

## Disc sealing kit



### This kit includes:

- item 1: EPDM gasket (\*)
- item 2: Screw A4 (\*)
- item 3: Washer (\*)
- item 4: retaining ring in ductile iron (\*)

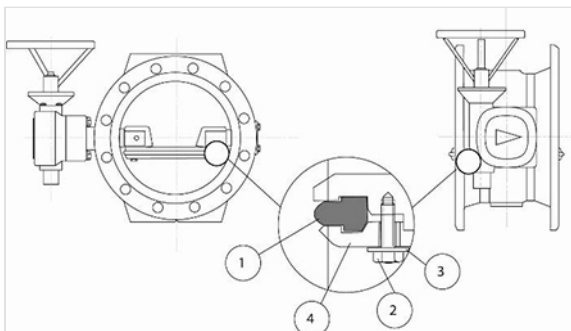
(\*) Number and diameter according to valve nominal diameter

DN (mm)	Version	Mass (kg)	References
150	Version S	1.40	162392
150	Version M-N	0.16	202630
200	Version S	2.30	162397
200	Version M-N	0.24	202631
250	Version S	3.50	162399
250	Version M-N	0.26	202632
300	Version S	4.80	162345
300	Version M-N	4.00	185199
350	Version S	6.00	166617
350	Version M-N	0.48	202633
400	Version S	7.50	162348
400	Version M-N	0.63	202634
450	Version S	9.00	166618
450	Version M-N	0.73	202635

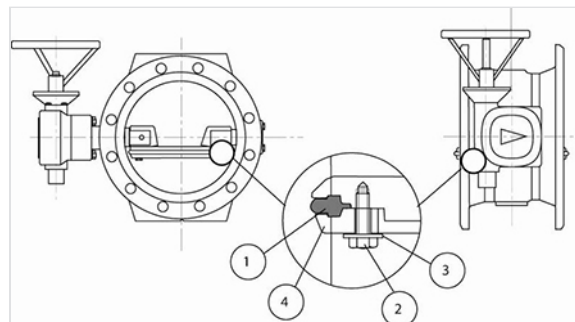
DN (mm)	Version	Mass (kg)	References
500	Version S	12.00	166949
500	Version M-N	0.78	202636
600	Version S	15.00	162350
600	Version M-N	0.95	202637
700	Version S	20.00	162352
700	Version M-N	2.30	202638
800	Version S	26.00	162354
800	Version M-N	2.57	202639
900	Version S	36.50	202485
900	Version M-N	2.80	202640
1000	Version S	38.00	162384
1000	Version M-N	3.24	202641
1200	Version S	52.00	202486
1200	Version M-N	4.40	202642
1400	Version S	62.20	202487
1400	Version M-N	16.00	185218
1500	Version S	69.70	202488
1500	Version M-N	18.00	185219
1600	Version S	81.00	202489
1600	Version M-N	22.00	185220
1800	Version S	103.70	202490
1800	Version M-N	28.00	185221
2000	Version S	115.40	202491
2000	Version M-N	35.00	185222

Type M-N : stainless steel bolts, nuts and washers (A4) for all the M-N types

VERSION S : for Valves manufactured before end 2002



VERSION M-N : for Valves manufactured after 2002



## Assembly instructions

### Preliminary operations

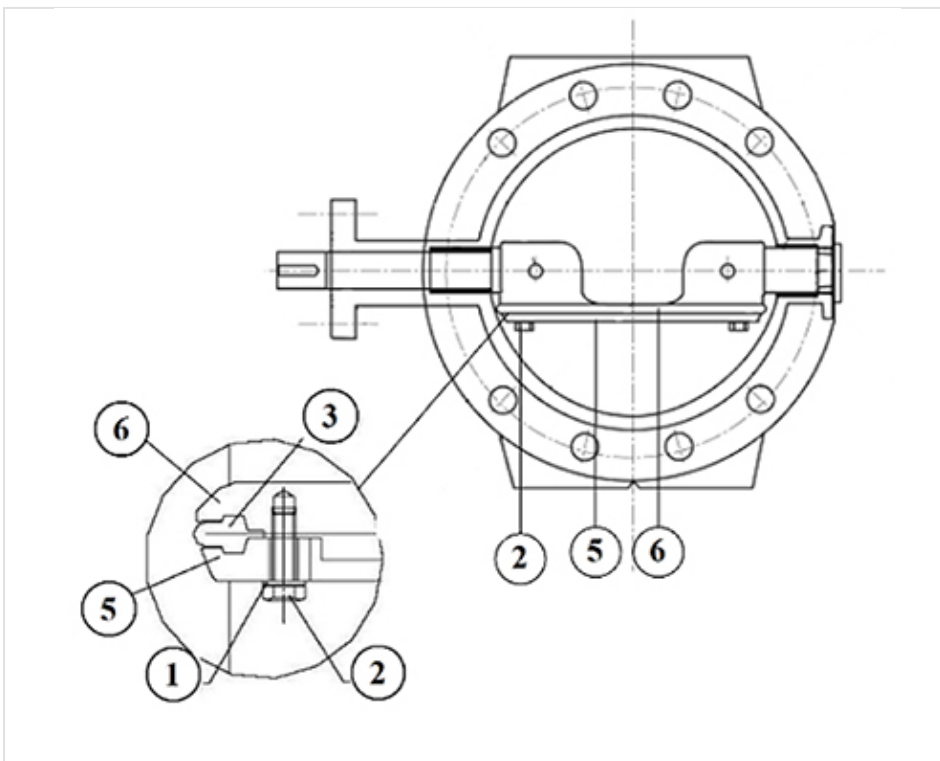
For small-medium diameters (DN<800) it is recommended to install a dismantling joint on the downstream side or otherwise on the retaining ring side.

In any case proceed as follows:

- Empty the pipe upstream and downstream of the valve taking care to admit correctly the air;
- Close the valve;
- Approach to the retaining ring of disk;
- DN medium-small (DN < 800): remove the valve from the pipe using correct lifting devices and removing the bolts gradually and diagonally;
- DN medium-large ( $\geq$  DN 800): the maintenance operations can be made directly from the pipe if there is an access point nearby. Access will be from the downstream side or otherwise on the retaining ring side.

After preliminary operations, carry out the replacement operations of the disc sealing kit (version M-N or S) described below.

### Replacement operations of sealing kit disk VERSION M-N

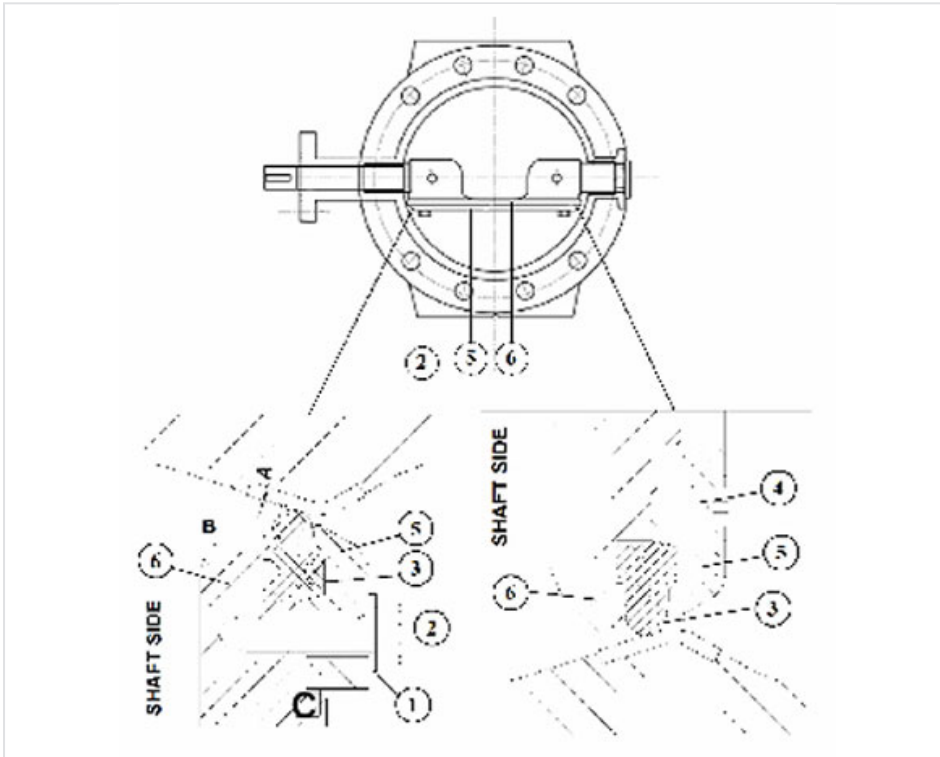


The M-N version has automatic seal system. This kit is valid for valves produced since the end of 2002.

- Make a reference sign on the retaining ring (5) and the disk (6) for the re-assembly phase;
- Unscrew and remove the retaining ring screws (2) and remove the ring (5)
- Remove the gasket (3)
- Clean the surface (seat) on the disk;
- Open the disc 90°;
- The stainless steel seat (body seat) must be cleaned. Remove the adhesion of limestone by the tightness surface;
- Close the disk 0°;
- The new gasket (3) must be placed into the disk seat and positioned also properly into the body seat - if necessary turning the wheel of ¼ in closure;
- Replace the retaining ring (5);
- Set up the retaining ring in the properly position. With a laminated shims to assure the properly centering with the disk measured between the internal diameter of the retaining ring and the diameter of the disk;
- Fix the retaining ring to disk by screwing the bolts gradually and diagonally (2) with the following torques:

DN Valve mm	DN Screw M	Tightening torque Nm
150-600	M08	15
700-1200	M12	65
1400-2000	M20	320

## Replacement operations of sealing kit disk VERSION S



The S version has semi-automatic seal system. This kit is valid for valves produced before the end of 2002.

- Unscrew and remove the screws (2) of retaining ring (5) and the grub screws (4);
- Remove the retaining ring (5);
- Remove the original gasket (3);
- The surface (seat) on the disk must be cleaned and prepared to receive the new gasket;
- Open the disk 90°;
- The stainless steel seat (body seat) must be cleaned. Remove the adhesion of limestone by the tightness surface;
- Close the disk 0°;
- The new gasket (3) must be placed into the disk seat and positioned also properly into the body seat - if necessary turning the wheel of  $\frac{1}{4}$  in closure (a small quantity of white grease can help the placement );
- Replace the retaining ring (5);
- Set up the retaining ring in the properly position. With a laminated shims check that the size C (distance between the inner diameter of the nut and the seat housing the disk) is uniform;
- Install the hexagonal head bolts with the washer (1-2) and screw (cross) few of them;
- The initial set up of the retaining ring will be up to rich the dimension B about 1mm;
- Open the disk and see around the properly position of the gasket into the seat;
- Turn the valve in closed position;

- Adjust the bolts (2) "step by step" until to reach a properly compression of the gasket. Initially use a torque of 10 Nm, then the torque can be between 10 and 40 Nm (depending on the DN of the valve). During the compression see around in the dimension B. The target is to maintain the dimension B above the 0,5 mm higher.
- With a laminated shims of 0,2 mm (10 mm x 100 mm stripes) check all around the compression A in terms to evaluate the properly compression between the gasket and the seat. The laminated shims could be forced from the side shaft toward side retaining ring and check the compression through the friction.
- When the compression is homogeneous all around and the dimension B is still not lower than 0,5 mm, screw the grub screw (4) .

*The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.*