



## Operating instructions for Butterfly Valves Eurotorc Series ETW710/ETL711.

Before fitting the valve between flanges, make sure that the operating conditions are compatible with the details given on the identification plate, the manufacturer's details and the fluid being carried (nature of the fluid, temperature range etc).

### Compatibility between pipework and flanges

Our valves are compatible with conventional flange standards as defined by the manufacturer.  
For any other type of fabricated flange or connection, please consult our technical service department.

Before assembly check that the valve is compatible with the pipework flanges (PN, ANSI, etc...)  
Please pay specific attention to the inside diameter of the adjacent pipe, to ensure adequate clearance for the butterfly disc.

### FITTING TO THE PIPEWORK

#### General remarks

The butterfly valve is bi-directional, and can be installed with the valve stem in the vertical position.  
The recommended installation position for media including solids or dry powders, is with the valve stem in the horizontal position.  
The valve seat is a fragile component, the valve must not be used to prise apart the flanges (failure/rapid deterioration of the sleeve might result).

#### Installation in existing pipework

1. Make sure that the valve fits between the flanges without difficulty. Prise apart the flanges with a suitable tool if the fit is too tight.
2. Close the butterfly so that the disc is about 5 to 10 mm inside the casing.
3. Slip the valve between the flanges. Centre the valve body and fit all of the flange fasteners.
4. Open the valve completely.
5. Keep the valve centrally aligned with the flanges while removing the flange separators (if used) and tighten the flange fasteners by hand.
6. Close the valve carefully making sure that the valve disc turns freely.
7. Open the valve disc again completely and tighten all the bolts (opposing bolts sequentially)

#### Installation on new pipework

1. With the valve disc almost closed, put the two flanges onto the body using the flange fasteners, tighten the valve between the two flanges.
2. Fix this whole assembly to the pipework.
3. Consolidate the flanges to the pipework by welding at several points.
4. Unscrew the flange fasteners and remove the valve from between the flanges.  
***Never completely weld the flanges with the valve in place : risk of burning the elastomer sleeve***
5. Finish welding the flanges and allow to cool completely.
6. Return the valve to the pipework using the procedure "installation in existing pipework".

#### Storage

Butterfly valves stored before installation must be kept in their original packaging. They should be stored inside, in a clean, dry place away from UV light.



## **Operating instructions for Butterfly Valves Eurotorc Series ETW710/ETL711.**

### **Maintenance**

Spare parts are available from Eurotorc.

### **General remarks**

No particular maintenance or greasing is required by butterfly valves

**Cycling the valve at least once a month is recommended.**

### **Removing the valve from the pipework**

1. Almost close the valve.
2. Unscrew all the flange fasteners and remove those which prevent the valve from being removed.
3. Prise apart the flanges with a suitable tool and remove the valve.

If the flanges have not been prised apart sufficiently, risk of damage to or "rolling up" of the sleeve. If the butterfly is too far open, risk of damaging the disc edge by the flanges is possible.

Do not tighten the bolts with the butterfly closed

### **Dismantling the valve**

1. Turn the valve disc to open position.
2. Uncouple the lever and notchplate.
3. Remove the circlip (part no 8), and remove the anti-extrusion ring (part no. 7).
4. Pull the upper stem upwards.
5. Remove the lower plug & lower plug seal (part no's 9 and 10)
6. Pull out the lower stem.
7. The disc can now be easily removed.
7. Remove the elastomer seat (part no. 4).

### **Assembly of the valve**

1. Apply a small amount of suitable silicon/grease inside and outside the seat (not too much).
2. Hold the valve body in a vice.
3. Insert the seat into the body, ensuring it is re-positioned correctly and that the stem holes are perfectly aligned with the body casting holes.
4. Grease the seat around the stem hub area's.
5. Position the valve disc centrally within the valve assembly.
6. Ensure that the seat has not been pulled out of shape or damaged by the insertion of the valve disc.
7. Position the upper stem in line with the axis of the body and in the upper hole in the seat, and use a small amount of pressure to insert the stem in as far as possible. Repeat the procedure for the lower stem.
8. use a nylon hammer to fully insert the upper stem correctly in place. Take care that the stem and the valve disc are correctly aligned before using the hammer. **DO NOT USE EXCESSIVE FORCE.**
9. Refit the lower plug and lower plug seal, using an allen key. The plug will ensure that the stem has the correct engagement when fully tightened.
10. Refit the anti-extrusion ring and circlip using circlip pliers.
11. Check that the valve is functioning properly : cycle the valve open and closed to ensure the valve runs smoothly and freely.