

PRESSURE REDUCING VALVE (DN65-DN150)

DM1716: PN16
DM1725: PN25



Before installation, confirm that the PRV is operating within an acceptable pressure reduction range.

High differential pressures across the PRV will result in noisy operation and could result in premature failure of the PRV due to internal cavitation.

Using the chart, identify that the intersection of the maximum inlet pressure and the set outlet pressure falls within the 'safe operating conditions' segment.

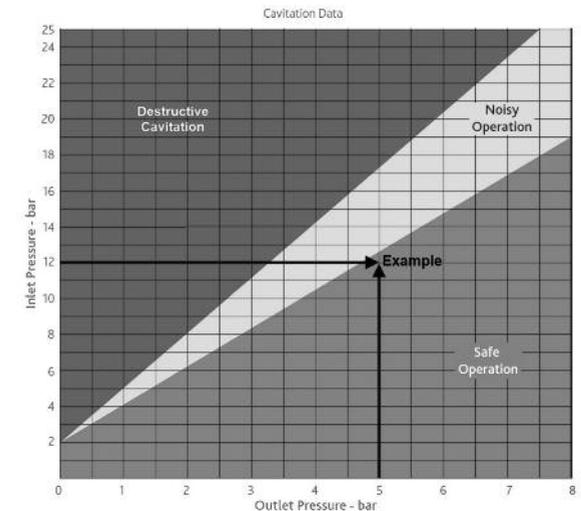


Note:

PN25 is flanged but can only be used to a maximum operating inlet pressure of 18 bar. Refer to Cavitation Chart inlet & outlet pressure.

Example;

- For an inlet pressure of 12 bar and an outlet pressure of 5 bar, the intersection falls within the 'safe operating conditions' segment
- It is important that the PRV should only be used where the intersection falls within the segment identified as 'safe operating conditions'.



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• Designed and manufactured under quality management systems in accordance with BS EN ISO 9001-2008

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INSTALLATION

The outlet pressure of the PRV is controlled by an 'Adjustable Setting Valve'; this allows accurate adjustment for improved performance.

We recommend, as a minimum requirement, that an IV (Isolation Valve) is fitted on the inlet side of the PRV. To reduce the possible risk of wasting water during maintenance, we also recommend that an IV should also be fitted to the outlet side of the PRV to reduce the length of pipework that needs to be drained down.

The PRV should be installed without causing any stress to its flanged connections.

The flow direction must coincide with the flow direct arrow cast into the PRV body.

The PRV must be installed in horizontal pipework the valve stem vertically upwards.

Access must be provided for the operation of the pilot assembly isolation valves (A, B & E) and for connecting to the quick-fit pressure test fittings (C & D).

COMMISSIONING

NOTE: When supplied, the outlet pressure of the PRV is not set to any specific pressure. Therefore, care should be taken when applying system pressure to the PRV as the outlet pressure may be greater than the maximum allowable pressure for some of the water outlets, taps etc

Before applying the system pressure to the PRV ensure that;

- The IVs for the quick-fit connections are closed (handle at right-angles to the IV body)
 - Pilot IVs are all in the open position (handle in-line with IV body)
 - All water outlet (taps etc) downstream of the PRV are closed during commissioning. A lower set pressure reading will be obtained if any water outlets are used during commissioning.
1. Slacken Locknut on Adjustable Setting Valve
 2. If the pressure reading on the gauge is greater than the required set pressure, reduce the outlet pressure using Setting Spindle to a lower value than the required set pressure
 - to reduce the outlet pressure the 'trapped' pressure downstream of the PRV will need to be reduced by opening a water outlet, ie tap etc
 3. Increase the pressure to the required set pressure
 - When setting the PRV, the pressure must be increased to the set pressure and not decreased to the set pressure
 - Clockwise adjustment increases the outlet pressure, whereas, counter clockwise adjustment decreases the outlet pressure

4. Lock adjusted in set position with Locknut

The gauge is supplied oil filled to dampen any pipework vibration.

MAINTENANCE

The PRV should be inspected regularly and after long periods of inactivity the PRV must be tested. Before carrying out any maintenance on the PRV, it must be isolated from the supply pressure and drained to remove system pressure.

The inlet port to the pilot assembly is fitted with a strainer screen to prevent small particles entering. In the advent of apparent poor pressure control, this screen should be inspected and cleaned. The screen is fitted to the pilot assembly isolation valve (A) connector and can be inspected by removing the connector from the PRV body.

