







BUTTERFLY VALVE
PRODUCT REF: BV00W/L/U

INTRODUCTION




This document describes the correct use of IVALTEC product, operating, maintenance and spare change. Before applying the present document, user should read and fully understand the safety and installation instructions delivered together with IVALTEC product, which is also downloadable from IVALTEC website: www.ivaltec.fr

In order to attract user's attention on important information and security concerns, following symbols are used.

 <p>Attention and useful information</p>	Information and useful advices to be followed.
 <p>Warning</p>	Security measures must be followed to avoid any human injury.
 <p>Warning</p>	Instruction when using valves in ATEX classified zone
 <p>Related document</p>	Refer to related document for detailed instruction

Installation

- Remove the valve end protection.
- The inside of the valve should be inspected and blown out with compressed air. Adjacent piping must be clean and free from debris to prevent damage to the valve.
- To prevent valve distortion, inefficient operation or early maintenance problems, support piping on each side of the valve.
- Make sure the valve is positioned such that there is sufficient space so that the hand wheel is easily and safely reached and there is enough clearance for the stem when the valve is open.
- Install the valve according to the flow indicator on the valve body. In some special cases, valves could be installed in the opposite direction of the direction arrow on the body.

 <p>Attention and useful information</p>	To avoid leakage and damage of valves, assure that pipeline flanges are aligned and in parallel with the valve facing surfaces. Supervise correct distance between pipe flanges.
 <p>Attention and useful information</p>	When using machine bolt for blind holes, well measure body thread profound, flange thickness to be sure that bolt length is limited that bolting will not weaken the blind hole when torqueing.
 <p>Related document</p>	Refer to Product datasheet for information.

- It is suggested that the valve be kept in the closed position when installing on the pipeline.
- Installation of flanged valves should follow prevailing site standards. The following will also be considered.
- The valve ends and the pipe ends/ flanges should be aligned.
- Flange bolting for end flanged shall be of the correct size, length and the material for the service conditions.
- Assemble all bolts and hand tight. Evenly tighten the bolts.
- Valves are intended for use at the pressure indicated on the nameplate attached to each individual valve. Check the valve operating temperature and pressure rating before proceeding with installation.
- All butterfly valves are completely bi-directional, so installation is not dependent on seat orientation.

- Prior to installing the valve, it is important to make sure the ID of the pipe and the pipe flanges are large enough to allow the disc edge to swing into the opening without interference. Damage to the disc edge can severely affect the performance of the valve.

General Maintenance

The following periodic preventative maintenance practices are recommended for all Butterfly Valves.

- Operate the valve from full open to full closed to assure operability.
- Check flange bolting for evidence of loosening and correct as needed.
- Inspect the valve and surrounding area for previous or existing leakage at flange faces or shaft connections.
- Check piping and/or wiring to actuators and related equipment for looseness and correct as needed.

Butterfly Valve Disassembly

- Position valve flat with the disc in the closed position.
- Remove the actuator and upper stem retainer. Extract the valve upper shaft from the body using a twisting motion.
- Remove the lower cover and extract the lower stem from the body.
- Remove the valve disc from body making sure not to damage the seat or disc sealing edge.
- Remove shaft bushings from body as required.

Butterfly Valve Assembly

- Thoroughly clean all parts. Inspect components for any defects.
- Apply a small amount of silicone grease to the inside surfaces of the body, including the upper and lower shaft holes.
- Insert the shaft bushings into the body being careful not to allow intrusion into the body seat bore.
- Install the seat into the center of the body, making sure the shaft holes in the seat line up with the holes in the body.
- Completely coat the inside surfaces of the seat with silicone grease. Carefully push the disc into the seat in the open position (90 degrees to the body.) Line up the shaft holes of the disc as close as possible with the shaft holes in the seat body.
- Insert the shaft through the body and disc, use a twisting motion to align the keyway parallel with the disc.
- Fix the upper stem retainer and actuator.

Trouble-shooting.

The following table will cover the various problems which are common to valves. The information provided will aid in isolating and correcting these problems.

PROBLEM	POSSIBLE PROBLEM ORIGIN	SOLUTION
Problems in operating valve	<ul style="list-style-type: none"> • Actuator trouble or damage • Obstacle in the pipeline preventing disc movement 	<ul style="list-style-type: none"> • Repair or replace the actuator • Inspect and clean pipe, take away obstacle and insure that sleeve is not damaged
Internal leakage	<ul style="list-style-type: none"> • Solids on the sleeve • Sleeve damaged 	<ul style="list-style-type: none"> • Clean and take away solids • Replace the sleeve
Stem leakage	<ul style="list-style-type: none"> • Sleeve and O-ring damage 	<ul style="list-style-type: none"> • Inspect and replace damaged pieces

VALVE OPERATION

By turning the hand wheel clockwise to close the valve. Anti-clockwise to open the valve



[Related document](#)

Actuator user instruction in case of valve with actuator.



[Warning](#)

Instruction when using valves in ATEX classified zone

Identifying IVALTEC Product Ref

IVALTEC valves can be identified by a distinct Product REF on the identification plate. This plate is located either on the body/bonnet flange or on the supporting plate. The Product REF gives all the necessary information for identifying valve type, material, end connections, pressure rating, etc. Please contact your local sales engineers for detailed information.

Ordering Parts

All valve's parts can be replaced. With proper care and maintenance, they will provide continuous satisfactory service. Should a part require replacement, please contact your IVALTEC Sales Representative with nameplate information and your order N°.