

These instructions must be stored and consulted by installers and by personnel doing routine and extraordinary maintenance.

- Before installation or maintenance, cut out the line upstream and downstream of the valve and make sure there is no pressure.
- Never exceed the maximum pressure and temperature limits marked on the valve.
- The product must not be modified: any tampering could make the device dangerous.
- The manufacturer will not be liable if the product is used improperly. Installation and maintenance must be performed by specialised personnel.
- This product must be used only for its specific intended purpose: any other use is potentially dangerous. The manufacturer will in no case be considered liable for any damage deriving from improper use..
- If the liner becomes damaged, have it replaced immediately by qualified personnel.

GENERAL INFORMATION

Please read carefully this Use and Maintenance Manual supplied together with the valve before starting to carry out any operation whatsoever. Pay careful attention to the recommendations given, observance of which will contribute to maintaining the valve in efficient service in the long term.

This instruction manual gives all the information necessary for use of the valve in environments with areas classified as potentially explosive (99/92/EC); some indications are specific to such applications.

GUARANTEE

Definition: guarantee refers to the maximum period, starting from that on which the valve was put on sale*, after which Gibson Italia srl can no longer ensure the characteristics of the product. In any case, the guarantee shall be valid only if the maintenance actions given in point 6 are correctly planned and executed, and if the valve is correctly used also

as regards temperatures, pressures and fluids, which must be compatible with the materials, and if the valve is correctly installed.

** Put on sale: the first butterfly valve of the FA SERIES placed on the market by Gibson Italia srl, for payment or free of charge, for the purposes of sale or use.*

INSTRUCTION FOR USE

Gibson Italia srl bases its choice of materials used for the valve on those most suitable for the customer's specific use, unless there is clear documented evidence of the working conditions and above all information regarding fluid, temperature and pressure.

Gibson Italia srl accepts no responsibility for damages caused to persons, property, animals or equipment due to incorrect use of the product
For specifications and measurements, please see technical catalogue.

The valve must be installed on the system only according to the modalities explained below.

In order to guarantee correct installation of the valve, it is necessary to check that:

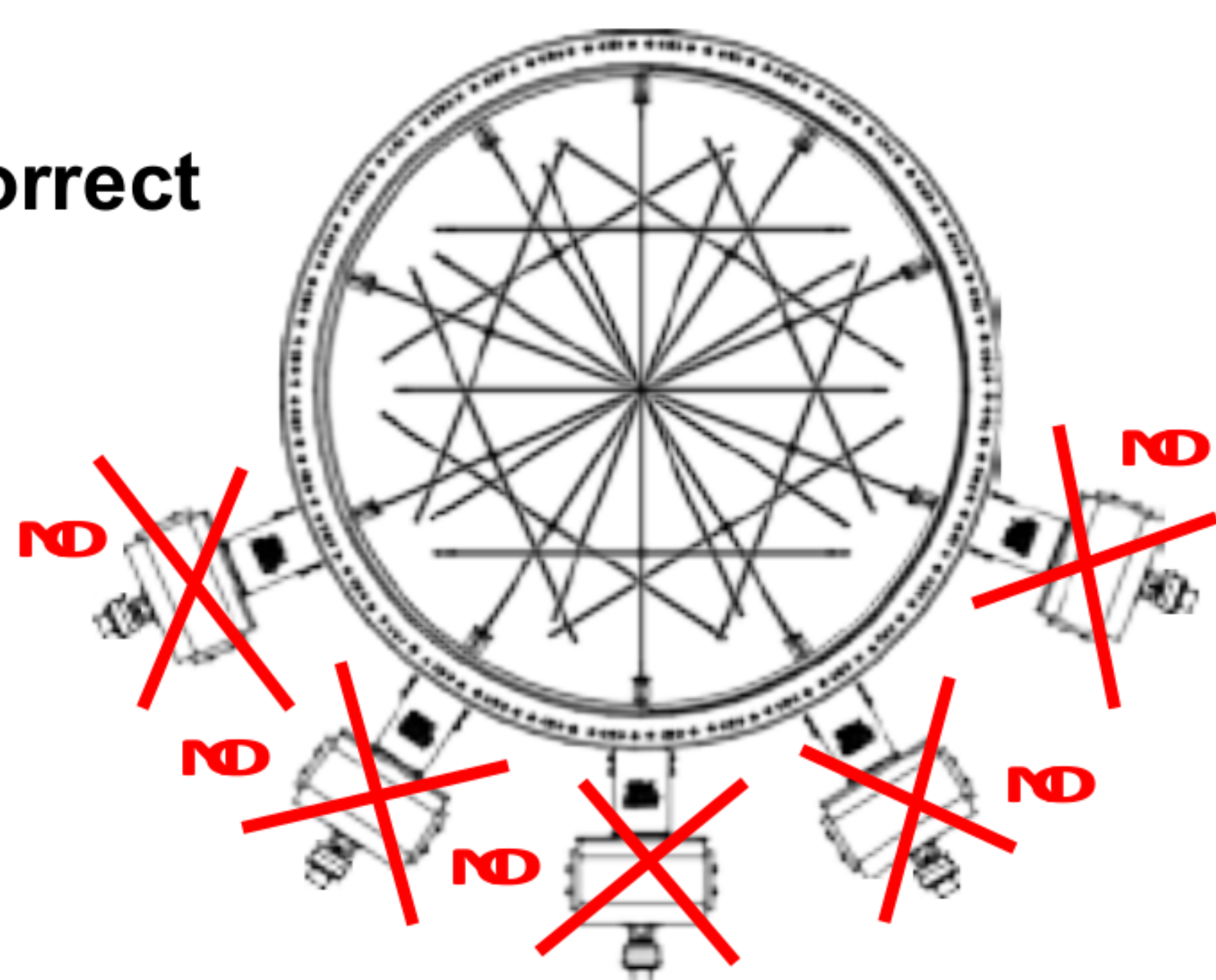
- the type of flanging (EN-UNI-DIN-ANSI-ISO...) is compatible with the pipes, especially as regards the diameter of the hole, and the number and size of the tie rods;
- the internal diameter of the pipe is less than the external diameter of the valve and greater or the same as the internal diameter;
- the counter-flanges are provided with washers;
- The distance between the pipe flanges corresponds to the valve gauge, or that this condition can be obtained by means of special separators.

Se i requisiti sopracitati sono rispettati si può procedere all'installazione, secondo la seguente procedura.

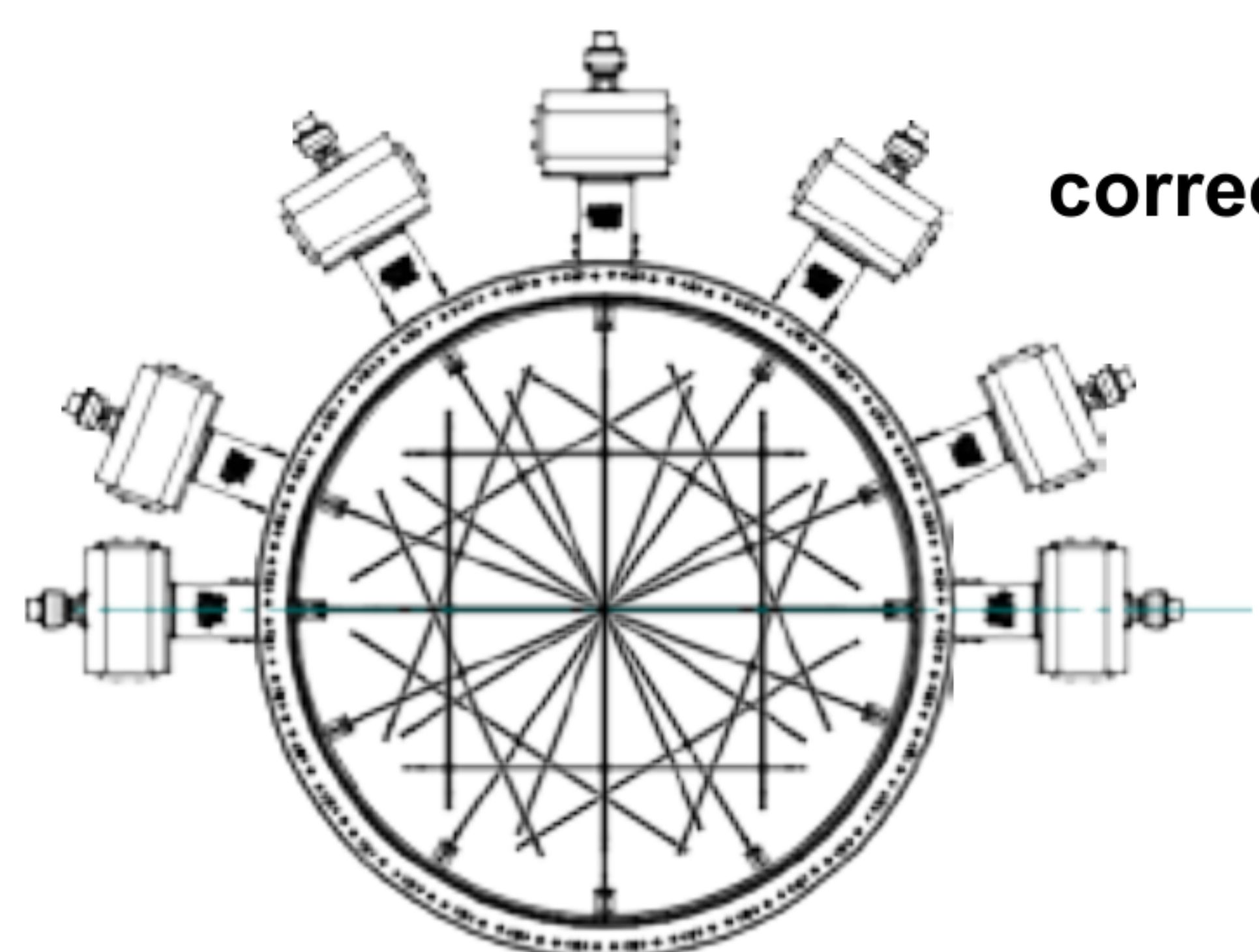
Assembly

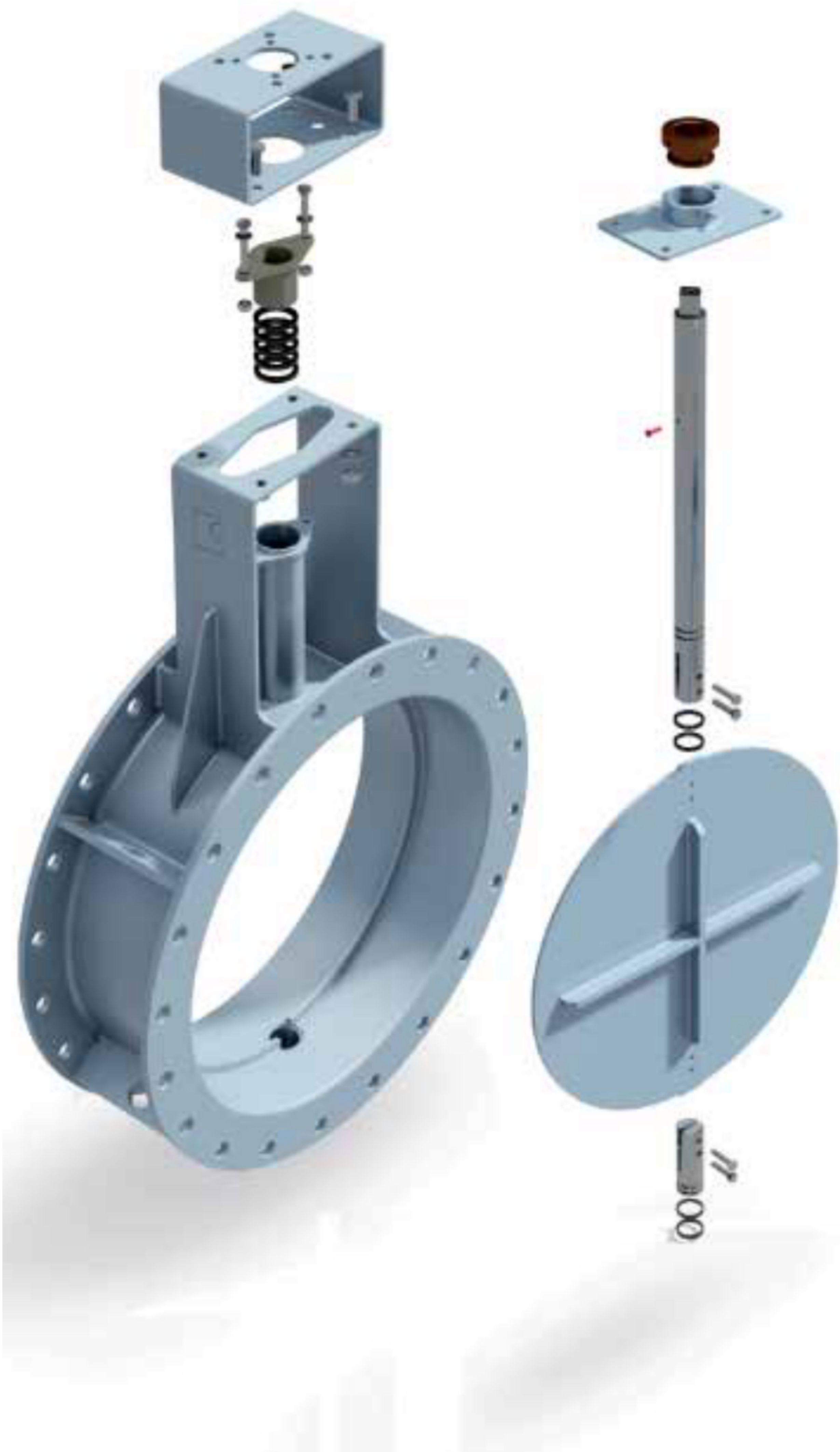
- The valve can be mounted according to the positions indicated in our drawing namely in any position either on vertical or horizontal piping. In case of mounting on horizontal piping it is advisable to position the valve with a horizontal rotating axis.
- Vertical rotating axis disk positioning is not recommended when handling not clean fluids.
- Use only stud bolts to mount the valve in both versions either Wafer or Flanged so as to securely tighten the valve between the flanges.

incorrect



correct





DN 150-1600
DN 150-1600

Partially close the disk to center the body between the flanges.

1. Insert the separator between the flanges of the piping
2. Insert the valve between the flanges of the piping and center it in the chosen position (horizontal, vertical or angular)
3. Fit the two lower tie rods (according to WAFER or FLANGED Version and valve DN), partially tightening the nuts to support the valve.
4. Remove the separator (if used), making sure that the valve remains centered.
5. Check that the disk can rotate, thus guaranteeing the opportune tolerances with the pipes.
6. Tighten all cross nuts using a torque wrench. Pay attention that the torque does not exceed the indicated values, because it can cause flange bending.

Tightening screw Torque values of Nuts
 DN50-300 - 100Nm

ATTENTION:
 Follow the above instructions in the order shown.

MAINTENANCE

The following routine maintenance applies to all models:

- Braid packing replacement when tightness is not guaranteed anymore. For valve FA Series and particular applications, please verify tightening of all braid packing. Tightening of braid packing screws has to abide by the following table. Please use a torque wrench in order to obtain the required to screw tightening values.
- Check of shaft tightness has to be carried out regularly at least every six months according to both application and ambient condition. Make sure that tightening of the braid packing screws abides by the above indicated chart.
- In the case of wear or anomalous damage of parts, it is essential to request original spare parts from the constructor
- Ghibson Italia srl declines all responsibility and guarantee on products repaired or replaced by third parties and/or which have not been given the recommended scheduled maintenance.
- According to EN 13463-1 point 5.2.6., dust deposits that remain at length between the interstices of moving parts can over time become a potential cause of ignition, even if the moving organs have very low rotation speeds. Carry out scheduled cleaning of the valve surfaces; if the environment is particularly dusty, this must be carried out more frequently.
- Check at least every 6 months that there is good conduction between the shaft and the valve body.

Torque Serraggio Viti Premitreccia					
DN	50-150	200-350	400-650	700-850	900 >
(Nm)	1	2	3	3,5	4

The recommendations are intended to prevent incorrect use of the FA Series butterfly valve.

Before installation:

- a. Check that the product received perfectly satisfies the usage conditions to which it will be subjected;
- b. Check on reception that the packaging is intact and that the product has not suffered any damage during transport;
- c. In the case of storage, the valves should not be removed from their packaging, and the inner parts should be shielded from light, humidity, sources of heat, and aggressive environmental conditions;
- d. Do not use the valve if the conditions do not conform with those declared by the manufacturer;

The valve is supplied with already calibrated braid packing screws. After start-up it is recommended to verify tightness on the shaft.

During installation:

- a. Follow the installation instructions;
- b. For use in potentially explosive environments, take into account the fluids and the effects that they could have on the surfaces of the valve;
- c. Always operate in conditions of safety;
- d. Make sure that there are no foreign bodies or dust on the internal parts of the valve and between the faces that connecting with the flanges;
- e. Before activating valve opening or closure, make sure that the rotation trajectory of the butterfly valve is clear.
- f. In the case of use in potentially explosive environments, make sure that the body of the valve is duly connected to the ground, to guarantee equal potential of its conductor parts;
- g. In the case of use in potentially explosive environments, check the existence of conduction between the butterfly and the body of the valve;

During maintenance:

- a. If it is necessary to remove the valve from the system, carry out the operation only after checking that it is not moving and when conditions cannot cause any hazard;
- b. The same recommendation also holds form for points e, f, g, h, i, j, and k.

During the first boot:

In the case of valves HTT equipped with refractory material within the body, is important that when you first start the working temperature is reached by following the following procedure (or otherwise in agreement with that recommended for the start of the boiler or other components with coatings of refractory material):

1. A temperature gradient of 20 ° C / h up to 200 ° C
2. Stay at 200 ° C for about 2 h
3. Increase of temperature up to 600 ° C following a temperature gradient of 50 ° C / h
4. Stay at 600 ° C for about 3-4 h
5. Heating to a maximum working temperature

Ghibson Italia srl will not be responsible for damage to the material refractory due to an achievement of the working temperature not in agreement as recommended.

Connection to a Pneumatic Actuator:

- a. The butterfly valve can be coupled to electric or pneumatic actuators, also equipped with electric accessories, providing all the components conform to Directive 94/9/CE ATEX and are equipped with conformation and classification declarations, suitable for the area of installation; the person in charge of coupling must assess whether the risk analysis requested by the aforesaid Directive is necessary for the group obtained (valve+actuator+accessory) .
- b. Always adhere strictly to the relative use instructions for every component added to the valve;
- c. In conformity with the standard EN 1127-1:2001, the rotating

elements exposed to the potentially explosive atmosphere must exceed a relative speed of 1 m/sec to be considered as elements of ignition. The user must obligatorily check that the installation on his/her own system maintains a safe rotation speed.

It is emphasised that the union of an activator and a valve, both supplied with conformity declarations pursuant to 94/9/CE ATEX DOES NOT give exemption from the obligation of danger and risk assessment of ignition induced by the aforesaid union

In the case of valves supplied by Ghibson Italia srl, complete with activators and accessories, he group does not generate an additional risk and it is therefore unnecessary to mark the group itself.