

FULL BODY SWING CHECK VALVES

INSTALLATION & MAINTENANCE INSTRUCTIONS

General:

Stayflow's Full Body Swing Check Valves are designed to automatically prevent back-flow in systems where it is desirable to permit flow in one direction and prevent flow in the opposite direction. When the pump starts and the downstream flow creates the required pressure drop in the forward direction, the disc will automatically open. When the pump stops and the flow ceases, the weight of the disc will automatically close the disc prior to flow reversal. This creates a positive shutoff against flow reversal and helps to eliminate system surges and water hammer.

PRECAUTION:

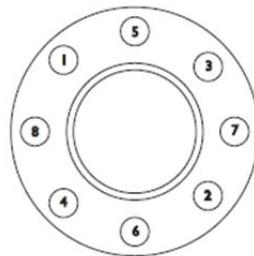
Full Body Swing Check Valves are designed for steady flow conditions and are not recommended for use in reciprocating pump, compressor or other types of physical/thermal shock-load applications. In this type of application, the Check Valve will not perform efficiently and will ultimately fail.

PRECAUTION:

Full Body Swing Check Valves are designed to operate properly for flow rates between 5 ft./sec. to 10 ft./sec.. It is not recommended to exceed the maximum flow rate of 10 ft./sec. or the minimum flow rate of 5 ft./sec..

Installation:

1. Orientate the flow arrow (cast into the side of the valve body or printed on the nameplate) in the direction of the pipeline flow. In the correct position, the valve disc will move away from the valve seat, in the direction of the pipeline flow. Stayflow Full Body Swing Check Valves can be installed in any position: horizontal, vertical (with upward flow) or any varying angle.
2. While supporting the existing pipeline, lift the Check Valve into position. For large or heavy Check Valves, the appropriate material handling equipment must be used in order to prevent injury and possible damage to the Check Valve.
3. Install a standard, 1/8" thick flange gasket (in accordance with ASME B16.1) between valve and mating flanges (on both sides). Ensure the flange gaskets are centered correctly to prevent internal leakage.
4. Install lubricated flange bolts and hand tighten. Flange bolts should then be tightened using a star or crisscross pattern to evenly load the bolts. This is illustrated in the diagram below.





Testing:

Valve may be one-time pressure tested to 1-1/2 times the product's maximum operating pressure. Do not exceed maximum pressure or temperature during operation.

Precautions:

Do NOT inspect the seat area of the valve by removing the piping from the inlet side of the valve when back pressure is present. This will result in the seat and trim of the valve being damaged.

Storage:

Store valves with flow arrows pointing upwards.

Maintenance:

Silent check valves have no serviceable parts and do not require maintenance. Stayflow recommends periodic inspection.