



A. introduction

This manual is intended to present the specifications, installation, operation and maintenance procedures for 208 series butterfly valves. The Zanardo Series 208 steel fence inside butterfly valves are designed in the concentric system, the disk and shaft bodies are centralized in the sealing plane. Its shaft is passant ensuring the increase of resistance of the disc, not allowing the flexibility between disk and the body, its look steel seal contains a steel core in its interior which does not allow the rubber folding when the valve is mounted between flanges which are attached to the pipe. The fluid does not come into contact with the valve body and there is no need to use gaskets in the installation. The seal of this valve is based on the interference between the disc and the elastomer seal, ensuring leak tightness to meet the needs of industrial processes such as: flow control and blocking of various fluids under various conditions.

B. Storage

The following information must be followed in order for the valve to be in good condition at the time of use:

- Avoid vibrations, shocks and rough handling.
- Always keep the valve packed until it is installed, avoiding possible damage to the drive or valve seal.
- Valves should be stored in a covered, clean and dry place.

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C. Handling

The 208 series valves have been precision machined to maintain perfect alignment and operation. Zanardo valves have been tested 100% before they are packaged and shipped to their final destination, therefore:

- Charge and discharge carefully.
- Do not damage the packaging, it is the valve protection.
- Valves should be covered wherever possible for transport.
- Avoid shocks, vibrations and rough handling, ensuring product quality and performance.

D. Installation

WARNING

"Before installing the Valve, check that the pressure class, temperature, fluid and other accessories are in accordance with the specifications on the data plate located on the Valve Body."

Procedure:

1- It is of utmost importance to clean the tubing before installing the valve, since dirt in the line can cause the valve to malfunction, damaging the seal.

2- The installation must observe the alignment, adequate support of the pipe and parallelism between the flanges to avoid damaging the valve according to figure-1. The face-to-face measurement must contain clearance necessary for the valve body to be installed. (figure 2)

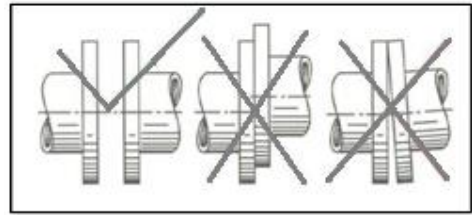


Figure 1

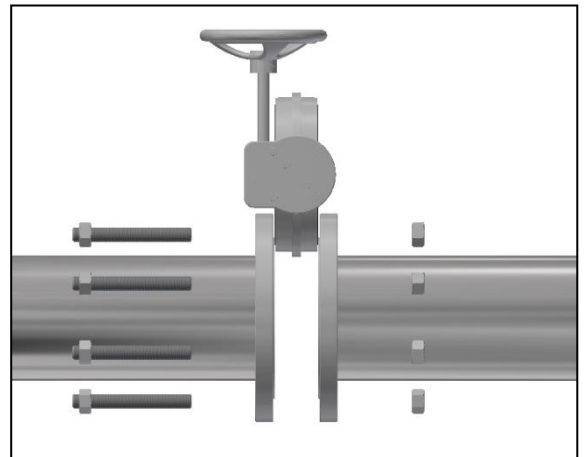


Figure 2

3- Ensure that the flange faces are free of imperfections, sharp corners, burrs and if gap between flanges is compatible with the face-to-face measurement of the valve, position the valve plug in the half-closed position. Figure-3.

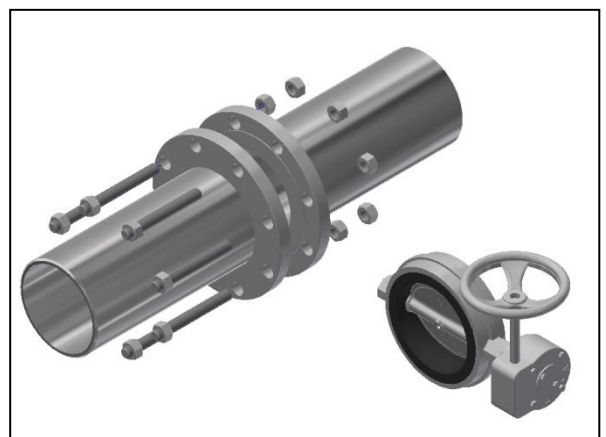


Figure 3

! WARNING

"We recommend the use of flanges with external tube fitting, and flat face to avoid damaging the valve seal ring. It is not necessary to use gaskets in the assembly."

4- Lightly tighten the locking nuts of the studs to distribute the clamping force between the valve faces.

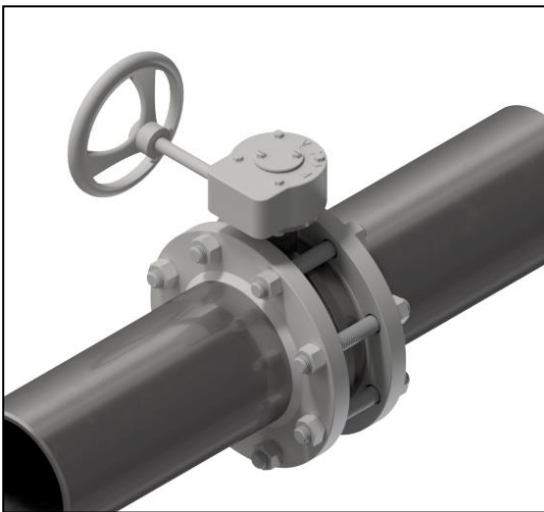


Figure 4

5- Turn the shutter to the fully open position to check for any interference with the tubing. Return the shutter to the semi-closed position and make the final tightening of the screws.

! WARNING

- ***Tighten the bolts or stud bolts only until they seal the faces, as over tightening can unnecessarily wrap the flanges. If the valve has leaks or great resistance when closing, we recommend evaluating if there is any obstacle between the seal and the disc.***

E. Operation

The Series 208 Butterfly Valve is designed for fluid control and blocking under various conditions with bi-directional locking flow sense. The butterfly valves have a long operating life and are quite reliable. Its simple design makes them easy to service and also to handle in case of repairs and exchanges of parts. Most butterfly valves are lightweight and compact, in addition, industrial butterfly valve models are designed to withstand well wear and tear with time of use.

! WARNING

"Avoid actuation of the valve through" dog "extension bars or pipes, use only the lever or steering wheel to avoid damaging the valve and the drive."

F. Maintenance

Careful and well-maintained maintenance is the main point for extending valve life.

! WARNING

"Before disassembling the valve, make sure the line is closed without pressure."

Below is a group of instructions that constitute the exchange of repair kits

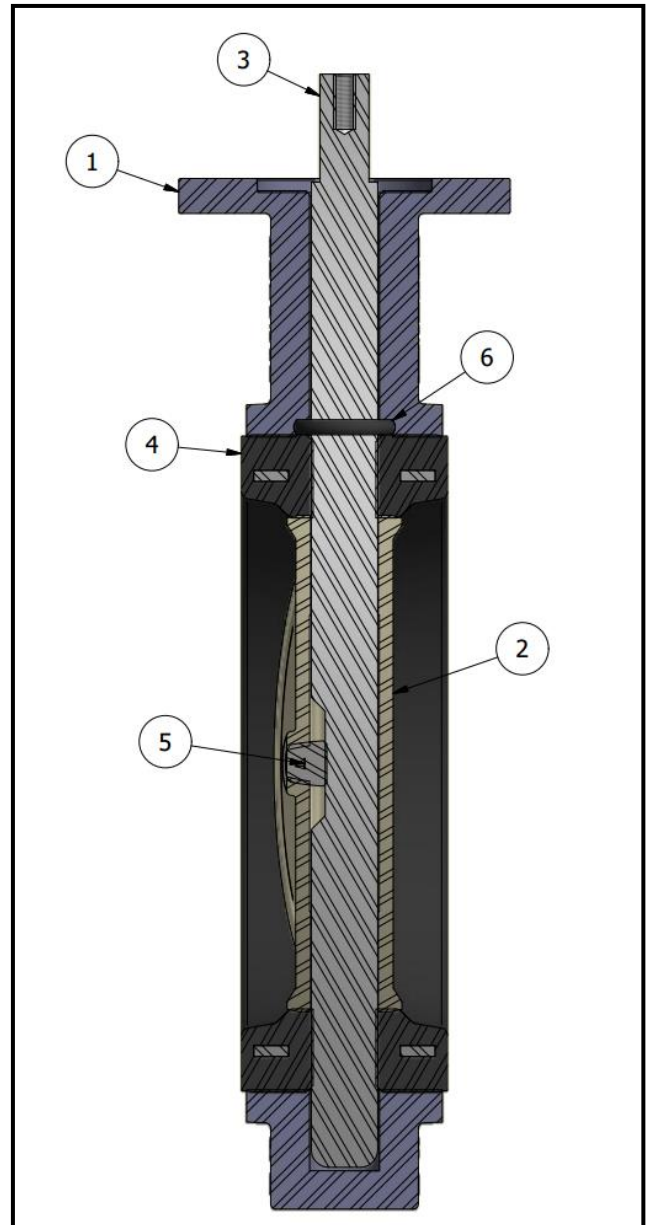
Model S208

Remove the valve drive to begin maintenance and replacement of the repair kit. Image of explosion of parts follows on page 6.

Procedure:

- 1º Remove the disc locking screw (5).
- 2º with the aid of a "axle pull", remove the through axle (3) through the threaded bore on its face.
- 3º Remove the shutter disc (2) from the valve.
- 4º Remove the lock steel seal (4) and the sealing ring (6) from the valve body (1).
- 5º Clean the valve body (1), the sealing disk (2) and the through shaft (3).
- 6º Place the new packing ring (6) in its original position.
- 7º Place the new seal (4) in its original position. As shown in figure 5 on p. 5.
- 8º Place the shutter disc (2) in the open position, until the center of the valve body (1)
- 9º Lubricate with Vaseline water based on the through shaft (3) and set screw observing the position of the housing (5) that is positioned on the side of the threaded hole of the shutter disc (2).
- 10º Insert the locking disc bolt (5), we recommend using glue lock in this process.

Lubricate the seal with Vaseline water based on all around, mount the drive to its originals position, open and close the valve, being free movement only having the resistance between the seal and the disc valve is ready for use.



Detail the installation of the fence kit

Place the sealing rib in line with the channel of the valve body so that the correct alignment of the seal is maintained, press the seal until it is centralized with the body, keeping the seal with the same distance on both sides of the body according to the X in figure-5 below:

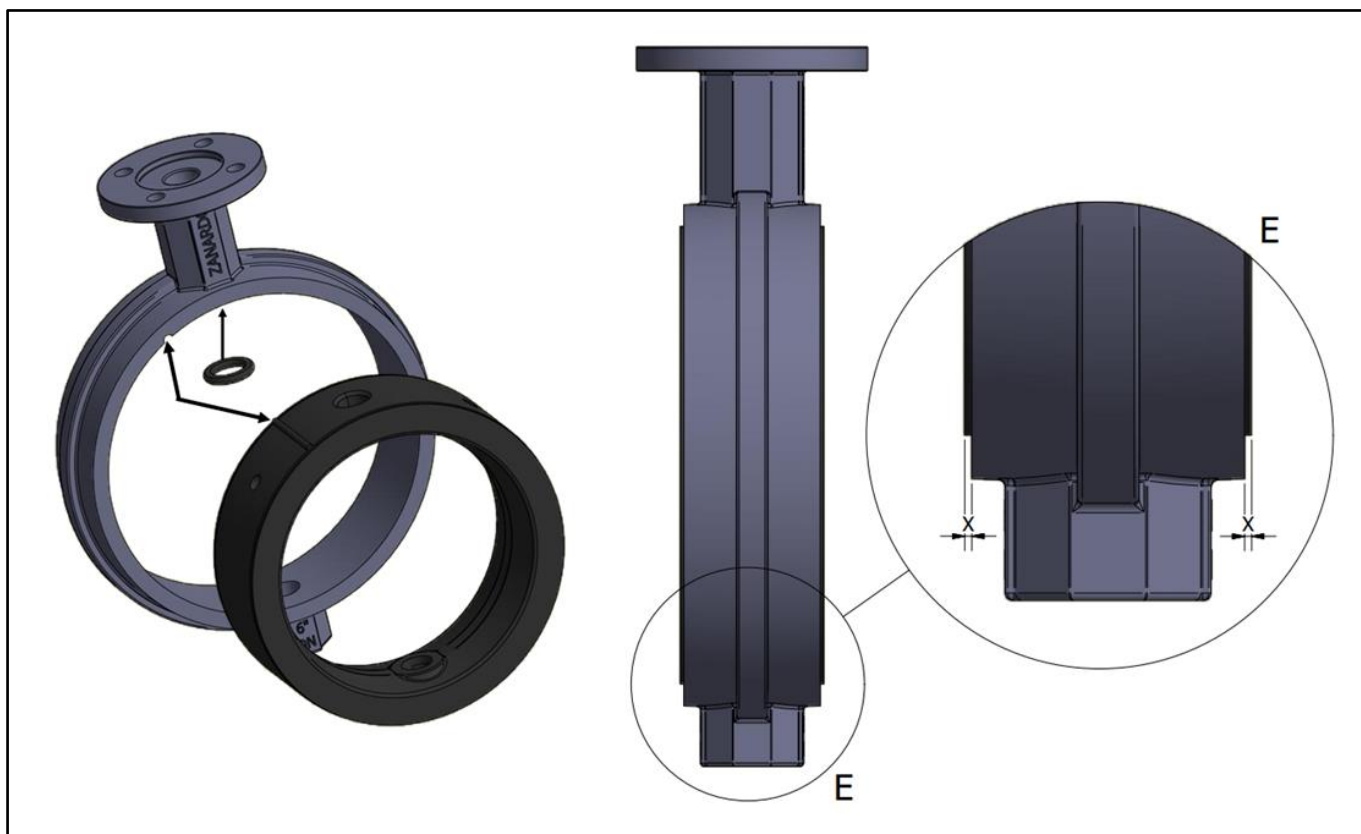


Figure 5 Illustrative picture

G. Parts List



Item	Part Name	Item	Part Name
1	Body	*4	Seal
2	Disc	5	Body Locking Screw
3	Through axle	*6	Sealing ring

The items *4 and *6 make up the Valve Seal Kit.

In accordance with our policy of continuous improvement, the information contained in this manual is subject to change without notice.

Rua Burity, 201 – Parque Industrial II
CEP 16012-170 – Araçatuba – SP – Brasil
Fone/Fax: +55 (18) 3117-1195
WWW.ZANARDO.COM.BR