



BAILEY PRESSURE REDUCING VALVES OPERATING AND SAFETY INSTRUCTIONS (PED)

Before installation these instructions must be read fully and understood

GENERAL

The intent of these instructions is to acquaint the user with the storage, installation and operation of this product. Please read these instructions carefully before installation. This reducing valve should only be used in accordance with the applicable operating instructions and within the application specifications of the purchase order. This valve has been tested and adjusted at the factory. If adjustment is required on site, check that the spring setting is available adequately from the spring fitted in the valve, by reference to the relevant Installation, Operating and Maintenance Instructions.

STORAGE AND HANDLING

- Because cleanliness is essential to the satisfactory operation and tightness of a reducing valve, precautions should be taken during storage to keep out all foreign material. Inlet and outlet protectors should remain in place until the valve is ready to be installed in the system. It is recommended that the valve is stored in the original shipping container away from dirt and other forms of contamination.
- Reducing valves must be handled carefully and never subject to shocks. Rough handling may alter the pressure setting, deform valve parts and affect seat tightness and valve performance adversely.
- The valve should be lifted in a safe manner. When it is necessary to use a hoist, the chain or sling should be placed around the valve body and cover in a manner that will ensure that the valve is in a vertical position to facilitate installation.

INSTALLATION

- Valves are damaged when first placed in service because of failure to clean the connection properly when installed. Before installation, flange faces or threaded connections on both the valve and the pipeline on which the valve is mounted must be cleaned thoroughly of all dirt and foreign material. Because foreign materials that pass into and through reducing valves can damage the valve, the systems on which the valves are tested and finally installed must also be inspected and cleaned. New systems in particular are prone to containing foreign objects that will get trapped during construction and will destroy the seating surfaces causing leakage, and moving parts causing jamming. The system should be flushed through thoroughly before installation of the reducing valve.
- The gaskets must be dimensionally correct for the specific flanges. The inside diameters must clear the valve inlet and outlet ports fully so that the gasket does not restrict the flow.
- For flanged valves, tighten down all connection studs or bolts evenly to avoid possible distortion of the valve body. For threaded valves, apply a wrench to the flats provided on the valve body. Pressure reducing valve installations require accurate design of both inlet and outlet pipework. Refer to International, National and industry standards for guidelines.
- The valve should be installed in horizontal pipework with its axis vertical. A flow arrow is cast on the valve body illustrating the direction of flow; always ensure that the arrow is pointing from the high-pressure source to the low-pressure source.

- When installing valves on steam systems, always ensure that the pipework on the inlet is fitted with a pipeline strainer; that the inlet and outlet pipework is fitted with a 'dirt leg and pocket' and that adequate steam traps are fitted. This will help to prevent the accumulation of foreign objects in the reducing valve, and help prevent the build up of condensate in both pipework and valve, which would cause the valve to oscillate.
- Safety valves should always be fitted into the downstream pipe work of a pressure reducing valve station; this will ensure that downstream pipework and equipment are protected properly against potential inlet pressure. Safety valves should be sized adequately to discharge the full system flow rate at the reduced outlet pressure setting.

NOTE

Service technicians are available to assist with your installation or other field problems. Call your nearest authorized representative (details can be found at Emerson.com/FinalControl).

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OPERATING AND SAFETY INSTRUCTIONS (PED)

SAFETY PRECAUTIONS

- Never attempt to remove a reducing valve from a system that is pressurized and never attempt to carry out maintenance on a reducing valve when the system is pressurized.
- If the valve is not isolated properly from the system pressure, it will be pressurized, which could cause serious injury to personnel.
- Accurate regulation of the reducing valve is important in the correct operation of the plant. The valve must be maintained according to appropriate instructions and must be reconditioned periodically to ensure correct function.
- For further information including adjustment, maintenance and detail illustrations, obtain the appropriate Installation, Operation and Maintenance Instructions. These may be obtained from the factory or are available on our website.

WARNING

- *The improper installation, application or maintenance of the valve or the use of parts or components not manufactured by us may result in a failure of the reducing valve.*
- *Any installation, maintenance, adjustment, repair or test performed on the reducing valve must be done in accordance with the requirements of all our applicable procedures and instructions and applicable National and International Codes and Standards.*
- *The information, specifications and technical data (the 'specifications') contained in this document are subject to change without notice. We do not warrant that the specifications are current and assume no responsibility for the use or misuse thereof. The purchaser should verify that there have been no changes to the specifications prior to use.*

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