

ASSEMBLY INSTRUCTIONS

TO ASSEMBLE BETWEEN FLANGES WITH BRACES OR BOLTS

The **VAMEIN** valve is installed through the compression between the valve body and the pipe flanges and no joints are required.

BEFORE ASSEMBLING:

- Verify that there are no welding slags or metallic particles on the face of the flanges.
- Verify that the flanges are separated enough to allow the valve to be slotted without damaging the seat.
- Verify that the inner diameter both of the flanges and pipe allows the movement of the disc, and check that the inner diameter of pipe is within the values of the following table.

DN VALVE		MAXIMUM INNER DIAMETER OF FLANGE / PIPE	MINIMUM INNER DIAMETER OF FLANGE / PIPE	Dim. "Q"
mm	Inch.			
50	2"	62	42	31
65	2½"	77	59	51
80	3"	91	76	70
100	4"	116	95	90
125	5"	144	121	116
150	6"	171	146	143
200	8"	223	197	195
250	10"	277	249	243
300	12"	328	297	293
350	14"	372	347	333
400	16"	423	396	382
450	18"	474	446	436
500	20"	524	495	480
600	24"	613	590	566
650	26"	645	635	624
700	28"	715	692	667
750	30"	787	745	739
800	32"	817	793	759
900	36"	919	890	855
1.000	40"	1.020	994	962
1.050	42"	1.070	1.044	1.011
1.100	44"	1.110	1.090	1.050
1.200	48"	1.215	1.195	1.164

Dimensions in mm.

For DN > 1200 consult our Technical Dept.

N.B.: To obtain the best working conditions, flanges with the biggest surface contacting the seat must be selected; this way, accidental getting out of the seat from its housing will be avoided and the maximum permissible design pressure can be achieved.

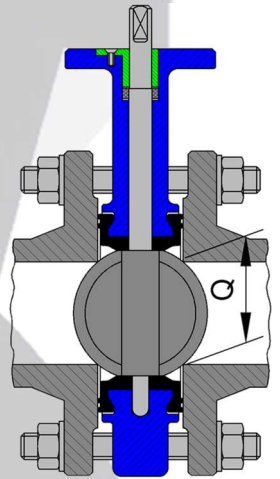
For this reason, the following rule must be taken into consideration:

"THE SMALLER CONTACT SURFACE WITH THE SEAT THE FLANGE HAS, THE LOWER WORKING PRESSURE THE VALVE HAS".

EXAMPLES.

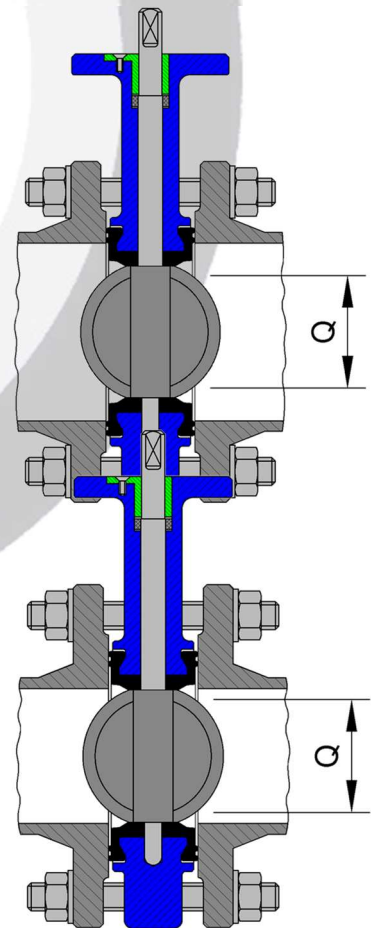
- Too small flanges:

If the inner diameter of flanges is smaller than the dimension "Q", the disc will touch these flanges or the pipe during opening. This will cause damages and will not allow the valve to open or close properly.



- Too big flanges:

If the inner diameter of flanges is bigger than the one indicated as maximum in CHART 2 of the previous page, the liner will not be compressed enough and will not reach the correct water tightness with the flange surfaces. Furthermore, there is the risk that the liner will come off from its housing during an open / close operation of the valve.



- Right flanges:

In order to achieve the maximum contact surface of the flange with the liner and thus reaching the maximum working pressure of the valve it is necessary to select flanges where the inner diameter is as close as possible to the minimum diameter indicated in CHART of previous page, in order to get the maximum contact surface of the flange with the liner and thus to be able to reach the maximum admissible working pressure of the valve.

We feel necessary to insist on this matter once again repeating the following proportional rule: **"The smaller contact surface of flanges with the liner, the lower the working pressure of the valve"**.

DURING THE ASSEMBLY:

- Place the valve half closed to avoid the butterfly to project out of the valve's body.
- Place the valve between the two flanges and center it by means of some braces.
- Open the valve to its full extent to ensure that the disc has no contact with the inner flange or pipe diameter.
- Tighten all the studs and/or bolts in an opposed sequence.
- Operate the valve several times to ensure the free rotation of the disc.
- With DN-500 mm (20") valves and above it is advisable to use a telescopic disassembling spool to make the assembly easier.
- From DN-600 mm (24") onwards, the valve must be installed with its shaft parallel to the ground to ease and secure the support on the bearings, gaining better movement of the disc, avoiding it from resting its weight on the seat or the cover plates, this way you also gain the advantage of the seat selfcleaning, removing any dirt from the rotation area, preventing it from any damage.

