

# Instructions for the Installation of ABO butterfly valves Series 3E

## A) Valve installation

- 1) When manufactured, valves with a carbon steel body are preserved using the oil preservative RUST-PEL 51. (If stored longer than 6 months, a new preservation treatment is recommended). Prior to putting into operation the preservation of the valve body needs to be removed using a warm aqueous solution containing a common detergent or solvent such as E 550 CLEAN etc.
- 2) Prior to the installation please ensure that the valve does not show any signs of damage.
- 3) Check the free rotation of the butterfly inside the valve body.
- 4) Close the valve.
- 5) Insert the gasket – See Fig. A.
- 6) Insert the valve (horizontal position of the valve shaft recommended for DN  $\geq$  300).

**IMPORTANT:** The arrow on the body marks the direction of  $\Delta p$ .

Counter-flanges have to be parallel and aligned. Do not use loose flanges.

For T type bodies with threaded holes: ensure that the screws are not in contact when fully tightened (See Fig. B)

- 7) Centre the valve in alignment with the axis of the piping.
- 8) Put the appropriate bolts through the flanges and tighten by hand.
- 9) Open and close the valve to check its smooth function.
- 10) Close the valve and tighten the bolts alternatively (i.e. in a criss-cross pattern) using a wrench.
- 11) Open and close the valve again to check its proper function.

## B) Installation of the valve in a new piping (flange welding)

- 1) Attach the valve including the gasket using several bolts between the flanges (see valve installations under A (items 2 to 9)).
- 2) Fix the flanges to the piping using several tack welds.
- 3) Remove the valve and finish the welding of flanges to the piping.
- 4) After the welds have cooled down, reinstall the valve as described under item 1.

**IMPORTANT:** Never weld the flanges to the piping with a valve in place! The valve gasket would be damaged!

## C) Valve removal

- 1) Check carefully to ensure that the piping is not under pressure!!!
- 2) Close the valve.
- 3) Remove the bolts.
- 4) Remove the valve from the piping and counter-flange area.

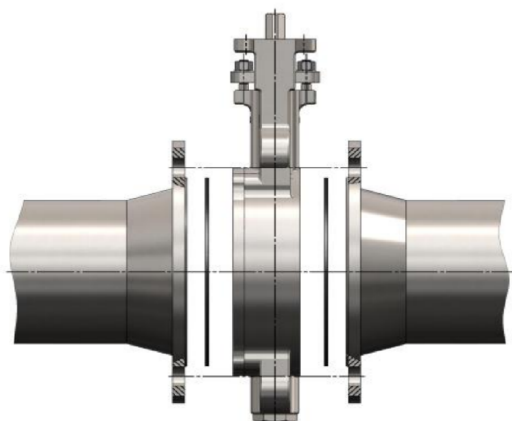


Figure A

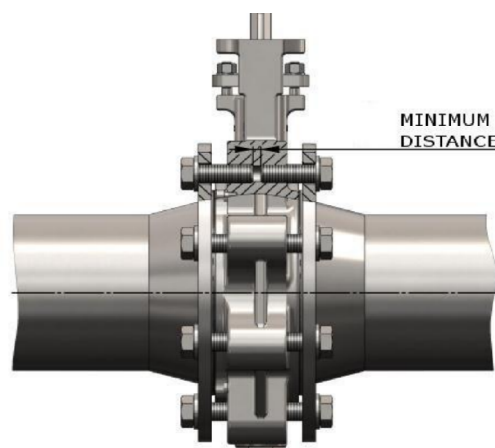


Figure B