



Installation, Operating, Maintenance and Storage Manual

Type of Product: Dual Plate Check Valves

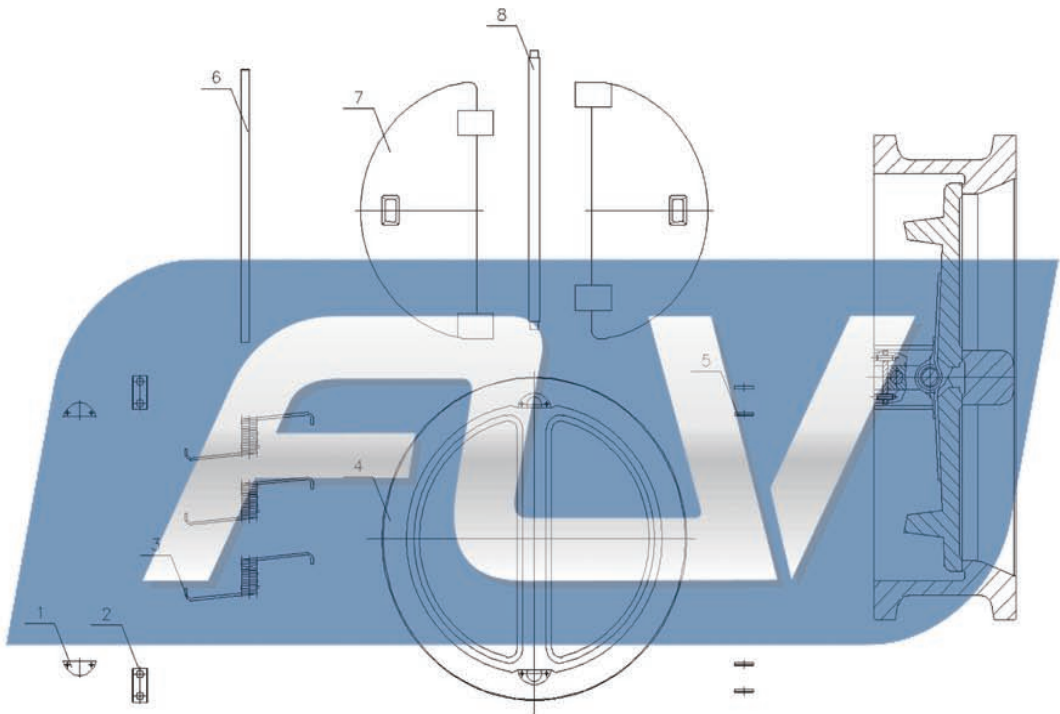


Introduction

Dual plate check valves are used for non-return applications in industrial pipelines for petroleum, gas and chemicals. The valve operates automatically when there is differential pressure across the valve.

List of Main Components and Materials

The below table is a list of the most common materials of construction of component. Refer to the name plate and or certification supplied for specific details of the valve.



1	Baffle	5	Bearing
2	Brackets	6	Shaft
3	Spring	7	Disc
4	Body	8	Shaft



Safety Tips and Warnings

- Read completely and understand all instructions provided prior or beginning installation or maintenance.
- Before installation confirm that valve is suitable for the intended service.
- Make sure that line is depressurized and drains are open/monitored during installation
- Before working on valve being in service make sure that service media has been flushed and line is safe.
- Make sure that all applicable MSDS sheets are available.
- Follow all safety related procedures.
- Before disassembly valve shall be cycled several times to assure there is no pressure trapped in body cavity.
- During assembly make sure that all threaded connections are safe and have proper engagement.
- During the pressure test of reassembled valve follow all safety precautions to avoid possible injury. (Use of proper test equipment, correct components, following test procedures, etc.)
- While the line is under pressure DO NOT remove the packing or any other valve parts.
- All activities shall be conducted by suitably experienced/trained personnel.

Installation

The valve can be installed in any plane, noting the flow direction. The following must be checked to ensure the correct valve has been selected for installation.

- Pressure class
- Temperature rating
- Materials of construction
- Name plate is affixed
- Tag number, if applicable
- Installation direction, if applicable

Before installation, check for any dirt or rust that may be in the cavity and on the sealing face. If present, this shall be removed. NOTE: valves are packed and shipped in a clean condition with sufficient protection to ensure contamination is avoided. Subsequent, inspection, testing or storage at site should be done in a manner to prevent contamination with dirt, water, etc.

If everything is acceptable, the valve can be fitted into the pipeline using appropriate sized bolts for the valve and pressure class.

Operation

The valve shall be used for on-off applications using pressure differential for operation. It is not permitted to operate the valve above the temperature and pressure limitation specified on the name plate.

Maintenance

When required, remove the valve from the line and check for wear or damage on the sealing faces and damage to the springs and discs.

Damaged components should be replaced and worn metal seal faces should be lapped to return the sealing performance.

Storage

The valve should be stored in a dry warehouse or facility. Stacking or storing in open air is forbidden. The valve ends should be fitted with covers for protection against dust ingress. If the valve is not fitted with an operator, the exposed stem should be protected by oil paper and bubble/plastic wrap to prevent damage.

For long periods in storage, i.e. greater than 6 months, the valve should be maintained periodically: to remove any ingress of dirt and removal of any rust, operate the valve and to re-coat the internals with anti-rust oil/grease as applicable.

