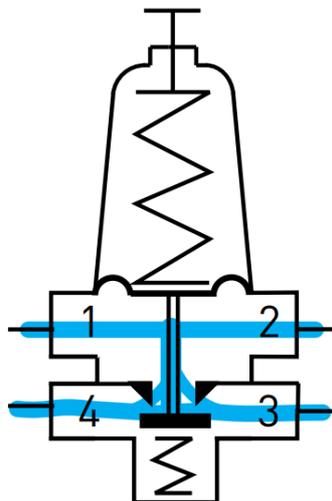


Operation:

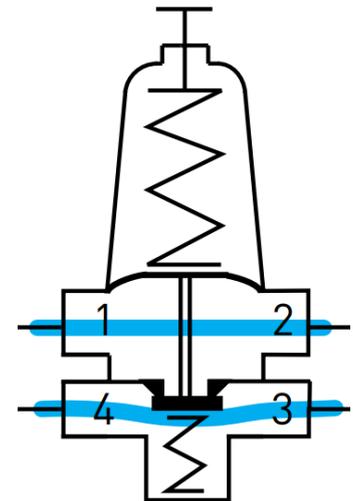
The PC-20 sensing chamber is connected to the valve downstream pressure in a pressure reducing circuit. the pilot modulates to close as downstream pressure rises above set point, and modulates to open when downstream pressure drops below set point. The pressure reducing valve follows the 2-Way pilot: when the pilot modulates to close the valve is also closing in the main line.



Modulating Open
Regulated pressure
lower than setting:
4 <--> 3 <--> 1,2



Stable Position
Regulated pressure
equal to setting:
4 <--> 3 <--> 1,2
controlled passage



Modulating Close
Regulated pressure
higher than setting:
4 <--> 3 |<-->| 2

Ordering guide:

Cat. no.	Description
5004N1P100	PC-20-A-MP W/SPRING "N" (0.8-6.5bar), 2W-METAL PRESSURE REDUCING PILOT VALVE- METAL W/PLASTIC COVER
5004N1P500	PC-20-A-MP W/SPRING "V" (1-10), 2W-METAL PRESSURE REDUCING PILOT VALVE, WITH PLASTIC COVER