

SHARP 3-WAY MINI-PILOT

Model PC-SHARP-X-P

SHARP is a sensitive and accurate diaphragm-operated mini-pilot. It is a multi-purpose 3-Way mini-pilot, based on a balance between the hydraulic force acting on the diaphragm, and the mechanical force of the calibration spring.

Features

- Universal Mini-Pilot
 - Serves as a Pressure Reducing Pilot, Pressure Sustaining Pilot, Flow Control Pilot [PC-XD] & Hydraulic Relay
- High Quality
 - All calibration springs made of Stainless Steel
- Accurate & Flexible

Typical Applications

- Pressure Reducing Valves
- Pressure Sustaining Valves
- Pressure Reducing & Sustaining Valves
- Flow Control Valves (Pilot with Sealed Cover "D")
- Hydraulic Relay

Technical Data

Pressure Rating: 10 bar

Water Temperature Range: 0-50 °C

Flow Factor:

Ports "0" to "3": Kv 0.2

Ports "3" to "2": Kv 0.16

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

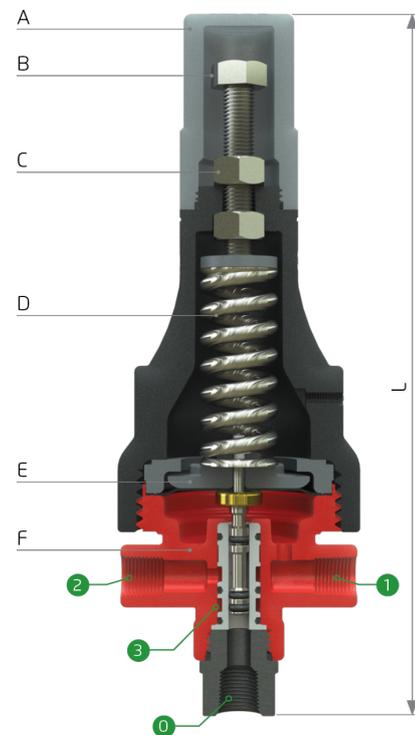
Spring: Stainless Steel

* Flow Control Pilot [PC-XD] include low pressure sensing port on the sealed cover

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
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

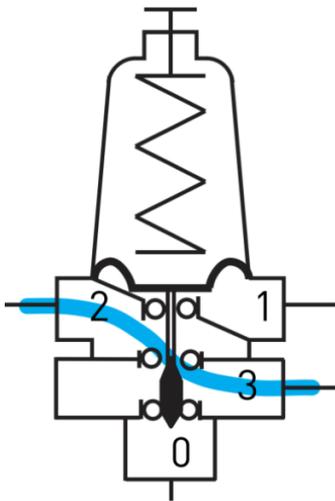
Port	Connections
0	Upstream: Pressure Reducing/Flow Control; Vent: Pressure Sustaining
1	Sensing
2	Vent: Pressure Reducing/Flow Control; Upstream: Pressure Sustaining
3	Valve Control Chamber

* Flow Control Pilot [PC-XD] include low pressure sensing port on the sealed cover

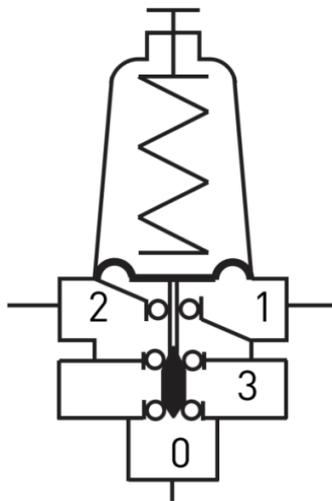


Operation:

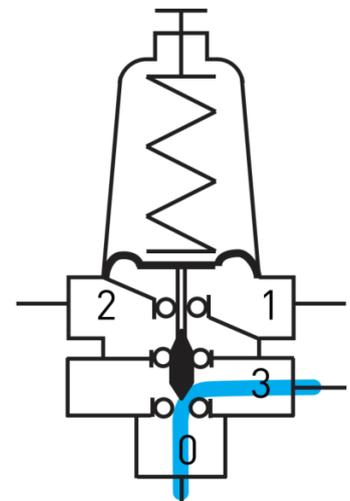
The SHARP Mini-Pilot sensing chamber is connected to the relevant pressure source according to application. The SHARP directs control pressure to & from valve control chamber, by opening and closing water passages (schematic drawing):



When sensed pressure lower than setting: 2<-->3
Modulating Open (PRV)
Modulating Close (PSV)



When sensed pressure equal to setting: 2|<-->3|<-->0
"locked position"
all passages locked



When sensed pressure higher than setting: 0<-->3
Modulating Close (PRV)
Modulating Open (PSV)

Ordering guide:

Cat. no.	Description
5008L1G500	PC-SHARP-X-P, W/SPRING "J" GREEN (0.2-1.7 bar), 3W-PLASTIC MULTI PURPOSE PILOT VALVE
5008L1G200	PC-SHARP-X-P, W/SPRING "K" (0.5-3.0) GREY, 3W-PLASTIC MULTI PURPOSE PILOT VALVE
5008L1G400	PC-SHARP-X-P, W/SPRING "N" (0.8-6.5 bar), 3W-PLASTIC MULTI PURPOSE PILOT VALVE
5008L1G600	PC-SHARP-X-P, W/SPRING "V" (1-10 bar), 3W-PLASTIC MULTI PURPOSE PILOT VALVE