



SHARP 3-Way Mini-Pilot

PC-SHARP-X

SHARP is the most sensitive and accurate mini-pilot in the market. It is a multi-purpose 3-Way mini-pilot, diaphragm-operated, based on a balance between the hydraulic force acting on the diaphragm, and the mechanical force of the calibration spring. The SHARP replaces the PC-X mini-pilot through all applications range.

Features and Benefits

- **Universal Mini-Pilot:** Serves as a pressure reducing pilot, pressure sustaining pilot, flow control Pilot [PC-XD] & hydraulic relay
- **Easy fit-in:** Connections are identical to PC-X & Servo (PC-S) mini-pilots, allowing easy & simple on-site upgrade
- **High Quality:** All calibration springs made of Stainless Steel
- **Accurate & Flexible:** Pressure setting range: 0.5-10bar; 8-145psi. Tolerance: < 2m; 3psi

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:

- When sensed pressure higher than setting: 0 ↔ 3
- When sensed pressure equal to setting: 2 | ↔ | 3 | ↔ | 0 "locked"
- When sensed pressure lower than setting: 2 ↔ 3

Typical Applications

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

Technical Data

Pressures Rating: PN10

Temperature Resistance: Water up to 50°C; 122°F

Flow Factor: KV (@1 bar DP); CV (@1 psi DP)

Ports "0" to "3": 0.22m³/h; 0.25gpm

Ports "3" to "2": 0.16m³/h; 0.18gpm

Construction Materials:

Plastic Cover: Polyamide (Nylon) 6 with 30% Glass Fiber

Metal Cover: Brass

Plastic Body: Polyamide (Nylon) 6 with 30% Glass Fiber

Metal Body: Brass

Elastomers: NBR

Internal Metal Parts: Stainless Steel

Spring: Stainless Steel

Ports: 1/8" NPT (Plastic Base) 1/4" (Metal Base)

Connections

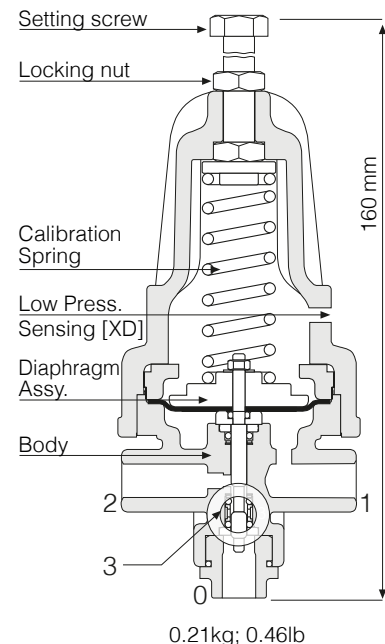
0 – Upstream - Pressure Reducing/Flow Control; Vent: Pressure Sustaining

3 – Valve Control Chamber

2 – Vent: Pressure Reducing/Flow Control; Upstream: Pressure Sustaining

1 – Sensing

Cover – Low Pressure Sensing: Flow Control (PC-XD)



Calibration range of springs

Spring	Spring color	Setting Range
J	Green	0.2-1.7bar; 3-25psi
K	Grey	0.5-3.0bar; 8-44psi
N	Colorless	0.8-6.5bar; 11-94psi
V	Blue-white	1.0-10bar; 14-145psi
P	White	1.0-16.0bar; 14-230psi

Ordering guide

Description	Cat. no.
SHARP Plastic with green spring J (0.2-1.7bar; 3-24psi)	5008L1G500
SHARP Plastic with grey spring K (0.5-3.0bar; 8-44psi)	5008L1G200
SHARP Plastic with colorless spring N (0.8-6.5bar; 11-94psi)	5008L1G400
SHARP Metal with blue-white spring V (1.0-16bar; 14-230psi), Plastic Cover	5004L1G200
SHARP Metal with colorless spring N (0.8-6.5bar; 11-94psi), Plastic Cover	5004L1G400
SHARP Plastic, Sealed Cover "D", with green spring J (0.2-1.7bar; 3-24psi)	5004L1G800