

## USERS MANUAL

**BUTTERFLY VALVE zBUT**

**Fig. 497**

**Edition: 07/2016  
Date: 01.07.2016**

### CONTENTS

1. Product description
2. Requirement for maintenance staff
3. Transport and storage
4. Function
5. Application
6. Assembly
7. Maintenance
8. Service and repair
9. Valve service discontinuity
10. Warranty terms



Fig. 497-J

### 1. PRODUCT DESCRIPTION

Butterfly valves are provided with casted marking. The marking facilitates technical identification and contains:

- nominal diameter DN (mm),
- nominal pressure PN (bar),
- body and disc material marking,
- maximum and minimum working temperature
- manufacture marking.

### 2. REQUIREMENTS FOR MAINTENANCE STAFF

The Staff assigned to assembly, operating and maintenance tasks should be qualified to carry out such jobs. If the valve is provided with mechanical actuators, operating manual of actuator should be obeyed.

### 3. TRANSPORT AND STORAGE

Valves should be handle carefully and be kept in a closed and dry place in above the dew temperature. If butterfly valves are kept outside, they should be protected against sunlight and atmospheric factors (e.g. rain). Valves can't be pollution or chemical endangered. During storage valve's disc should be in partially open position. Protect against strokes, especially the one sensitive to spare parts damage (e.g. hand lever, reducer, actuators). Do not lift by spare parts sensitive for damage (hand lever).

### 4. FUNCTION

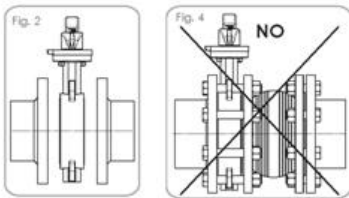
Butterfly valves have a throttle and shut-off function

### 5. APPLICATION

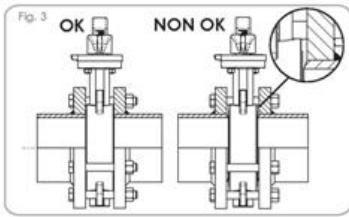
For water systems, heating, conditioning, fire protection and gas. In case of specific use, contact with manufacturer for system evaluation is necessary.

### 6. ASSEMBLY

Avoid to place the piping installations in inclination position, twisting and displacement in axis. It can cause mechanical stress of the valve.

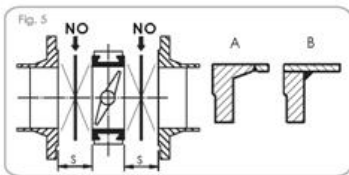


Before assembling visual control is needed in the way to exclude damages during transport or storage. It can have an impact on butterfly functioning. Valve's disc should be in partially open position.



Place the valves between two flanges. Make sure that during valve's placing, there is enough space to not damage rubber parts. Do not install gaskets between valve and flanges (fig. 2).

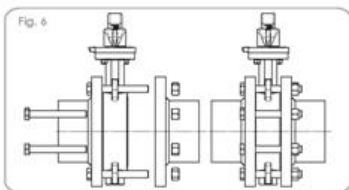
Protruded sharp ends shall be strictly avoided as it can causes damage on/off rubber sealing surfaces of butterfly valve (fig.. 3).



Do not install the butterfly valve on a rubber to rubber surface (e.g. expansion joints); the perfect installation shall be on rubber to metal surface (fig. 4).

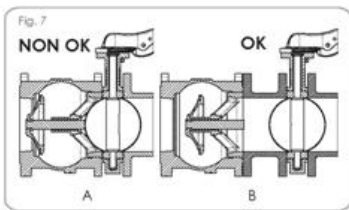
Do not place joints between flange and body. The use of WELDING NECK flanges type is recommended (fig. 5A).

In case of flat flanges use, make sure the pipe is welded exactly edgewise with the flange (fig. 5B).



Centre the valve by bolting the body locator first (Wafer type). Tighten bolts and nuts in progressive and crosswise with bolting pressure evenly distributed until the contact between valve body and flange faces (fig. 4).

Pressure shocks can cause damages and breakage. We recommend to avoid them if possible or adopt expansion joints that could reduce pressure shocks' effects.



The fluid turbulence may increase the wear and reduce the valve endurance. In order to reduce the instance it is recommended to install the valve at a distance equal to at least 1 time the DN upstream and 2-3 DN downstream of fittings and bends.

In open position the valve shows a greater space occupied then the nominal face to face. You need to verify that there aren't interferences with other elements of the piping which could cause damages or malfunctions (Fig. 7A). In this case you need to set up a spacer to permit the right functioning (Fig. 7B).

## 7. MAINTENENCE



Before to proceed in any intervention of maintenance or disassembly:

- wait the cooling of the piping, the valve and the fluid;
- let the pressure escape and drain line and piping in the presence of poisonous, corrosive, inflammable and caustic fluids

Temperature over 50°C and under 0°C can cause damages to people.

Do not use the valve (flange bolts tightening, safety interlocks removing) if the installation is under pressure.

Fast closing of butterfly valve can cause violent pressure increase and hydraulic strokes. In this case time of valve's closing should be extended.

## 8. SERVICE AND REPAIR

No maintenance required (do no service)

Valve ageing can cause issues with its functioning.

Leakage through flange sealing can be caused by:

- butterfly valve hasn't been assembled in axis with pipe position,
- sealing rubber has been damaged,
- bolt tightning torque has been selected not correctly,

Internal leakage if the disc is closed can be caused by:

- sealing surfaces damage by foreign body, - worn of sealing surfaces,

Leakage through butterfly valve stem can be caused by:

- stem's sealing has been aged, because of time or temperature reason,

## **9. VALVE SERVICE DISCONTINUITY**

All obsolete and dismantled valves must not be disposed with household waste. ZETKAMA valves are made of materials which can be re-used and should be delivered to designated recycling centres.

## **10. WARRANTY TERMS**

- ZETKAMA grants quality warranty with assurance for proper operation of its products, providing that assembly of them is done according to the user's manual and they are operated according to technical conditions and parameters described in ZETKAMA's catalogue cards. Warranty period is 18 months starting from assembly date, however not longer than 24 months from the sales date,

- warranty claim does not cover assembly of foreign parts and design changes done by user as well as natural wear,

- immediately after detection the user should inform ZETKAMA about hidden defects of the products,

- a claim should be prepared in written form.

Address for correspondence:

ZETKAMA Sp. z o.o.  
ul. 3 Maja 12  
57-410 Ścinawka Średnia

Phone +48 74 86 52 111

Fax +48 74 86 52 101

Website: [www.zetkama.com](http://www.zetkama.com)