



Fig. KBL25 / KBL25EXT Bronze Ball Valve Installation & Maintenance Instructions

PRODUCT LIFE CYCLE

The life of the valve is dependent on its application, frequency of use and freedom from misuse.

The properties of the fluid being transported such as pressure and temperature must be taken into account to avoid premature failure.

Other factors to be considered are the electrolytic interaction between dissimilar metal used in the system, dezincification and stress corrosion cracking occurring on chilled water service.

Before commissioning a system, it should be flushed to eliminate debris and chemically cleaned as appropriate to eliminate contamination, all of which will prolong the life of the valve.

OPERATING PRESSURES AND TEMPERATURES

Maximum non shock pressure and temperature range:

25 bar from -10°C to 20°C
8 bar at 120°C

Water hammer and other shock conditions should be avoided.

Not suitable for fatigue loading, creep conditions, fire testing, fire hazard environment, corrosive service or transporting abrasive solids.

PRESSURE / TEMPERATURE RATING

These valves must be installed in a piping system where the normal pressure and temperature do not exceed the above ratings.

If system testing will subject the valve to pressures in excess of the working pressure rating, this should be within the test pressure for the body with the valve in the open position.

If the limits of use specified in these instructions are exceeded or if the valve is used on applications for which it was not designed, a potential hazard could result.

LAYOUT AND SITING

It should be considered at the design stage where valves will be located to give access for operation and routine inspection.

Ball valves are bi-directional and can be installed with the flow in any direction.

INSTALLATION

Prior to installation, a check of the markings on the body and lever marking must be made to ensure that the correct valve is being installed.



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KIDS ball valves are manufactured to high quality standards and should not be subjected to misuse. The following should be avoided:

- Careless handling of the valve - valves should not be lifted using the lever.
- Dirt and debris entering the valve through the end ports.
- Excessive force during assembly and lever operation.

All special packaging material must be removed.

Ball valves may be fixed in any orientation, always leaving enough space for the 90° operation of the lever handle where fitted.

Confirm that the pipe threading length is correct to avoid excessive penetration of the pipe into the valve which would otherwise cause damage.

It is common practice to apply thread sealing compounds appropriate to the application but excessive use should be avoided, since this increases thread interference and may cause overstressing of the body ends.

Ensure the threads are properly engaged and proceed to tighten the valve onto the pipe. The wrench must only be located on the valve end into which the pipe is being threaded to avoid distortion of the valve.

Valves and adjoining pipework must be provided with adequate support to avoid inducing bending stresses into the valve body, which will impair its performance.

Immediately prior to valve installation, the pipework to which the valve is to be fastened should be checked for cleanliness and freedom from debris.

After installation, the valve may be opened and closed fully to confirm satisfactory operation.

It is recommended that valves installed on end of line service and unused for prolonged periods should be fitted with a blank plug.

OPERATION

Ball valves have a quarter turn operation (clockwise to close) providing quick and positive isolation. The lever will be in line with the pipeline with the valve in the open position.

Close the valves by rotating the lever clockwise until a positive stop is felt.

Note: Rapid closure of a quarter turn valve on liquid service may cause a shock to the valve and 'water hammer' in the pipework system.

Extensions to the lever or similar devices should not be used.

The operator should use suitable hand protection at extreme temperature conditions.

Ball valves should only be used in the full open or closed position and should not be used for regulation.

MAINTENANCE

KIDS ball valves will provide a long service life and no maintenance is required

In the unlikely event that a valve requires replacement then the following should be taken into consideration.



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The valve should be at zero pressure and ambient temperature before any valve replacement is carried out and correctly fitting tools should be used for the valve replacement work. Eye protection and gloves must be worn for this operation.

As the valve is removed there will be water loss between the two isolation points, therefore unless the pipework has been drained at another location, a means of collecting the discharged water is recommended.

A full risk assessment and methodology statement must be compiled prior to any maintenance.