

GAS WAFER BUTTERFLY VALVE



Size : DN 32/40 to 200 mm
Ends : Between ISO PN10/16 and ANSI150 flanges
Min Temperature : - 20°C
Max Temperature : + 60°C
Max Pressure : 5 Bars
Specifications : Long neck for isolation
Wafer type
Full crossing stem
ISO 5211 mounting pad

Materials : Ductile iron EN GJS 500-7 body

GAS WAFER BUTTERFLY VALVE

SPECIFICATIONS :

- Long neck for isolation
- ISO 5211 mounting pad
- Wafer type
- Between flanges ISO PN10/16 from DN32/40 to 200 and ISO PN20 ANSI150 from DN40 to 200
- **NF ROBGAZ certificate**
- Full crossing stem
- Removable seat
- Stainless steel disc up to DN100 included and ductile iron disc epoxy coated +/- 40 µ from DN125 to 200
- 9 positions lever with locking device
- Rilsan coated body color RAL 5024 , 250-300 microns thickness

USE :

- Fluids : Gas
- Min and max Temperature Ts : - 20°C to + 60°C
- Max Pressure PN : 5 bars (MOP 5 class)

RANGE :

- With lever from DN 32/40 to DN 200

ENDS :

- Between flanges ISO PN10/16 from DN32/40 to 200 and ISO PN20 ANSI150 from DN40 to 200

TORQUE VALUES (in Nm with safety coefficient of 30 % included) at 10 Bars :

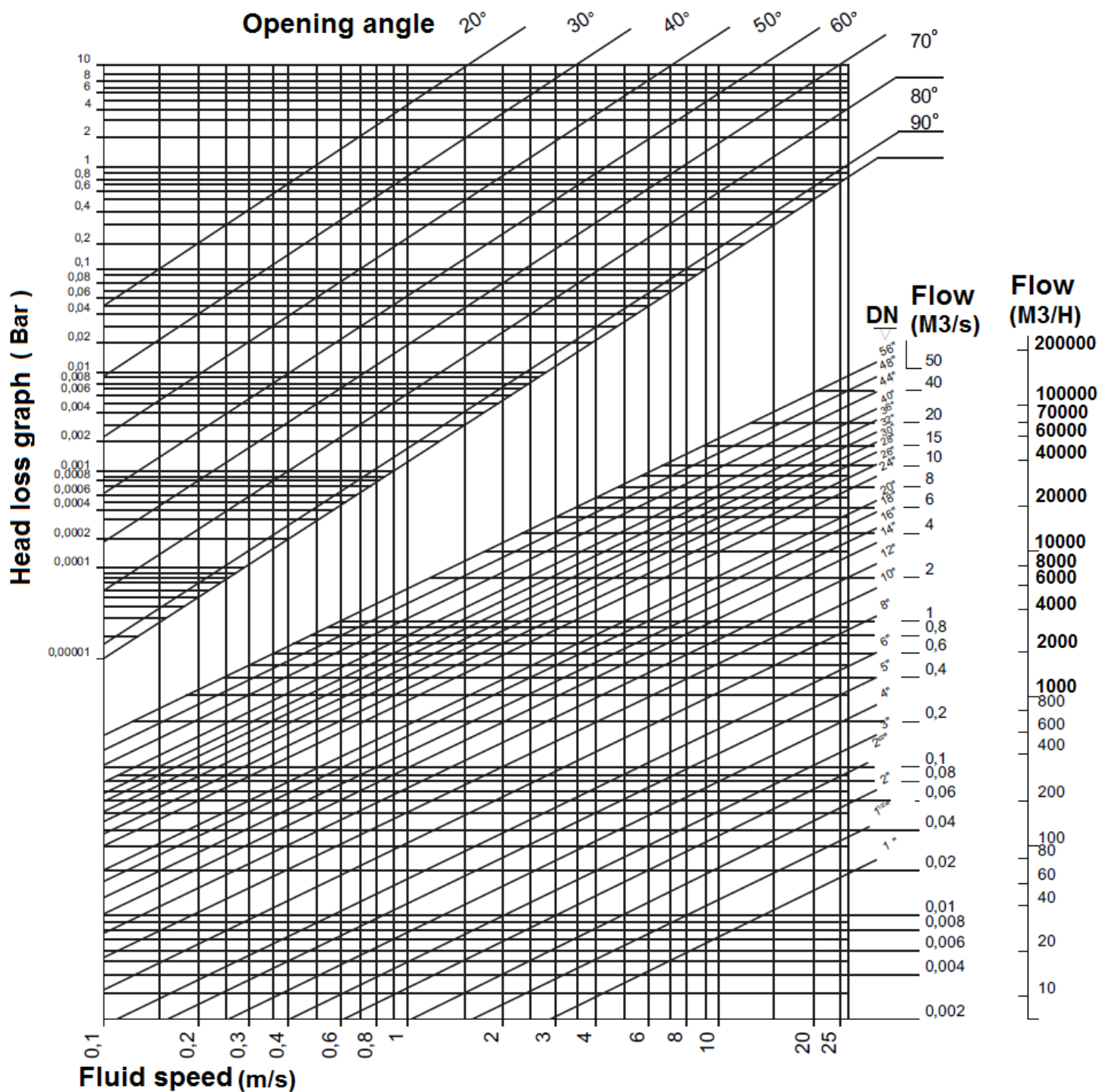
| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|---------------|-------|----|----|----|-----|-----|-----|-----|
| Torque (Nm) | 9 | 11 | 20 | 29 | 47 | 82 | 130 | 210 |

FLOW COEFFICIENT Kv (m3 / h) :

| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|-------------|-------|-----|-----|-----|-----|-----|------|------|
| Kv (m3/h) | 70 | 109 | 200 | 334 | 551 | 901 | 1427 | 2383 |

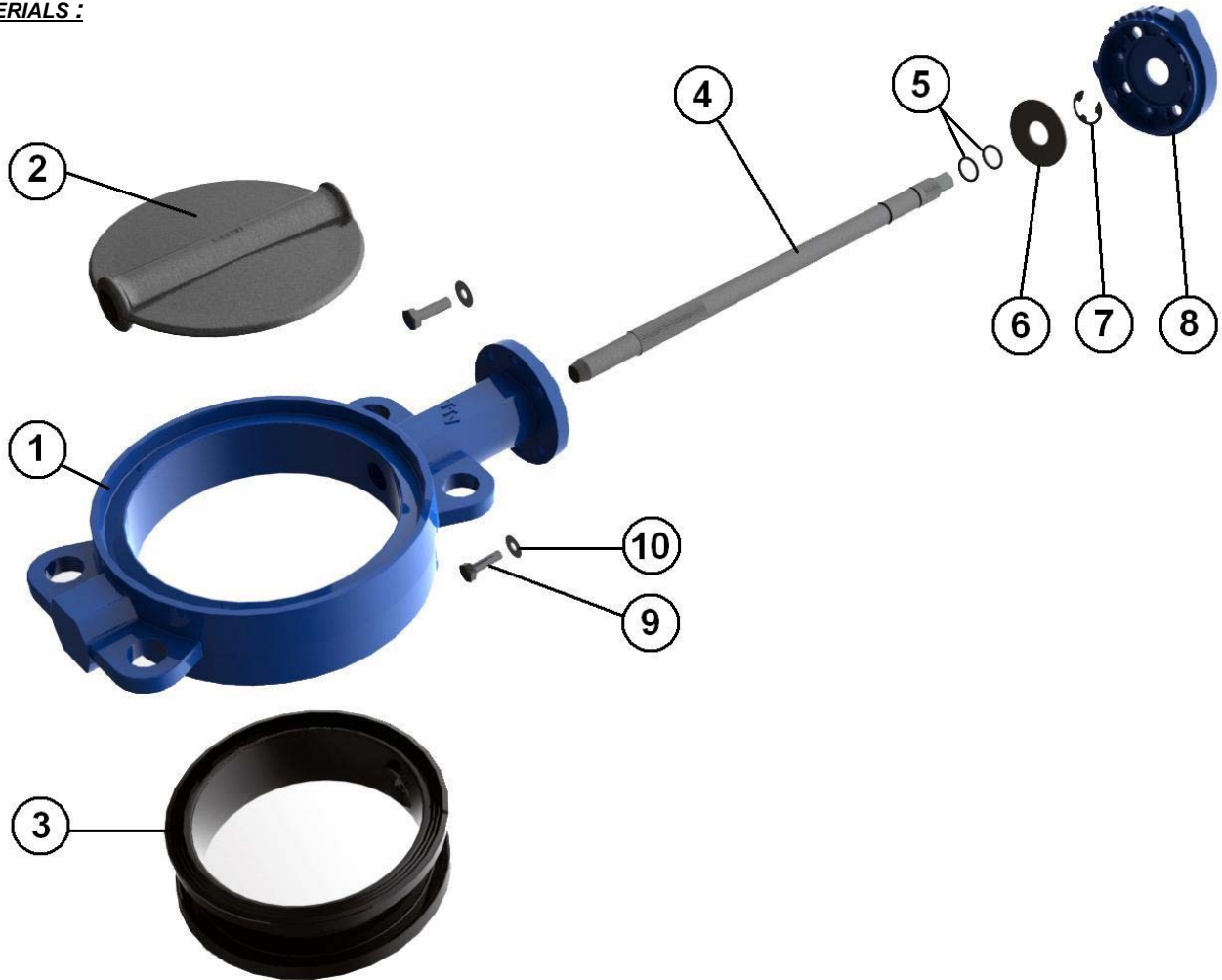
GAS WAFER BUTTERFLY VALVE

HEAD LOSS GRAPH :



GAS WAFER BUTTERFLY VALVE

MATERIALS :

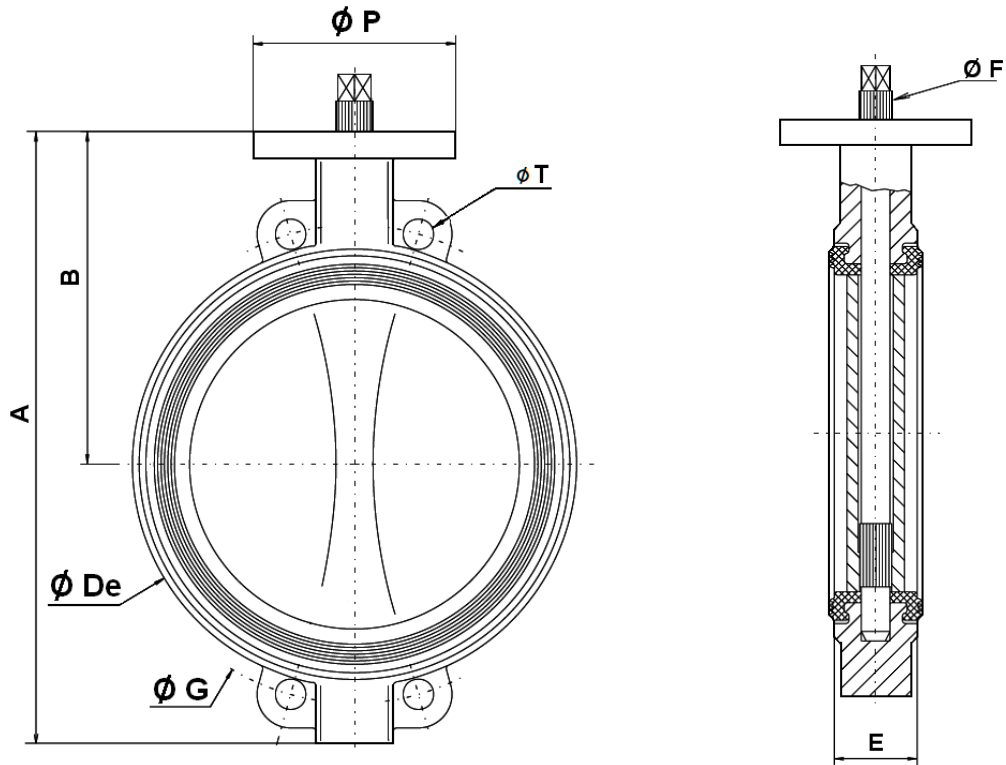


| Item | Designation | Materials |
|------|----------------|---------------------------|
| 1 | Body | Ductile iron EN GJS-500-7 |
| 2 | Disc DN40-100 | ASTM A351 CF8M |
| 2 | Disc DN125-200 | EN GJS 500-7 epoxy coated |
| 3 | Elastic ring | NBR for Gas |
| 4 | Stem | SS 420 |
| 5 | O ring | NBR |
| 6 | Ring | Steel |
| 7 | Circlips | Steel |
| 8 | Plate | Aluminium |
| 9 | Plate screw | 5.6 |
| 10 | Washer | Steel |
| | Lever | Aluminium |

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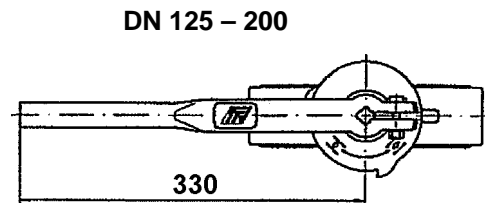
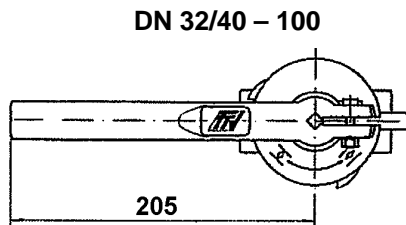
SIZE ISO PN10 (in mm) :

- Valves :**



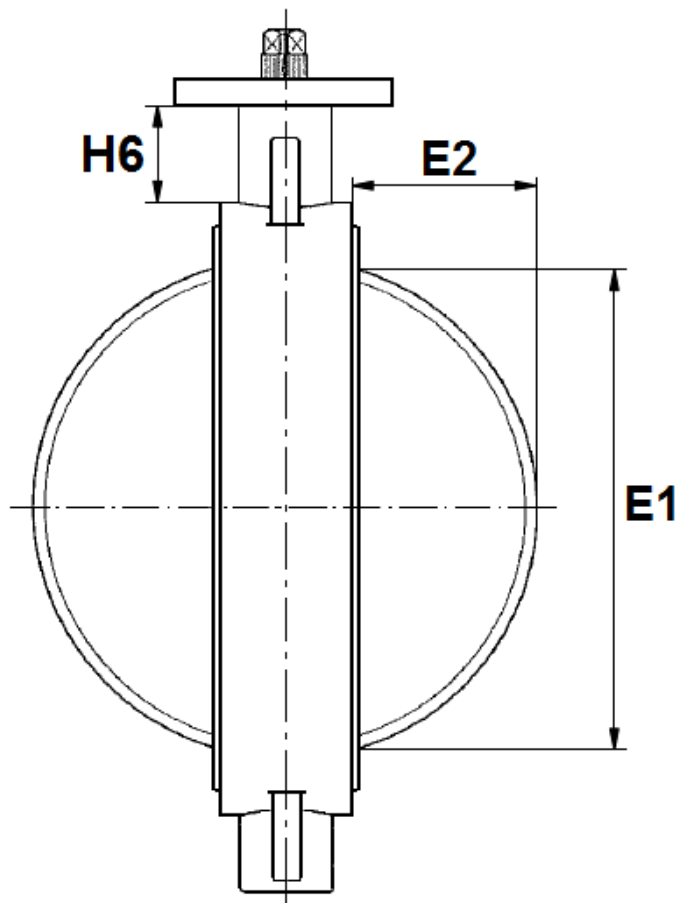
| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|-------------|-------|------|------|------|------|------|------|-------|
| A | 206 | 228 | 243 | 266 | 294 | 324 | 349 | 438 |
| B | 140 | 156 | 162 | 170 | 185 | 207 | 216 | 256 |
| ϕDe | 82 | 102 | 119 | 135 | 155 | 185 | 208 | 270 |
| E | 33 | 43 | 46 | 46 | 52 | 56 | 56 | 60 |
| ϕF | 10.5 | 10.5 | 14.5 | 16.5 | 16.5 | 18.5 | 18.5 | 22.5 |
| ϕG | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295 |
| ϕP | 88 | 88 | 88 | 88 | 88 | 105 | 105 | 105 |
| ϕT | 18 | 18 | 18 | 18 | 18 | 18 | 23 | 23 |
| Weight (Kg) | 2.44 | 3.52 | 4.11 | 4.72 | 5.9 | 7.6 | 8.74 | 14.02 |

- Levers :**



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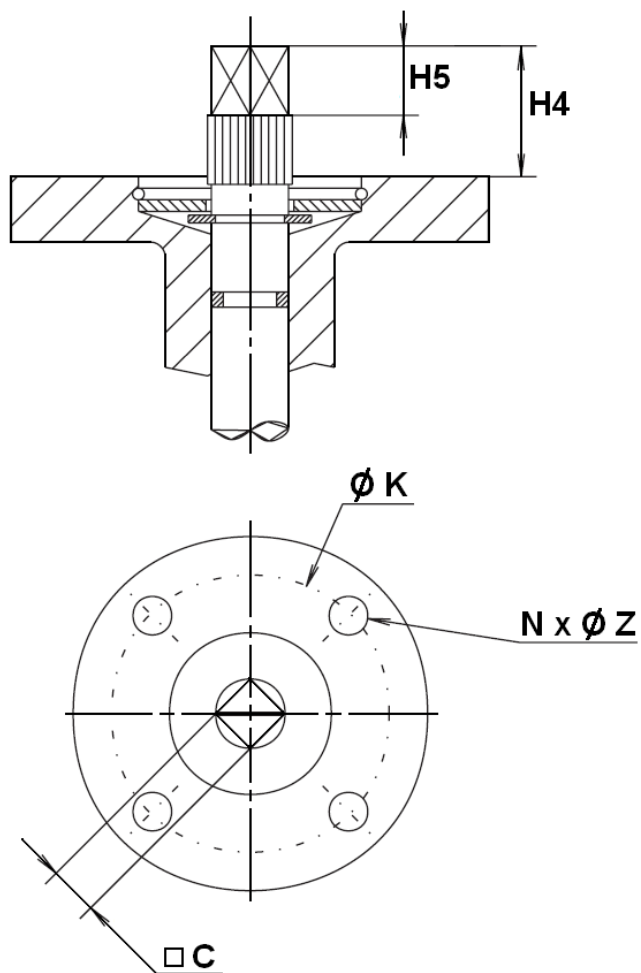
DISC AND NECK SIZE (in mm) :



| DN | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|----|-----|------|-----|----|-----|------|------|-----|
| E1 | 23 | 24.5 | 46 | 65 | 85 | 109 | 136 | 188 |
| E2 | 3.5 | 3.5 | 9.5 | 17 | 24 | 33.5 | 45.5 | 69 |
| H6 | 76 | 82 | 80 | 80 | 88 | 93 | 89 | 99 |

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ISO MOUNTING PAD AND STEM SIZE (in mm) :

[illegible]

GAS WAFER BUTTERFLY VALVE

STANDARDS :

- Fabrication according to ISO 9001:2008
- DIRECTIVE 97/23/CE : CE N° 0038
Risk Category III module H
- Tests according to ISO 5208 , rate A
- Between ISO PN10/16 flanges according to EN 1092-1
- ISO 5211 mounting pad
- Length according to ISO 5752 short series 20, EN 558-1 series 20 (NF 29305),BS 5155 Wafer short/medium, DIN 3202 part 3, series K1
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 (optional marking)
- **Certificate NF ROBGAS N° ROB 064-R3 according to NF EN 13774 & NF EN 549**

ADVICE : Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages.
The customer must check the right choice of the products with the real service conditions.

INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

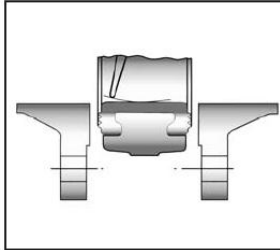
INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned** (if they're not, the valves may not work correctly).
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.

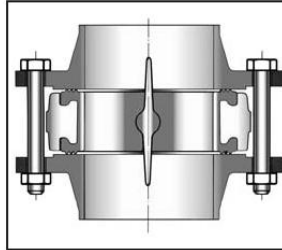
GAS WAFER BUTTERFLY VALVE

INSTALLATION INSTRUCTIONS (SUITE):

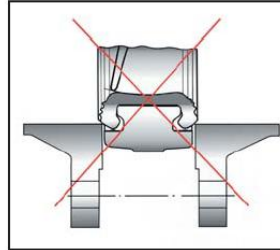
- If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.
- The valve must be inserted between flanges with disc half opened but the disc must not overpass the valve thickness. Position the bolts to keep centered the valve. Then open fully the valve and tighten the bolts. See graph under.



Half open valve introduction



Complete opened disc valves
when screw tightening



- Tighten the bolts in cross.
- The disc must move easily inside the pipe.
- Valves must be opened during cleaning operation.
- Tests must be done with a cleaned pipe.
- Tests must be done with opened valve. Test pressure must not be higher than the valve specification according to ISO 5208.
- Then open slowly the valve.
- **Do not mount butterfly valves with stainless steel pressed collars and turning flanges without strias.**
- **And not on flat face flanges without strias (example : painted cast iron fittings)**

MAINTENANCE :

- We recommend to operate fully the valve 1 to 2 times per year.
- During maintenance operation, ensure that the pipe isn't under pressure, that there's no fluid in the pipe and that the valve is isolated. If there's a fluid in the pipe , evacuate it. Ensure that there are no risks due to the temperature or the fluid (like acids). If the fluid is corrosive , inert the installation before maintenance operation.