

Recommendations

- ✓ Ensure valve is suitable for service conditions such as pressure and temperature.
- ✓ Make sure that the Valves are designed for On-Off service or regulating services.

Before installation

- ✓ The complete piping system must be flushed through prior to commissioning to ensure all foreign matter is removed.
- ✓ Subsequent valve failure is frequently caused by dirt and other matter left in the pipeline.
- ✓ Cleaning both valve and system before operation and excessive force during assembly and hand-wheel operation.
- ✓ The flange gaskets should be suitable for operating conditions or maximum pressure/ temperature ratings.
- ✓ The flange gaskets should be checked to ensure freedom from defects or damage.
- ✓ In assembly, flange bolts should be tightened sequentially to make the initial contact of flanges and gaskets flat and parallel followed by gradual and uniform tightening in an opposite bolting sequence to avoid bending one flange relative to the other, particularly on flanges with raised faces.

Consider

- ✓ The valves may be installed in horizontal pipework with the stem in the vertical position, or in vertical pipework with the stem horizontal. The valves should not be installed in horizontal pipework with the stem horizontal because shut off performance may be impaired.
- ✓ Valves are designed to operate either in the fully closed or open positions, if used in an intermediate position this will lead to increased wear and therefore reduced life expectancy.
- ✓ Where EPDM is used as the sealing medium, oil or grease should not be allowed to come into contact as this will cause swelling in the EPDM.
- ✓ Valves must be installed into a well-designed system and it is recommended that the system be inspected in accordance with the appropriate national and regional legislation. Maximum operating pressure reduces as service temperature increases.

Be Careful

- ✓ Joints Flanges may be damaged by over tightening the bolts.
- ✓ Always use the correct size of bolts.
- ✓ Find out the correct assembly torque for the specific gasket and conditions applicable, and use a torque wrench to achieve this.
- ✓ Do not match a flat-faced flange to a raised face flange.
- ✓ Care should be taken to provide correct alignment of the flanges being assembled. A suitable lubricant on bolt threads is recommended.

For Safety

- ✓ In the interests of safety, valves installed on end-of-line service in the closed position with infrequent opening should be fitted with a locking device on the operating mechanism. Alternatively, it should be fitted with a blanking plug on the downstream end connection of the valve.
- ✓ Avoid to install valves with the hand wheels pointing downwards, as damage may be caused to the gland packing and stem seal, by debris in the system. Piping Supports These must be carefully aligned and at the correct Avoid to install valves with the hand wheels pointing downwards, as damage may be caused to the gland packing and stem seal, by debris in the system.
- ✓ Hand-wheels cannot be used for lifting.
- ✓ If gland is leaking tighten the gland nut(s). The gland nut(s) should be tightened only enough to prevent stuffing box leakage. Over-tightening can cause excessive wear on stem and packing and make valve difficult to operate. Inspection and Maintenance
- ✓ The maximum pressure rating is that on a closed valve.
- ✓ Inspections recommends three months for smooth operation and leak free performance.
- ✓ The valve should be at zero pressure and ambient temperature prior to any inspection.
- ✓ Valves must be installed by competent personnel only.
- ✓ It is the responsibility of the installer to ensure that the valves do not exceed the allowable limits of pressure.
- ✓ Valves should be located to ensure ease and safety of operation and access allowed for subsequent maintenance of the valve

