

CASH VALVE™ TYPE B 11/4" - 2" PRESSURE REGULATOR

OXYGEN SERVICE INSTALLATION INSTRUCTION

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. (Emerson) 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 B Series 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 B Series pressure regulators.

DESCRIPTION

The Type B pressure reducing and regulating valve automatically reduces a high inlet pressure to a lower delivery pressure and maintains the lower pressure within reasonably close limits regardless of the pressure fluctuations on the inlet side of the valve.

SPECIFICATION DATA

Service: Oxygen gas (including medical grade oxygen)

Sizes: 1¼, 1½ and 2" (32, 38 and 51 mm) Connections: Threaded internal inlet and outlet Body Material: Bronze

Temperature Rating: +150 to -320°F (65.6 to -195.6°C)

Maximum Initial Pressure: 400 psi (27.58 bar) **Capacity:** For specific capacity information, consult the factory.

GENERAL INSTALLATION INSTRUCTIONS

The Type B regulator should be installed in the horizontal position with the spring chamber upright. 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, all piping 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

Bronze body, brass internal trim, Buna-N diaphragms and seat, Stainless steel pressure spring.

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 (2) or optional T-Handle (1) at the top of the Spring Chamber (5) after loosening the Adjusting Screw Lock Nut (3). 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.

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, the 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.

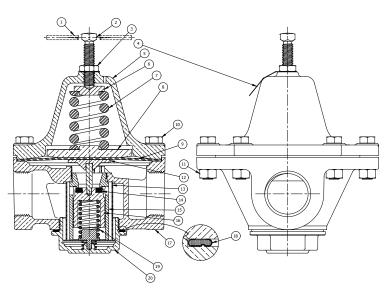
Refer to section view for parts identification. Repair parts can easily be installed without removing the regulator from the line.

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| No. | Control Description | Construction |
|-----|----------------------------|---------------|
| 1 | T-Handle Sub (Opt.) | Steel |
| 2 | Adjusting Screw | Steel |
| 3 | Lock Nut | Steel |
| 4 | Name Plate | Aluminum |
| 5 | Spring Chamber | Bronze |
| 6 | Spring Button | Steel or Iron |
| 7 | Pressure Spring | Steel |
| 8 | Pressure Plate | Brass |
| 9 | Diaphragm | Buna-N |
| 10 | Screw | Steel |
| 11 | Nut | Steel |
| 12 | Pusher Post Button | Brass |
| 13 | Screen | SST or Monel |
| 14 | Seat Disk | Buna-N |
| 15 | Cylinder | Brass |
| 16 | Piston and Post | Brass |
| 17 | Body | Bronze |
| 18 | Gasket | Fiber/Copper |
| 19 | Piston Spring | SST |
| 20 | Bottom Plug | Bronze |
| | | |

FIGURE 1



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