

# Reliable®

## Models A-2 & B-1 Automatic Pressure Maintenance Devices

### Features

1. Eliminate manual system pressure maintenance.
2. Prevent accidental dry pipe valve and dry pilot line deluge valve operation due to low air pressure.
3. Models suitable for dry nitrogen supply, or local tankless compressor.
4. Suitable for preaction system supervision.
5. May feed dual dry pipe valve systems.
6. Bypass valve incorporated for quick filling system.
7. Shut-off valves permit servicing without shutting down sprinkler protection.
8. Easily adjusted pressure settings.

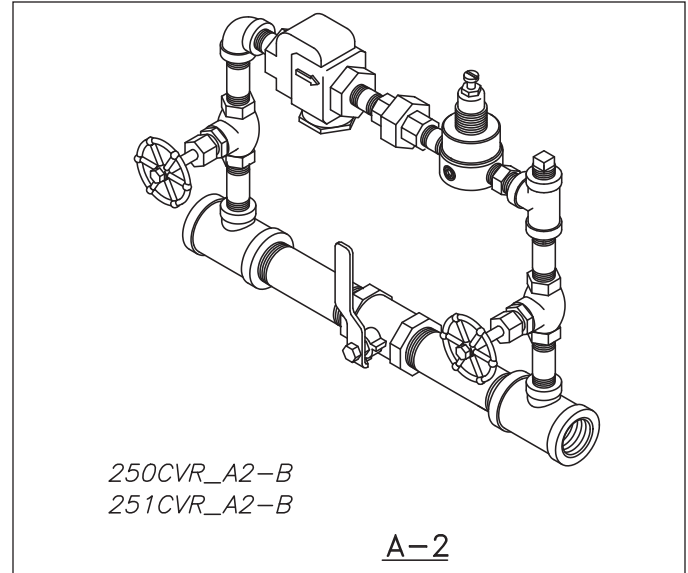
### Application

Reliable pneumatic pressure maintenance devices are used to automatically maintain the correct pressure in dry pipe valve, or preaction systems, and in dry pilot lines for deluge systems. When installed in these systems, they eliminate the need for manual filling to overcome small leaks or temperature changes. Reliable pressure maintenance devices do not interfere with the prompt operation of dry pipe valves and deluge valves including when used with quick opening devices.

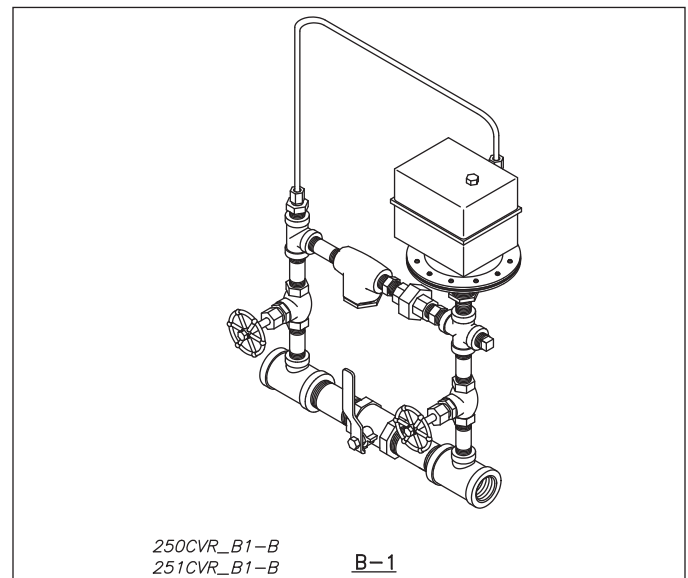
### Listings and Approvals

Models A-2 and B-1:

1. Listed by Underwriters Laboratories, Inc. (UL)
2. Listed by Underwriters' Laboratories of Canada. (ULC)
3. Certified by FM Approvals.
4. NYC MEA 258-93-E.



Model A-2



Model B-1

## Operation

### Model A-2

The Model A-2 Device is designed for use where a source of compressed gas is available, such as nitrogen cylinders, a plant compressed air system or a tank mounted air compressor with a pressure control switch. The pressure of the compressed gas is reduced by the regulator to the level required by the dry pipe, deluge or preaction system. The Reliable automatic pressure maintenance device will maintain a constant pressure in the system regardless of pressure fluctuations in the compressed gas source.

The strainer prevents any foreign matter in the gas from traveling to the regulator and check valve and interfering with their normal operation. The check valve prevents reverse flow so that water cannot reach the regulators after the dry pipe or deluge valve operates. The shutoff valves permit the servicing of the strainer and regulator without shutting down the sprinkler system. The bypass valve permits the rapid restoration of the required system pressure after service or operation. The bypass valve must be closed and the shutoff valves open for proper automatic operation.

**Face to Face Dimensions:** 11¼" (286mm)

#### Pressure Rating:

Adjustable Range: 5psi - to - 50 psi (0,3 bar - to - 3,4 bar)

Maximum Inlet Pressure: 175 psi (12 bar)

**Note: 1 bar = 100 kPa**

### Models B-1

The Model B-1 Device is designed for use in conjunction with Reliable Model A or Model B tankless air compressors which do not have a pressure control switch to maintain the correct pressure in a dry pipe or deluge valve system. By wiring the compressor motor to the electrical pressure switch of the Reliable Model B-1 Automatic Pressure Maintenance Device, the compressor is controlled by the selected pressure in the dry pipe or deluge valve system.

A drop in the air pressure closes the pressure switch, activating the compressor. When the air pressure is restored to the pre-adjusted setting, the pressure switch opens, stopping the compressor. The electrical pressure switch is equipped with an unloader valve which automatically bleeds off the compressor outlet pressure (through the copper tubing) each time the pressure switch opens. This protects the compressor motor from overload at the next startup.

Like the Model A-2 Device, the Model B-1 has a strainer for contamination control and a check valve to prevent reverse water flow. The bypass valve and shutoff valves are identical in configuration and function as with the Model A-2 Device. Likewise, the bypass valve must be closed and the shutoff valves open for proper automatic operation.

**Face to Face Dimensions:** 9¼" (235mm)

The equipment presented in this bulletin is to be installed in accordance with the latest published Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable. Products manufactured and distributed by Reliable have been protecting life and property for over 90 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

Manufactured by

# Reliable®

The Reliable Automatic Sprinkler Co., Inc.

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Sales Offices

Sales Fax

Corporate Offices

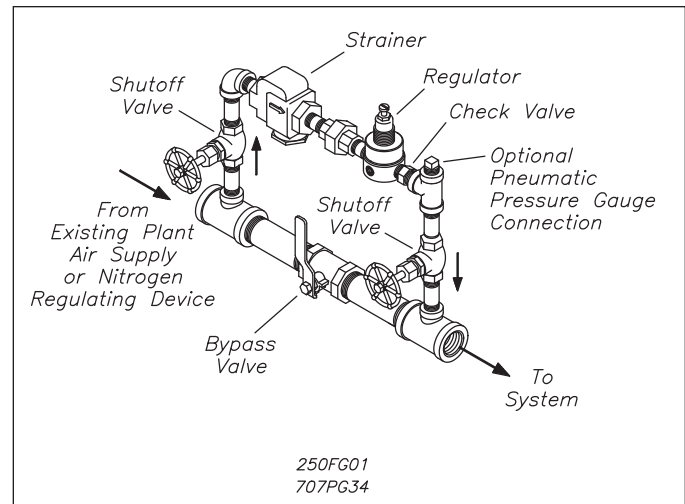
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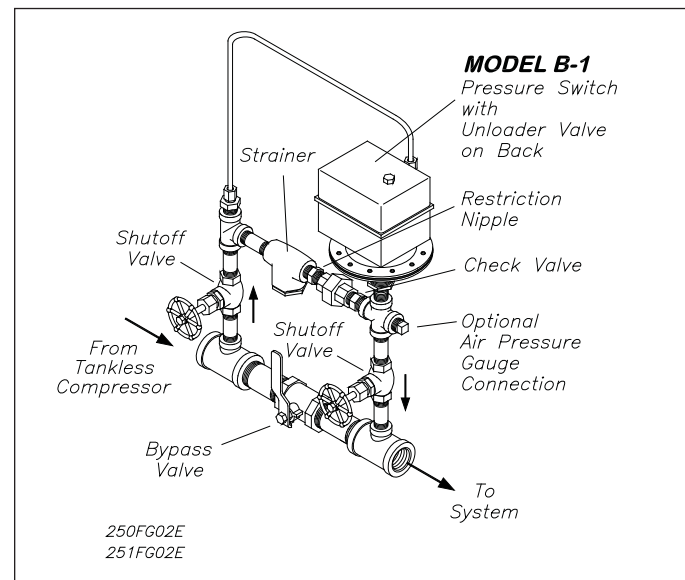
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Model A-2



Model B-1

### Electrical Rating

115-230 Volts DC; 3 HP (B-1)

#### Single Phase

120 Volts AC; 2 HP

240 Volts AC; 3 HP

600 Volts AC; 5 HP

#### Three Phase

120 Volts AC; 3HP

240 Volts AC; 5 Hp

600 Volts AC; 5 HP (B-1)

### Model B-1: Pressure Rating

Adjustable Range: 14psi - to - 60 psi (1,0 bar - to - 4,1 bar)

Maximum Inlet Pressure: 175 psi (12 bar)