

Dual Disc Check Valve Installation and Maintenance Instructions

1.0 Valve Location and Orientation in Piping

Check valves should be installed if possible a minimum of 6 pipe diameters from other line elements. i.e. elbows, pumps, valves, etc.

Horizontal Lines

 Valves installed in horizontal lines must be bolted in place with the hinge post in the vertical position. i.e. in such a manner that the hinge pin retainers are at the top and bottom of the installed valve, perpendicular to the flow.

Vertical Lines

 In the upward position, no special attention needs to be given to the hinge post position. The only exception being when mounted directly downstream of an elbow. In this case the hinge post should be mounted perpendicular to the outermost portion of the elbow. Consult factory for vertical down flow applications.

2.0 Precautions

- Do not install IFC Dual Disc Check Valves directly against another valve whereby the check valve discharges downstream directly into the valve.
- Do not install the valve whereby it directly discharges downstream into a tee or elbow fitting.
- IFC Dual Disc Check Valves should not be used in severe pulsating services such as reciprocating compressor discharges.
- It is recommended that the check valves be installed a minimum of three pipe diameters downstream of a pump or compressor.

3.0 Maintenance

IFC Dual Disc Check Valves are permanently lubricated and normally require no routine maintenance.

4.0 Reconditioning

IMPORTANT! PRIOR TO DISASSEMBLY, VALVE MUST FIRST BE ISOLATED FROM SYSTEM PRESSURE AND FLOW.

CAUTION! BEFORE ATTEMPTING THE FOLLOWING SHAFT EXTRACTION, BE SURE TO PRESS A HAND OVER THE DISC SPRING. FAILURE TO DO THIS MAY RESULT IN PERSONAL INJURY DUE TO THE SPRING "LAUNCHING" ITSELF UNEXPECTEDLY ONCE THE SHAFT IS PULLED FREE OF IT.

Series DC Disc & Shaft Removal

• After observing the above precaution, remove the valve from the pipeline and lay flat with open, body cavity side facing up. Remove pipe plugs from top and bottom of body with a wrench. Insert a punch and lightly tap the top of the shaft until it is accessible on the other side of the body. Pull shaft through body to remove. The internals of the valve are now ready to be cleaned and inspected.

Series DC Reassembly

Use new replacement parts, as required and a liberal amount of general-purpose grease (such as Mystic JT-6) on seals and machined mating surfaces. Reinsert the disc into the body cavity with the shaft holes inline with top and bottom shaft port. Slide the shaft into the body through the shaft opening on one side of the valve. Continue sliding the shaft through the disc, spring and remaining shaft port the opposite side of the body. Install pipe plugs into the body using a good industrial grade thread sealant compound.

Series DR Disc & Shaft Removal

 After observing the above precaution, remove the valve from the pipeline and lay flat with open, body cavity side facing up. Using an Allen wrench, remove the set screws that hold the upper and lower pin guides in place.
Cautiously remove the pin guides from the body by sliding the assembly upwards. The pin guides then can be removed and the internals of the valve are ready to be cleaned and inspected. (It is important to inspect the set screw female threads for wear and damage.)

Series DR Reassembly

Use new replacement parts, as required and a liberal amount of general-purpose grease (such as Mystic JT-6) on seals and machined mating surfaces. Reinsert the discs, washers and springs into pins and realign with upper and lower guides. Press guides into pins and reinsert the complete assembly into the body. Pay attention not to damage set screw threads. Once insertion of the guides is complete, gently thread back into place the set screws using an Allen wrench.

Do not over torque.