

SERVO 2/3 WAY MINI PILOT

Model PC-S-A-P

This pilot combines all principal functions of a 2-way control circuit with elements of a 3-way control circuit. It is a direct acting pilot valve, actuated by a pressure responsive diaphragm, which seeks to reach equilibrium between hydraulic and set spring forces. A fully balanced trim ensures high accuracy and stability. When used in a pressure reducing circuit, the pilot modulates closed as downstream pressure rises above setting. The pilot's unique internal design dynamically increases and decreases the main valve response speed in direct proportion to the discrepancy between actual and setting pressures.

Features

- Integrated Dynamic Upstream Flow Restrictor
- Often Used as Differential Pressure Sensing

Typical Applications

- Pressure Reducing Valves (low pressure irrigation using lay flat - for example)
- Flow Control Valves (Differential Pilot: PC-SD-A-P, sealed cover)
- Differential Pressure Sustaining Valves (Differential Pilot: PC-SD-A-P, sealed cover)

Technical Data

Pressure Rating: 10 bar

Water Temperature Range: 0-50 °C

Flow Factor:

Ports inlet to outlet: Kv 0.08

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

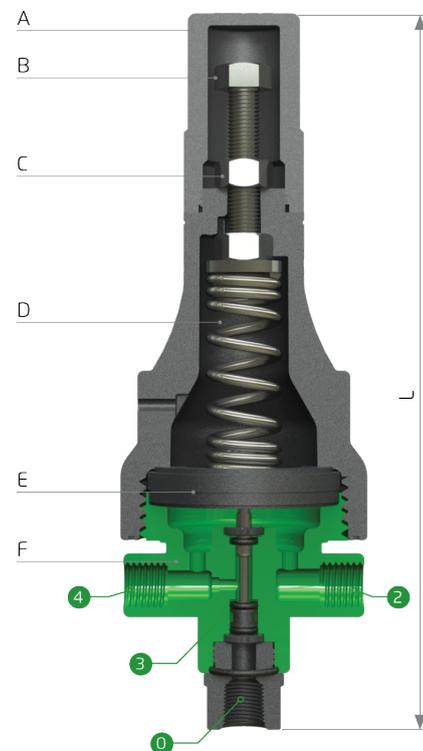
Internal Parts: Stainless Steel

Spring: Stainless Steel

Adjustment Range:

Spring	Spring Color	Setting range	Material
J	Green	0.2-1.7 bar	
K	Gray	0.5-3.0 bar	St. St. 302

Standard spring - marked in bold



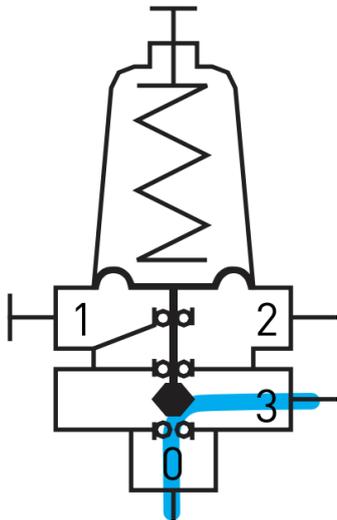
Part	Description
A	Non-tamper safety cap (Optional)
B	Adjusting screw
C	Locking nut
D	Calibration spring
E	Diaphragm
F	Body

Port	Connections
0	Upstream for reducing
1,2	Sensing, Regulated Pressure; Downstream for Reducing
3	Valve Control Chamber

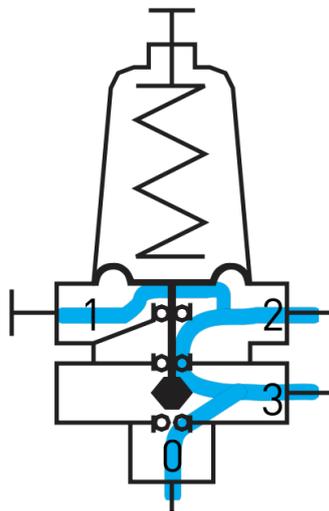


Operation:

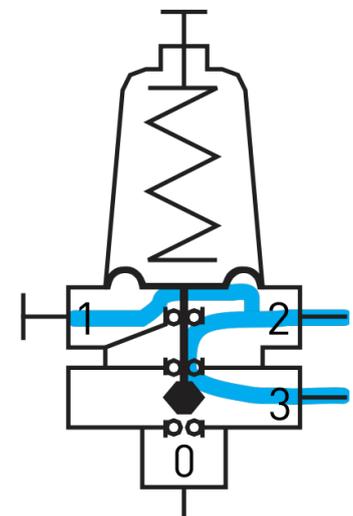
The Servo 2/3 way mini pilot is connected to the regulated pressure source according to the application. When used in a pressure reducing circuit, the pilot modulates closed as downstream pressure rises above setting.



Modulating close
Regulated pressure
higher than setting:
0 <--> 3



Stable Position
Regulated pressure
equal to setting:
0 <--> 3 <--> 1, 2
controlled passage



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

Ordering guide:

Cat. no.	Description
5008N65S00	PC-S-A-P 2/3 WAY, TYPE "SERVO" W/SPRING "J" (0.2-1.7 bar) GREEN, PLASTIC PILOT VALVE, WITH INTERNAL SENSING
5008N66S00	PC-S-A-P 2/3 WAY, TYPE "SERVO" W/SPRING "K" (0.5-3.0), PLASTIC PILOT VALVE, WITH INTERNAL SENSING