

Fig. KBS20 and KBS25 Bronze 'Y' Strainers Installation & Maintenance Instructions

PRODUCT LIFE CYCLE

The life of the strainer is dependent on its application 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:

KBS20 20 bar from -10°C to 100°C

9 bar at 180°C

KBS25 25 bar from -10°C to 100°C

10.5 bar at 186°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 strainers 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 strainer to pressures in excess of the working pressure rating, this should be within the test pressure for the body.

If the limits of use specified in these instructions are exceeded or if the strainer 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 strainer will be located to give access for routine inspection and cleaning the strainer element.

Isolation valves should be fitted immediately upstream and downstream to allow the strainer to be isolated, drained and the strainer element removed for cleaning.

INSTALLATION

Prior to installation, a check of the identification plate and body marking on the strainer must be made to ensure that the correct strainer is being installed.

Page 1 of 3 Issue: 4 Date: June 2019



Fig. KBS20 and KBS25 Bronze 'Y' Strainers Installation & Maintenance Instructions

KIDS 'Y' strainers are manufactured to high quality standards and should not be subjected to misuse.

All special packaging material must be removed.

If strainers are installed in horizontal pipework the part of the body housing the strainer element must hang below the pipe.

The direction arrow cast on the body must be coincident with the direction of flow in the pipeline.

For vertical pipework the flow direction must be downwards.

For the purpose of cleaning the strainer element and removing debris the strainer must be installed with sufficient room so that the strainer element can be withdrawn from beneath in a downwards direction.

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.

INSTALLATION

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

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

MAINTENANCE

KIDS 'Y' pattern strainers will provide a long service life provided the strainer element is cleaned regularly.

The strainer should be at zero pressure and ambient temperature before any maintenance is carried out and correctly fitting tools should be used.

Eye protection and gloves must be worn for this operation.

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

The element will require cleaning after the flushing process and periodically thereafter.

STRAINER ELEMENT CLEANING

If fitted close the isolating valves.

The strainer has a screwed cap which is removed in an anti-clockwise direction to enable the withdrawal of the strainer element.

Page 2 of 3 Issue: 4 Date: June 2019



Fig. KBS20 and KBS25 Bronze 'Y' Strainers Installation & Maintenance Instructions

As the cap 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.

Clean the strainer element using a brush and or water jet. It is recommended that goggles should be worn during the cleaning process.

Once the strainer element has been cleaned the strainer can be re-assembled.

The strainer element and sealing gasket should be renewed if damage has occurred.

Page 3 of 3 Issue: 4 Date: June 2019