



CASH VALVE A36 PRESSURE REDUCING OR PRESSURE BUILD-UP REGULATOR INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

Before installation, these instructions must be carefully read and understood.

DESCRIPTION

The Type A-36 regulator is a fully automatic pressure regulating valve designed for cryogenic service in the pressure build-up circuit. Because it may be used for either cryogenic liquids or gases, it may be installed either before or after the pressure build-up coil.

SPECIFICATION DATA

Service:	Cryogenic liquids and gases (pressure reducing or pressure build-up service)
Sizes:	3/8"
Connections:	Threaded internal inlet and outlet
Body material:	Bronze or Stainless Steel
Temperature rating:	+150°F (65°C) to -320°F (-195°C)
Maximum initial pressure:	600 psig (41.4 bar)

INSTALLATION INSTRUCTIONS

The Type A-36 regulator can be installed in any position. For ease of maintenance and reference however, it is suggested that the valve be installed in a horizontal line with the spring chamber upright. For convenient operation and maintenance, manual shut-off valves should be installed upstream and downstream from the valve. Before installing the valve, the piping should be thoroughly flushed out to remove any foreign material. Install the valve with the inlet pipe in proper relationship to the flow arrow stamped on the valve body.

OPERATION INSTRUCTIONS

Adjusting the Delivery Pressure

The regulator's delivery pressure setting is adjusted by turning the adjusting screw (1) at the top of the spring chamber after loosening the adjusting screw lock nut (2). To increase the delivery pressure, turn the adjusting screw clockwise (into the spring chamber). To decrease the delivery pressure, turn the adjusting screw counter-clockwise (out of the spring chamber). Tighten the adjusting screw lock nut after the adjustment has been made.

NOTE

When adjusting the delivery pressure, draw flow and shutoff downstream to check pressure set.

MAINTENANCE INSTRUCTIONS

CAUTION

Before attempting to replace any spare parts, be sure to shut off all pressure connections to the valve. With the valve closed however, system pressure could still be locked between the shut-off valve and the inlet and/or outlet sides of the regulator. Before proceeding with any valve service, be certain to relieve the pressure from both sides of the regulator.

1. Loosen Lock Nut 1/4 turn and loosen Adjusting Screw until the Pressure Spring is no longer under tension. See Figure 1.
Note: When installing the Adjusting Screw during re-assembly, tighten the screw until the Lock Nut just touches the Spring Chamber. When the Valve is placed in service the pressure setting should be very close to the original setting.

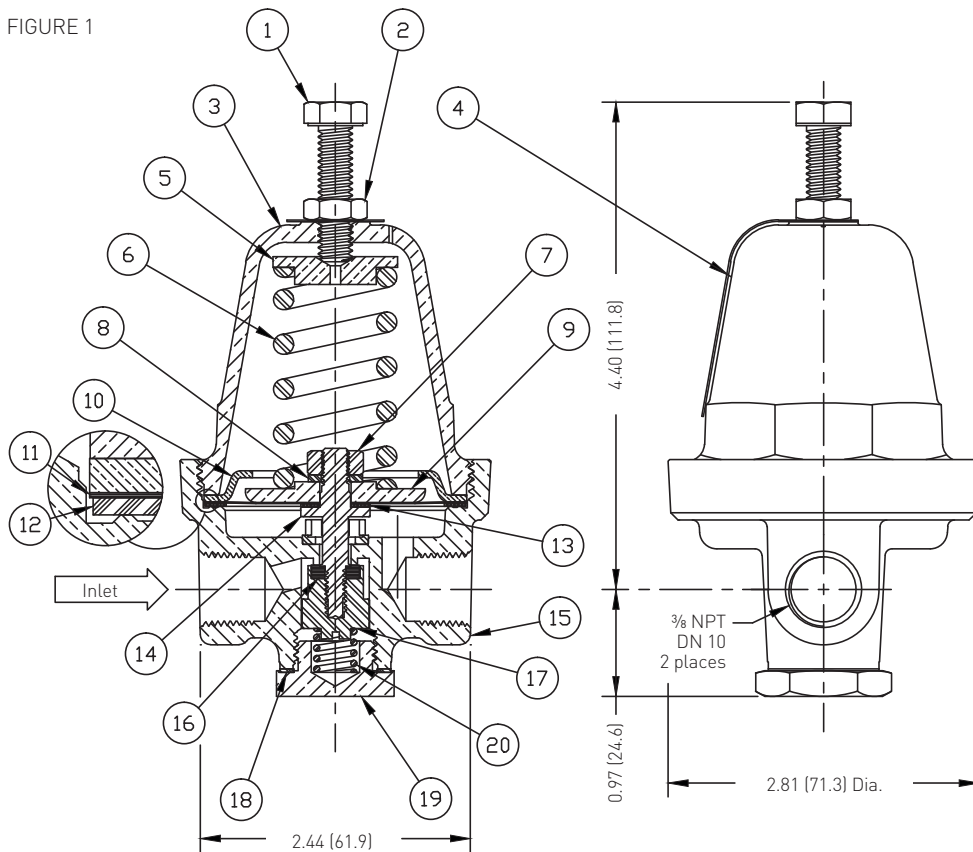


2. Loosen and remove Spring Chamber (with pressure spring) and bottom plug (with piston spring). With screwdriver placed in piston bottom slot, loosen and remove lock nut on top of diaphragm. Disassemble diaphragm and remove pusher post from piston. Remove piston and pusher post from valve.
3. Replace Diaphragm, piston, seat disc, pusher post, and gaskets with components included in Kit. Diaphragm and pusher post gaskets must be given a very light coating of Fluorolube LG-120 or oxygen compatible lubricant and installed between Body and Diaphragm Assembly.
4. Retighten Spring Chamber to 50-60 ft/lbs. torque.
5. Retighten Bottom Plug to approximately 125 in./lbs. torque.
Important: DO NOT OVERTIGHTEN.
6. Reset Adjusting Screw and tighten Lock Nut - see NOTE in step 1.

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INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

FIGURE 1



PARTS LIST

Item	Description	Material	Quantity	Item	Description	Material	Quantity
1	Adjusting screw	Stainless steel	1	13	Gasket	Teflon	1
2	Lock nut	Stainless steel	1	14	Pusher post	Stainless steel	1
3	Spring chamber	Brass ⁽²⁾	1	15	Body sub	-	1
4	Name plate	Aluminum	1	15a	Limit stop	Stainless steel	1
5	Spring button	Brass	1	15b	Body	Brass ⁽⁴⁾	1
6	Pressure spring	Stainless steel	1	16	Seat disc	Teflon	1
7	Nut	Stainless steel	1	17	Piston	Stainless steel	1
8	Washer	Stainless steel	1	18	Gasket	Copper	1
9	Pressure plate	Brass	1	19	Bottom plug	Brass ⁽⁴⁾	1
10	Diaphragm stop	Brass	1	20	Piston spring	Stainless steel	1
11	Diaphragm	Bronze ⁽³⁾	3				
12	Gasket	Teflon	1				

NOTES

1. Dimensions are approximate.
2. Spring chamber material is Brass for Spring Chamber Material selection Z - Bronze. Also available is Spring Chamber Material selection G - 316 SST.
3. Diaphragm material is Bronze for Diaphragm Material Z - Bronze. Also available is Diaphragm Material selection G - Stainless Steel.
4. Body and bottom plug material are Bronze for Model A36Z - Bronze Body. Also available is Model selection A36G - SST Body.

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