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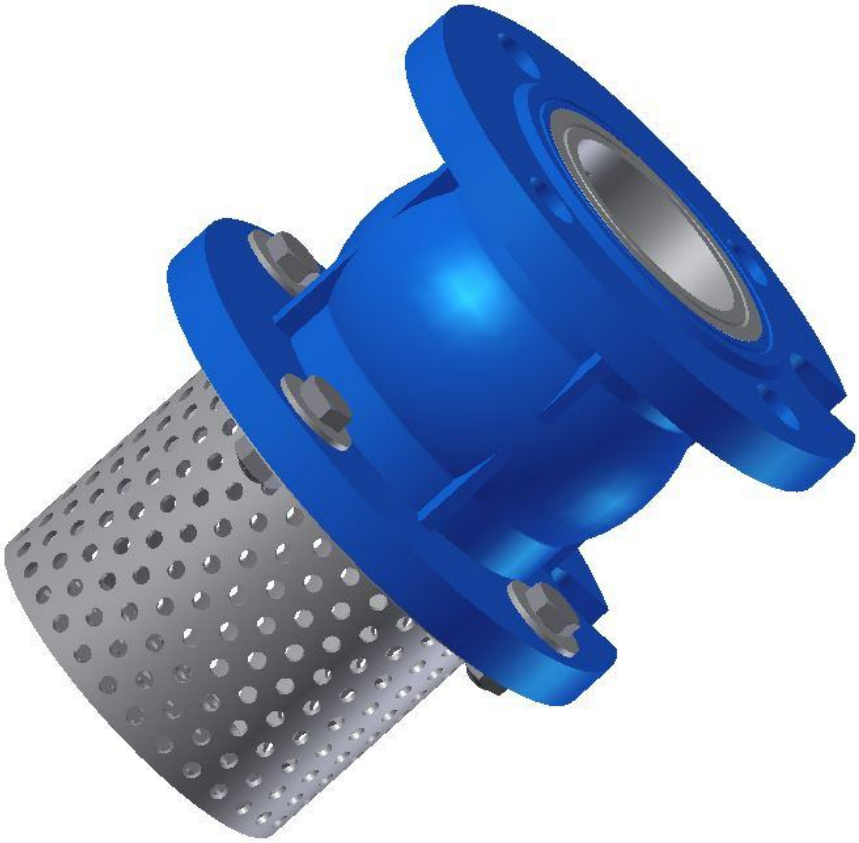
INSTALLATION, OPERATION & MAINTENANCE MANUAL

Flanged Disk Check Valve with Strainer



Ref. GENEBRE: 2450 – 2451 – 2452

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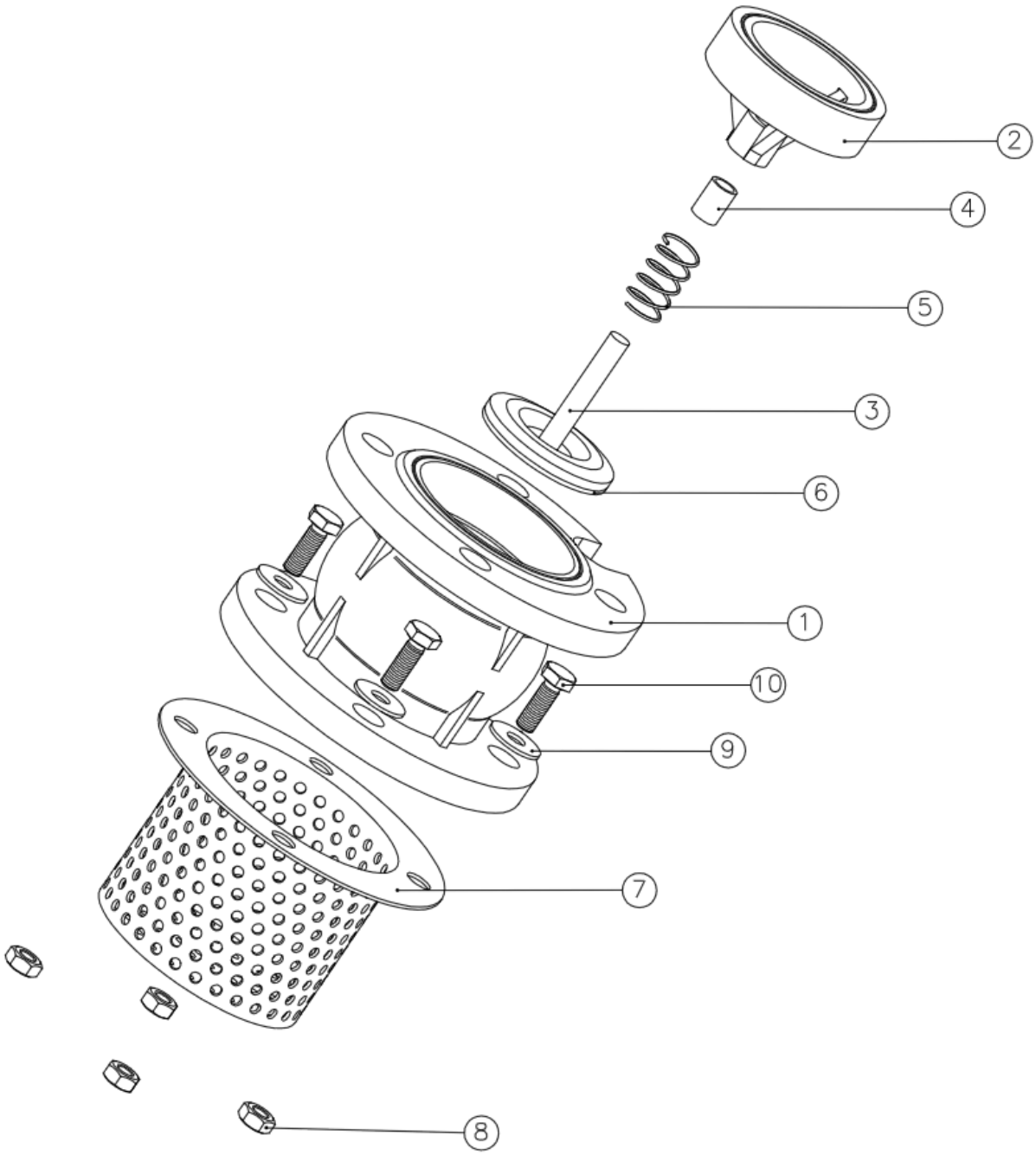
INSTRUCTIONS FOR INSTALLATION, OPERATION & MAINTENANCE MANUAL

1) Spare Parts.



1.1) Parts List

10	SCREW	4	STEEL	Zn plated
9	WASHER	4	STEEL	Zn plated
8	NUT	4	STEEL	Zn plated
7	FILTER	1	STEEL	Zn plated
6	SEAT	1	NBR	—
5	SPRING	1	STAINLESS STEEL	—
4	BUSH	1	BRASS	—
3	DISC	1	BRASS/GG-25 up to DN100 / from DN125	Ni plated
2	GUIDE	1	BRASS/GG-25 up to DN100 / from DN125	Ni plated
1	BODY	1	GG-25	EPOXI paint
PART	DESCRIPTION	QUANT	MATERIAL	FINISHING

2) Storage

In case that the valve is not installed immediately, keep it with protective packaging to prevent strokes or accumulation of dirt (it should not be removed until the valve is going to be installed). As far as possible, the valves should be stored in a dry and clean area.

3) Installation Instructions

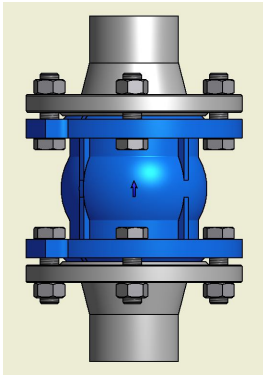
3.1) Preparation

Remove any remaining packing materials from the valve.
There may be serious problems with any valve installed in a dirty pipe.
Make sure the pipe is free of dirt, welding particles, etc. before installation because the valve could get irreparable damage when starting-up → *prepare a clean working area.*
Provide enough space for future maintenance.
Use flat gaskets between valve and pipe flanges to ensure sealing.

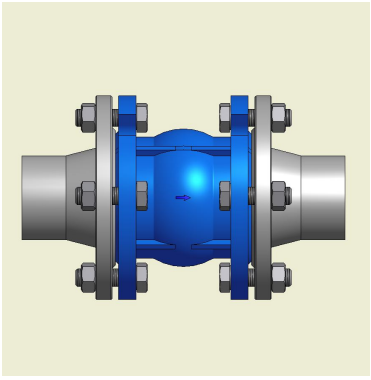
Check the correct operation of the valve by pushing the disc (part.3) in the flow direction and noting that it returns on its own once released. Otherwise, check that there are not foreign objects inside the valve and then repeat the operation. If the disc can't move freely, do not install the valve.

3.2) Installation

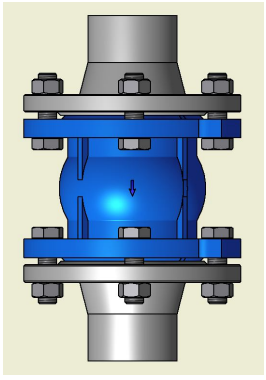
The double disk check valve can be installed in any position, but must take into account the flow direction of the valve marked by an arrow in the body.



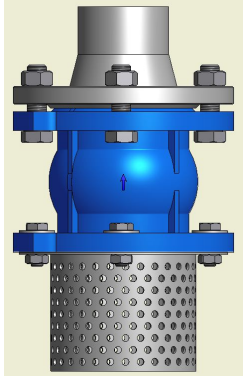
UPWARD



HORIZONTAL



DESCENDING



BOTTOM VALVE

IMPORTANT:

- Genebre flanged disk check valve (art. 2452) is designed for mounting between flanges DIN PN16 .

- Take the precaution of centring the valve with the axis of the pipe in order to ensure sealing between body and flange.

- Do not weld with the valve mounted as it could get damage by overheating and produce deformation of the seating area.

- Pay particular attention to the flow direction of the valve marked by an arrow in the body.

- Check the parallelism of the flanges. Keep enough space between them so that the valve can be inserted or removed easily.

- Tighten the screws of the flanges to hold the valve body firmly. Apply the alternate clamping method to ensure proper installation.

- The valve should never be mounted adjacent to an elbow, reducer, valve or pump, to avoid turbulence. The recommended minimum distance between these elements is 10 times the diameter of the pipe - upstream - and 3 times the diameter of the pipe - downstream – according to CR 13932:2000.

4) Operating Instructions

4.1) Usage

Check valves are used mainly to prevent backward flow in the system. These valves are made for being installed between flanges, and provide a tight seal when are used respecting the values of pressure / temperature for which they are designed.
The material of the valve body, seat and other components must be compatible with the fluid going through the valve; otherwise the valve can be seriously damaged.
Another application of the valve, assembled with strainer (art. 2452), can be used as an aspiration valve.

4.2) Operation

This type of valve, by definition, does not require any operation. Opening and closing is done automatically depending on the pressure and flow direction. For more information about the opening pressure of the valve consult the technical data sheet of the product.

5) Maintenance Instructions

Check valves do not require regular maintenance and lubrication during their life. However, the following regular checks will help to extend the life of the valve and reduce problems in the installation:

- keep the valve in the fully closed position.

- check that all screws and threaded unions are not loose or rusted. Tighten if necessary.

- Inspect the valve and surrounding areas to check that there is not any leakage.

6) Repair Instructions

This type of valves, due to their easy assembling and reduced production cost are not worth repairing, because most of the times is simply not cost-effective, so we recommend to directly replace it.

7) Opening Pressure

The flanged disc check valve (art. 2450) has been designed to work with minimum opening pressure (for details see technical data sheet of the product).

8) Safety Instructions

8.1) The fluids pass through a valve can be corrosive, toxic, flammable or pollutant. When handling valves shall be taken necessary security measures and it is advisable to use personal protective equipment:

1) Wear eye protection.
2) Wear gloves and appropriate work clothes.
3) Wear safety shoes.
4) Wear a helmet.
5) Note the availability of running water.
6) For flammable fluids, make sure you have a fire extinguisher.

8.2) Before removing a valve from a pipe, always check that the line is completely cold, drained and depressurized.

8.3) Any valve that was used in toxic services must have a cleaning certificate before handling.