



CASH VALVE™ TYPE A-32 CRYOGENIC PRESSURE REGULATOR INSTALLATION INSTRUCTIONS

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

WARNING

Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion, fire and/or chemical contamination causing property damage and personal injury or death.

Cash Valve regulators must be installed, operated and maintained in accordance with federal, state and local codes, rules and regulations and Emerson Process Management Regulator Technologies, Inc. instructions.

If the regulator vents gas or a leak develops in the system, service to the unit may be required. Failure to correct trouble could result in a hazardous condition.

Installation, operation and maintenance procedures performed by unqualified personnel may result in improper adjustment and unsafe operation. Either condition may result in equipment damage or personal injury. Only a qualified person shall install or service the Type A32 regulator.

CALIFORNIA PROPOSITION 65 WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

INTRODUCTION

Scope of the Manual

This manual provides instructions for the installation, adjustment and maintenance for the Type A32 pressure regulator.

DESCRIPTION

The Type A-32 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: 1/4" - 3/8"

Connections: Threaded internal inlet and outlet.

Body Material: Bronze or Stainless steel

Temperature Rating: +150°F (339°K) to -320°F (78°K)

Maximum Initial Pressure: 600 psig (41.4 bar)

Capacity: For specific capacity information, consult the factory.

GENERAL INSTALLATION INSTRUCTIONS

The Type A-32 regulator should be installed in the horizontal position with the spring chamber upright or down. For other installation requirements, consult the factory. For easy operation and maintenance, it is suggested that manual shut-off valves be installed upstream and downstream from the valve. Before installing the valve, the piping and valve should be thoroughly flushed out to remove any foreign material. Install the valve with the inlet pipe fitted to the inlet connection identified on the valve body. Use a compatible sealant on the male pipe threads and do not over-tighten the valve connections.

CONSTRUCTION

See component description for materials of construction.

All parts are commercially cleaned for oxygen service.

OPERATING 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 (3) 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 (and reinstall optional cap).

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.

Refer to section view on the following page for parts identification. Repair parts can easily be installed without removing the regulator from the line.

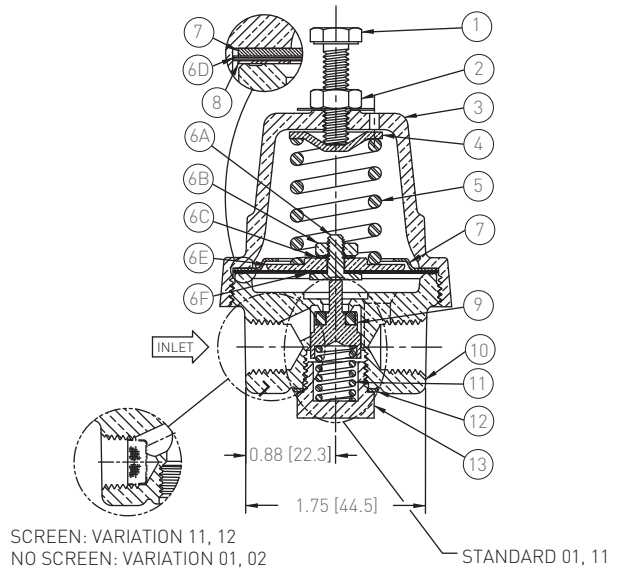
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INSTALLATION INSTRUCTIONS

LIST OF MATERIALS

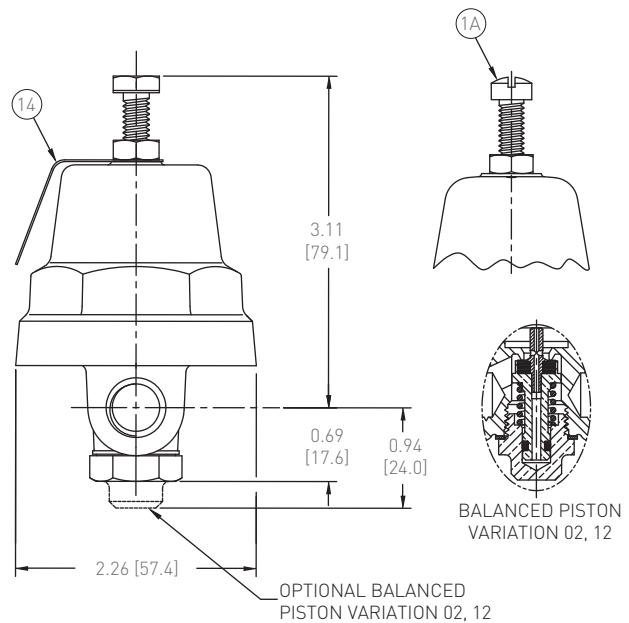
Item	Quantity	Description	Material
1	1	Adjusting Screw	SST
1A	1	Adjusting Screw	Brass
2	1	Lock Nut	SST
3	1	Spring Chamber	Aluminum or Brass, Brass with Chrome
4	1	Spring Button	Brass
5	1	Pressure Spring	SST or Carbon Steel
6	1	Diaphragm Sub	
6A	1	P-Post Button	Brass or SST
6B	1	Nut	Brass
6C	1	Lock Washer	SST
6D	1	Diaphragm	Buna, EPR, SST, Bronze
6E	1	Pressure Plate	Brass
6F	1	Gasket	Gylon
7	1	Diaphragm Stop	Brass
8	1	Gasket	Teflon
9	1	Piston Sub	
9A	1	Piston	Brass
9B	1	Seat Disc	Teflon, Buna-N
9C	1	Piston Spring	SST
10	1	Body	Brass
11	1	Piston Spring	SST
12	1	Gasket	Copper
13	1	Bottom Plug	Brass
14	1	Name Plate	Aluminum

FIGURE 1
1/4" or 3/8" Pressure Builder Valve Cryogenic



NOTES

1. Dimensions are approximate. Unless otherwise specified.



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