

## ANDERSON GREENWOOD PILOT OPERATED SAFETY RELIEF VALVES (POSRV)

WINTERIZATION GUIDELINES

The intent of these instructions is to acquaint the user with the heat tracing and insulating of these products. **Please read these instructions carefully.** 



Anderson Greenwood Pilot Operated Safety Relief Valves (POSRV) are designed for use in a wide variety of environments, including locations where they may be exposed to low ambient temperatures. In order to ensure optimal performance, freeze protection systems are commonly used on pilot operated safety relief valves (POSRV) in cold climates to keep them warm, and in particular, to prevent freezing of liquids in the valve and tubing. A typical freeze protection system consists of two primary components: insulation and a heat source, often an electric heating cable. These components must be selected to work together providing the freeze protection required in the most efficient manner. It is recommended that an organization with freeze protection expertise be consulted to ensure the most appropriate system is designed for your conditions.

In addition to electric heat cable, in some cases steam tracing or steam jacketing systems are chosen. Either steam or electric freeze protection systems are acceptable methods for use with Anderson Greenwood Pilot Operated Pressure Relief Valve as long as the following guidelines are used.

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### SERIES 200, 400, 500, 800 (FIGURES 1 AND 2)

- Main valve, pilot valve, tubing and accessories can all be heat traced and/or insulated.
- Do not insulate over pilot exhaust vents or bonnet vents since they must communicate directly to atmosphere.
- Assure heat trace temperature does not rise above 140°F (60°C) on surface of valve to prevent damaging O-rings, diaphragms and seals. Heat trace temperature should be sensed and controlled at or near the pilot valve. Consult the factory if higher heat trace temperatures are required for a particular application. The POSRV serial number is required for a factory response.



#### FIGURE 2 SERIES 200 SNAP ACTING POSRV





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## SERIES 700 (FIGURE 3)

- Main valve, pilot valve, tubing and accessories can all be heat traced and/or insulated.
- Do not insulate over pilot exhaust vent since it must communicate directly to atmosphere.



## SERIES 5200 (FIGURE 4)

- Do not insulate the main valve cap. This will hamper the convection cooling needed to keep the main valve piston seals cool and main valve dome filled with water. The main valve (except cap), pilot, tubing and accessories can all be heat traced and/or insulated.
- Assure heat trace temperature does not rise above 200°F (93°C) to prevent overheating O-rings and seals. Also, a 200°F (93°C) maximum heat trace temperature assures that condensate will be maintained in the main valve dome and condensate trap. Heat trace temperature should be sensed and controlled at or near the pilot valve.

#### FIGURE 4 SERIES 5200 MODULATING POSRV



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#### SERIES 90, 9000 (FIGURE 5)

#### FIGURE 5 MODULATING OR SNAP ACTING POSRV

- Main valve, pilot valve, tubing and accessories can all be heat traced and/or insulated.
- Do not insulate over pilot exhaust vents or bonnet vents since they must communicate directly to atmosphere.
- Assure heat trace temperature does not rise above 140°F (60°C) on surface of valve to prevent damaging O-rings, diaphragms and seals. Heat trace temperature should be sensed and controlled at or near the pilot valve. Consult the factory if higher heat trace temperatures are required for a particular application. The POSRV serial number is required for a factory response.



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