



# 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 & 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
- 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": 0.22m<sup>3</sup>/h; 0.25gpm

Ports "3" to "2": 0.16m<sup>3</sup>/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

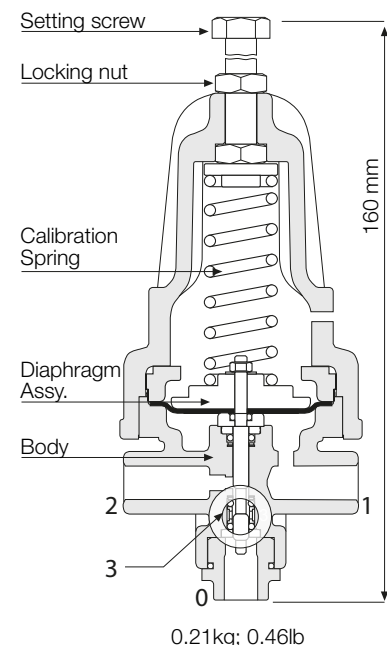
**Internal Metal Parts:** Stainless Steel

**Spring:** Stainless Steel

**Ports:** 1/8" NPT

### Connections

- 0 – Upstream: Pressure Reducing; Vent: Pressure Sustaining
- 3 – Valve control chamber
- 2 – Vent: Pressure Reducing; Upstream: Pressure Sustaining
- 1 – Sensing



### 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