



# Model 3300-0102 & 3300-0103 High Flow Balanced Pressure Regulator Valves

Form L-1523  
11/09

## Installation & Operation Instructions

### Installation

As a relief valve, this valve should be placed in an area that remains pressurized when the gun is shut off.

As a pressure regulator, the valve maintains the pressure in the system (even during flow changes). In this condition, always use a suitable safety valve. If the bypass is directed directly into the pump, caution should be taken to avoid excessive water temperature increases.

### Operation

#### **IMPORTANT:**

The bypass port is at the bottom. The inlet port is on the side.

The bypass should be returned to a baffled tank for turbulence control.

### Pressure Adjustment/Setting

As a relief valve, the adjustment has to be made in such a way that the pressure setting is not higher than the system's working pressure.

As a pressure regulator, adjust the valve when the system is pressurized and the gun is open. As the adjustment cap is turned, there should be a corresponding change in pressure. To increase the pressure, turn the cap clockwise; to decrease the pressure, turn the cap counterclockwise. Once the desired pressure is reached, tighten the ring nut to lock the cap in place.

#### Specifications for 3300-0102

	Max. Flow	Pressure Range	Max Temp.	Inlet Port	Bypass Port	Dimensions
<b>Standard</b>	55 GPM	260-2000 PSI	185° F	3/4" NPT	1/2" NPT	6.25" x 2.00" x 1.50"
<b>Metric</b>	208 LM	18-138 BAR	85° C	3/4" NPT	1/2" NPT	159 x 50 x 38 mm

#### Specifications for 3300-0103

<b>Standard</b>	55 GPM	260-2000 PSI	185° F	1" NPT	1" NPT	6.25" x 2.90" x 1.65"
<b>Metric</b>	208 LM	18-138 BAR	85° C	1" NPT	1" NPT	159 x 74 x 42 mm

### Order Information

Part No.	Description
<b>3300-0102</b>	3/4" NPT Inlet x 1/2" NPT Bypass Model
<b>3300-0103</b>	1" NPT Inlet x 1" NPT Bypass Model
<b>3430-0747</b>	Piston and Seat Repair Kit

### Troubleshooting

<b>Valve chatters</b>	Valve is installed improperly (inlet & bypass may be reversed). Valve is missing its orifice washer. Valve is improperly set; repeat adjustment process.
<b>Valve continually bypasses</b>	Seat or piston worn; replace as needed. Valve is improperly set; repeat adjustment procedure.
<b>Leaking out the top of valve</b>	O-ring and piston are worn or cut. Install repair kit.

## Instructions / Parts Drawing

### Installation Instructions for Piston Seal Kit No. 3430-0747

1. Remove the adjustment cap from the top of the valve assembly.
2. Once cap is removed, the spring and spring plate can be removed.
3. Using a .625 (5/8") hex wrench, unscrew and remove the old sleeve and piston assembly.
4. If the orifice washer didn't come out with the sleeve assembly, use a valve extractor tool (Hypro P/N 3010-0057), to reach down inside the body. Place the extractor inside the orifice hole, expanding the tool, and then pull up, removing the SST orifice washer as shown in Figure 1. **(This part is re-used so do not discard it.)**
5. Using the same extractor tool, reach down inside the body and remove the seat by placing the extractor inside the seat hole, expanding the tool, and then pulling up, removing the SST seat as shown in Figure 2.
6. Reassemble the new 3430-0747 kit in the reverse order as disassembly.
7. See Figure 2 for proper assembly direction of the new SST seat ring. **Seat must be installed with identification ring up as shown.**
8. Orifice washer must be reassembled after seat and before installation of new sleeve assembly or valve operation will be compromised.

#### NOTE:

- O-rings on seat and outer sleeve should be lubricated prior to assembly to ensure proper sealing.
- **Piston and sleeve assembly should not be disassembled for any reason.** It is lubricated at the factory and should remain assembled as a unit.



Fig.1



Fig. 2



No. 3430-0747 Kit

