

PRESSURE REDUCING 2-WAY MINI PILOT

Model PC-20-A-P

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

Typical Applications

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

Technical Data

Pressure Rating: 10 bar

Water Temperature Range: 0-50 °C

Flow Factor:

Ports inlet to outlet: Kv 0.22

Height (H): 180 mm

Weight: 0.2 Kg

Ports: 1/8" NPT

Standard Materials:

Body: Polyamide 6 & 30% GF

Cover: Polyamide 6 & 30% GF

Diaphragm & Seals: NBR

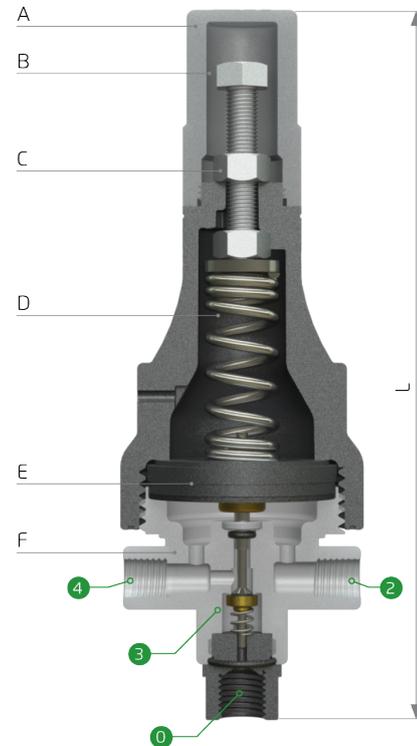
Internal Parts: Stainless Steel

Spring: Stainless Steel

Adjustment Range:

Spring	Spring Color	Setting range	Material
K	Gray	0.5-3.0 bar	St. St. 302
N	Natural	0.8-6.5 bar	St. St. 302
V	Blue & White	1.0-10.0 bar	St. St. 302

Standard spring - marked in bold



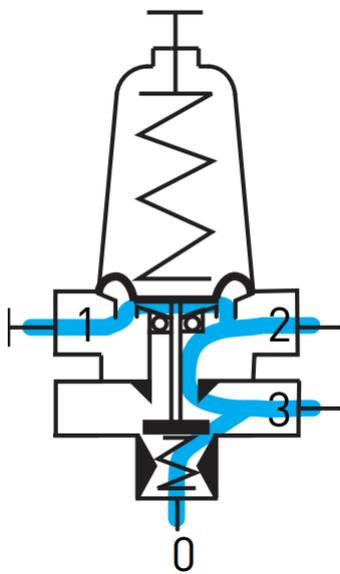
Part	Description
A	Non-tamper safety cap (Optional)
B	Adjusting screw
C	Locking nut
D	Calibration spring
E	Diaphragm
F	Body

Port	Connections
0	Upstream
1	Plugged/ External Sensing
2	Downstream
3	Valve Control Chamber

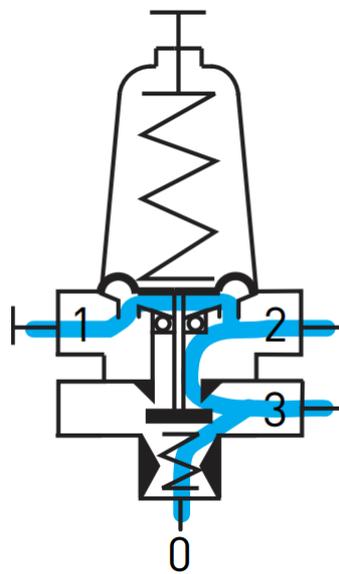


Operation:

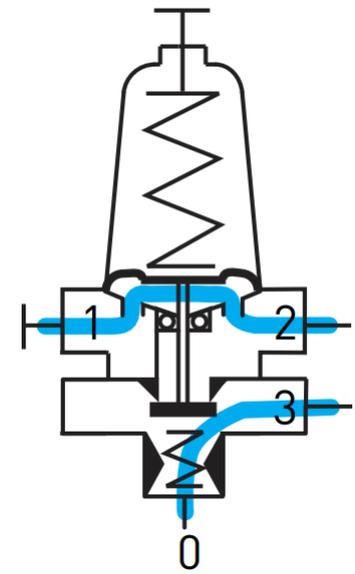
The PC-20 sensing chamber is connected to the valve downstream pressure in a pressure reducing circuit. the pilot modulates to close as downstream pressure rises above set point, and modulates to open when downstream pressure drops below set point. The pressure reducing valve follows the 2-Way pilot: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



Modulating Open
Regulated pressure
lower than setting:
0 <--> 3 <--> 2



Stable Position
Regulated pressure
equal to setting:
0 <--> 3 <--> 2
controlled passage



Modulating Close
Regulated pressure
higher than setting:
0 <--> 3 |<-->| 2

Ordering guide:

Cat. no.	Description
5004N51300	PC-20-A-P W/SPRING "K" (0.5-3.0), GREY, 2W-PLASTIC PRESSURE REDUCING PILOT VALVE-PLASTIC
5004N51400	PC-20-A-P W/SPRING "N" (0.8-6.5 bar), 2W-PLASTIC PRESSURE REDUCING PILOT VALVE- PLASTIC
5004N51800	PC-20-A-P W/SPRING "V" (1-10 bar), WHITE & BLUE, 2W-PLASTIC PRESSURE REDUCING PILOT VALVE-PLASTIC