# Honeywell



# PP902C & D Pressure ReducingValve and Filter Stations

**Installation Instructions** 

# **Before Installation**

- 1. Ensure sufficient clearance around the unit to permit easy access for the pressure adjustment, and for the servicing and replacement of the filter cartridge. See Figure 1 for dimensions.
- 2. Ensure the filter is installed with the drain pointing downward.
- 3. Use 1/4-in. NPT fittings for inlet and outlet connections.
- 4. Use 1/8-in. NPT fittings for pilot port connections (PP902D only).



Fig. 1. PP902C and D Dimensions in Inches (Millimeters).

# Installation •

The PP902 may be mounted on a wall or panel using bracket supplied or it may be directly supported by system piping. When using the bracket, secure with a 1/4-in. (6-mm) bolt or screw.

## **PP902C** Piping

Install inlet and outlet piping (Fig. 2) and adjust the outlet pressure (see Adjustments section).



Fig. 2. PP902C Piping.

### **PP902D** Piping

The PP902D outputs the higher of two pressures when the mainline pressure is applied to the pilot port. This may be accomplished by a switching device such as a pneumatic relay, a manual pneumatic switch, or an E-P relay (see E-P Relay Mounting paragraphs).

- 1. Install the desired switchover device (Fig. 3 and Fig. 4).
- 2. Install inlet, outlet, and pilot piping (Fig. 5).
- 3. Adjust pressures (see Adjustments section).

### **E-P Relay Mounting**

An RP418 or RP818 Relay can be mounted directly to a PP902D. A mounting bracket is available in the 14003638-001 Adapter Kit. When using the bracket (Fig. 3), secure the bracket to the relay using the mounting holes in the splice box. To mount the bracket and relay assembly, use the holes in the valve body.

All pneumatic piping connections on the RP418 and RP818 are sized for 1/4-in. (6-mm) O.D. polyethylene tubing. See Figures 4 and 5 for piping information.



Fig. 3. RP418 or RP818 Installation Using the 14003638-00 Adapter Kit.



DEENERGIZED: PORTS 2 AND 3 CONNECTED, PORT 1 BLOCKED.



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Fig. 4. PR418 and RP818 Pneumatic Schematic.



Fig. 5. PP902D with RP418/RP818 Piping.

# Adjustments -

The PP902 primary reduced pressure is factory set at 18 psi (124 kPa). The PP902D secondary reduced pressure is factory set at 4.5 psi (31 kPa) above primary reduced pressure. These settings may be changed for other desired system pressures.

### **Resetting the Primary Reduced Pressure**

#### **PP902C**

- 1. Loosen the locknut (Fig. 6) on the pressure reducing adjustment screw.
- 2. To increase the outlet pressure, turn the pressure reducing adjustment screw clockwise.
- 3. Note the reading of the outlet pressure gage and adjust the pressure as required.
- 4. Tighten the locknut to lock the adjustment screw in place.





#### PP902D

- 1. Pilot port (P) pressure must be 0 psi (0 kPa) before the primary pressure can be adjusted.
- 2. Turn the pressure reducing adjustment screw (Fig. 7) clockwise to increase the outlet pressure to the *lower* of the two desired pressures. The pressure reducing adjustment screw is located inside the sleeve of the secondary adjustment assembly.

#### **Resetting the Secondary Reduced Pressure**

#### PP902D Only

- 1. After the primary setting (lower of the two desired pressures) has been made, apply outlet pressure to the PP902D pilot port.
- 2. Loosen the locknut (Fig. 7) on the sleeve over the pressure reducing adjustment screw.
- Turn the secondary pressure adjustment nut in either direction until the outlet gage indicates the desired secondary pressure (*higher* of the two desired pressures).
- 4. Tighten the locknut to lock the adjustment nut in place.





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