

R600 Series LP-Gas Regulators

Note: Type R632 integral regulators installed on underground tanks require the use of 2 vent tubes, one for the 1st stage vent and the other for the 2nd stage vent of the regulator. Remove the vent screen and install a vent tube. The vent tube must be run from the regulator vent to above the maximum water table. The vent tube opening must terminate at the extreme top inside of the dome cover. Make sure the regulator's closing cap is on tightly, and maintain drainage away from the dome at all times. For further information on underground installations, contact Aero Fulfillment Services at phone number 866-840-1075 and ask for Item number 000412 "Installation of Underground LP-Gas Systems: Suggested Installation, Inspection,".

Adjustment

Each regulator is factory set. If it becomes necessary to increase the outlet pressure, remove the closing cap and turn the adjustment screw clockwise. Turn the adjusting screw counterclockwise to decrease the outlet pressure. **The first stage portion of the R632 integral regulator is non-adjustable.** The outlet pressure plug may be removed using a 7/16" hexagon wrench. The pressure tap is restricted, so the plug can be removed with pressure on the outlet of the regulator. Install a pressure gauge to determine the regulator's outlet setting during adjustment, (Actual pressure at the 2nd stage regulator may be less due to line loss.) After setting, reinstall the pipe plug and replace the closing cap. Check the plug for leakage.

Inlet pressure may be checked using the inlet pressure gauge tap and a pressure gauge. Remove the plug using a 7/16" wrench. The pressure tap is restricted, so the plug can be removed with pressure on the inlet of the regulator.

Overpressure Protection



WARNING

Some type of overpressure protection is needed if actual inlet pressure can exceed the outlet pressure rating. Overpressuring any portion of this equipment above the limits shown in the Specifications Table 1 may cause damage to regulator parts, leaks in the regulator, or personal injury due to bursting of pressure-containing parts or explosion of accumulated gas.

If any portion of the regulator is exposed to an overpressure condition that ex-

ceeds the limits in the Specification Table 1, it must be inspected for damage that may have occurred.

Large volumes of gas may discharge through the regulator vent during internal relief valve operation, which can, if not controlled, result in fire or explosion from accumulated gas.

The R600 series regulators, **except for the 1st stage of the type R632**, contain internal relief valves. The internal relief valve in all units will give overpressure protection against excessive build-up resulting from seat leakage due to worn parts or chips or foreign material on the orifice. The amount of internal relief protection provided varies with the regulator type and the cause for the overpressure relief valve operation. When the internal relief valve opens, gas escapes to the atmosphere through the regulator's vent.

Some type of additional external overpressure protection must be provided if the outlet pressure in an overpressure condition exceeds the inlet pressure rating of the gas system or downstream equipment. Common methods of external overpressure protection include relief valves, monitoring regulators, shutoff devices, and series regulation.

Maintenance



WARNING

To avoid personal injury or equipment damage, do not attempt any maintenance or disassembly without first isolating the regulator from system pressure and relieving all internal pressure.

Regulators that have been disassembled for repair must be tested for proper operation before being returned to service. Only parts manufactured by Fisher should be used for repairing Fisher regulators. Relight pilot lights according to normal startup procedures.

Due to normal wear or damage that may occur from external sources, these regulators must be inspected and maintained periodically. The frequency of inspection and replacement of the regulators depends upon the severity of service conditions or the requirements of