

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

Unidirectional cast iron knife gate valve for water, water treatment, chemical pulp, powders, food industry, chemistry  
PTFE packing with ductile iron packing gland nut for a better mechanical resistance.

Centered index allowing the installation of the sensor with a small footprint.

Ribbed support plate for a better rigidity.

Interchangeable seat (NBR, EPDM, FKM, SILICONE, PTFE).

**Certificate**

**3.1**



**Size :** DN50 to DN1000

**Connection :** Between flanges PN10

**Min Temperature :** -10°C

**Max Temperature :** +90°C

**Max Pressure :** 10 Bars up to DN200

**Specifications :** Rising non rotating stem, non rising handwheel

Unidirectional tightness

Weak head loss

**Materials :** Cast iron EN GJL-250

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

### SPECIFICATIONS :

- Opened or closed valve
- Rising non rotating stem, non rising handwheel
- Unidirectional tightness ( Respect the flow direction indicated by the arrow )
- Weak head loss
- Between flanges PN10
- Full crossing threaded lower holes and blind threaded top holes
- With handwheel
- With lever or chain handwheel ( option )
- Possible with bipolar sensor O + C , voltage AC 15-240V 3A, IP66 type XCK M115C
- Deflector ( option )
- 50% epoxy 50% polyester painting blue colour RAL 5005
- Other seats on request ( FKM, PTFE, SILICONE ...)

### USE :

- Water, water treatment, chemical pulp, powders, food industry, chemistry
- Min and max Temperature Ts : - 10°C to + 90°C for cast iron body with NBR seat **Ref.170**
- Min and max Temperature Ts : - 20°C to + 130°C with **WHITE EPDM** seat( on request )
- Min and max Temperature Ts : - 10°C to + 180°C with **FKM** seat( on request )
- Min and max Temperature Ts : + 0°C to + 180°C with **PTFE** seat ( on request )
- Min and max Temperature Ts : - 20°C to + 200°C with **SILICONE** seat ( on request )
- When using powders, inverse flow direction

### MAX PRESSURE :

| DN        | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700-1000 |
|-----------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| Ps (Bars) | 10 | 10 | 10 | 10  | 10  | 10  | 10  | 8   | 6   | 4   | 4   | 3   | 3   | 3   | 2        |

### MIN AND MAX SEAT TEMPERATURES WITH REFERENCES :

| SEAT              | TEMPERATURE          | DN 50          | DN 65          | DN 80          | DN 100         | DN 125         | DN 150         | DN 200         | DN 250         | DN 300         |
|-------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| NBR               | -10°C à +90°C        | 9801851        | 9801852        | 9801853        | 9801854        | 9801855        | 9801856        | 9801857        | 9801858        | 9801859        |
| EPDM              | -20°C à +130°C       | 9801870        | 9801871        | 9801872        | 9801873        | 9801874        | 9801875        | 9801876        | 9801877        | 9801878        |
| <b>WHITE EPDM</b> | -20°C à +130°C       | <b>9802170</b> | <b>9802171</b> | <b>9802172</b> | <b>9802173</b> | <b>9802174</b> | <b>9802175</b> | <b>9802176</b> | <b>9802177</b> | <b>9802178</b> |
| FKM               | -10°C à +180°C       | 9801910        | 9801911        | 9801912        | 9801913        | 9801914        | 9801915        | 9801916        | 9801917        | 9801918        |
| <b>PTFE</b>       | <b>+0°C à +180°C</b> | <b>9801890</b> | <b>9801891</b> | <b>9801892</b> | <b>9801893</b> | <b>9801894</b> | <b>9801895</b> | <b>9801896</b> | <b>9801897</b> | <b>9801898</b> |
| SILICONE          | -20°C à +200°C       | 9801930        | 9801931        | 9801932        | 9801933        | 9801934        | 9801935        | 9801936        | 9801937        | 9801938        |

| SEAT              | TEMPERATURE          | DN 350         | DN 400         | DN 450         | DN 500         | DN 600         | DN 700         |
|-------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| NBR               | -10°C à +90°C        | 9801860        | 9801861        | 9801862        | 9801863        | 9801864        | 9801865        |
| EPDM              | -15°C à +130°C       | 9801879        | 9801880        | 9801881        | 9801882        | 9801883        | 9801884        |
| <b>WHITE EPDM</b> | -15°C à +130°C       | <b>9802179</b> | <b>9802180</b> | <b>9802181</b> | <b>9802182</b> | <b>9802183</b> | <b>9802184</b> |
| FKM               | -10°C à +180°C       | 9801919        | 9801920        | -              | -              | -              | -              |
| <b>PTFE</b>       | <b>+0°C à +180°C</b> | <b>9801899</b> | <b>9801900</b> | -              | -              | -              | -              |
| SILICONE          | -20°C à +200°C       | 9801939        | 9801940        | -              | -              | -              | -              |

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

### NUMBER OF CYCLES TO CLOSE OR OPEN THE VALVE :

| DN               | 50 | 65    | 80   | 100  | 125   | 150 | 200 | 250 | 300 |
|------------------|----|-------|------|------|-------|-----|-----|-----|-----|
| Number of cycles | 15 | 18.75 | 22.5 | 27.5 | 33.75 | 40  | 42  | 52  | 62  |

| DN               | 350 | 400  | 450  | 500 | 600   | 700   | 800    |
|------------------|-----|------|------|-----|-------|-------|--------|
| Number of cycles | 60  | 68.3 | 76.7 | 85  | 101.7 | 88.75 | 101.25 |

### FLOW COEFFICIENT Kvs ( M3 / h ) :

| DN         | 50  | 65  | 80   | 100  | 125  | 150  | 200  | 250   | 300   |
|------------|-----|-----|------|------|------|------|------|-------|-------|
| Kvs (m3/h) | 447 | 755 | 1144 | 1787 | 2793 | 4021 | 7149 | 11171 | 16086 |

| DN         | 350   | 400   | 450   | 500   | 600   | 700   | 800    | 900    | 1000   |
|------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Kvs (m3/h) | 21895 | 28597 | 36193 | 44683 | 64343 | 87579 | 114388 | 144773 | 178732 |

### HEAD LOSS CALCULATION :

$$\Delta p = ( Q / K_v )^2 \times SG$$

Q : flow in m<sup>3</sup>/h

$\Delta p$  : Head loss in bar

SG : Specific gravity (= 1 for water)

Kv : Volume of water in m<sup>3</sup>/h, that will flow through a given restriction or valve opening with a pressure drop of 1 bar at 20°C)

### TORQUE VALUES ( in Nm without safety coefficient ) :

| DN          | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
|-------------|----|----|----|-----|-----|-----|-----|-----|-----|
| Torque (Nm) | 8  | 10 | 12 | 14  | 16  | 24  | 24  | 38  | 32  |

| DN          | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Torque (Nm) | 51  | 61  | 65  | 72  | 80  | 107 | 138 | 172 | 211  |

### STEM THREADING SIZE :

| DN             | 50      | 65 | 80 | 100 | 125 | 150 | 200     | 250 | 300 |
|----------------|---------|----|----|-----|-----|-----|---------|-----|-----|
| Threading (mm) | Tr 20x4 |    |    |     |     |     | Tr 25x5 |     |     |

| DN             | 350     | 400 | 450 | 500 | 600 | 700     | 800 | 900 | 1000 |
|----------------|---------|-----|-----|-----|-----|---------|-----|-----|------|
| Threading (mm) | Tr 35x6 |     |     |     |     | Tr 50x8 |     |     |      |

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

### RANGE AND ACCESSORIES :



- Between flanges PN10 cast iron body, AISI 304 gate , NBR seat, with handwheel **Ref. 170** from DN 50 to DN 800
- Between flanges PN10 cast iron body, AISI 304 gate, NBR seat, with gearbox **Ref. 170** from DN 900 to DN 1000



- Between flanges PN10 cast iron body, AISI 304 gate , NBR seat, with handwheel and sensor **Ref. 170101 to 170801** from DN 100 to DN 800



- Bipolar sensors O + C kit **Ref. 9801351 and 9801352** from DN 50 to DN 300



- Sensor (alone) **Ref. 9801350** from DN 50 to DN 700



- Chain handwheel **Ref. 9801790-9801792** from DN 50 to DN 600



- Chain ( per meter ) **Ref. 9801795**



- Lever **Ref. 980178** from DN 50 to DN 300

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

### RANGE AND ACCESSORIES (SUITE) :



- SS ASTM A351 CF8M Deflector **Ref. 9801800 to 9801813** from DN 50 to DN 600



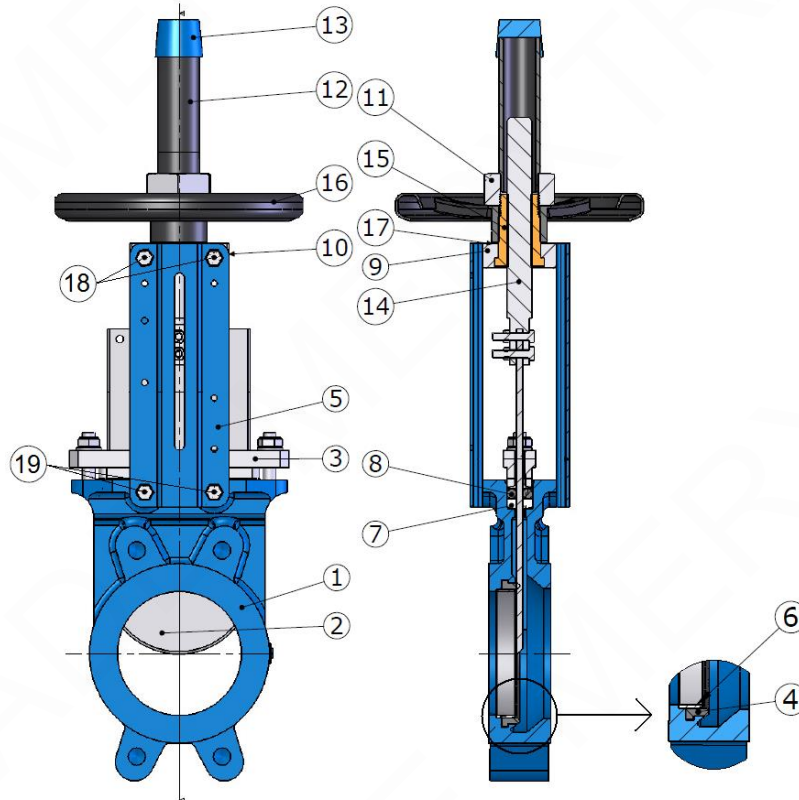
- SS ASTM A351 CF8M Deflector kit ( with flange gasket ) **Ref. 9801820 to 9801837** from DN 50 to DN 600



- Stainless steel support with bolting **Ref. 9802001 to 9802011** from DN 50 to DN 400

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

**MATERIALS WITH HANDWHEEL DN50-800:**

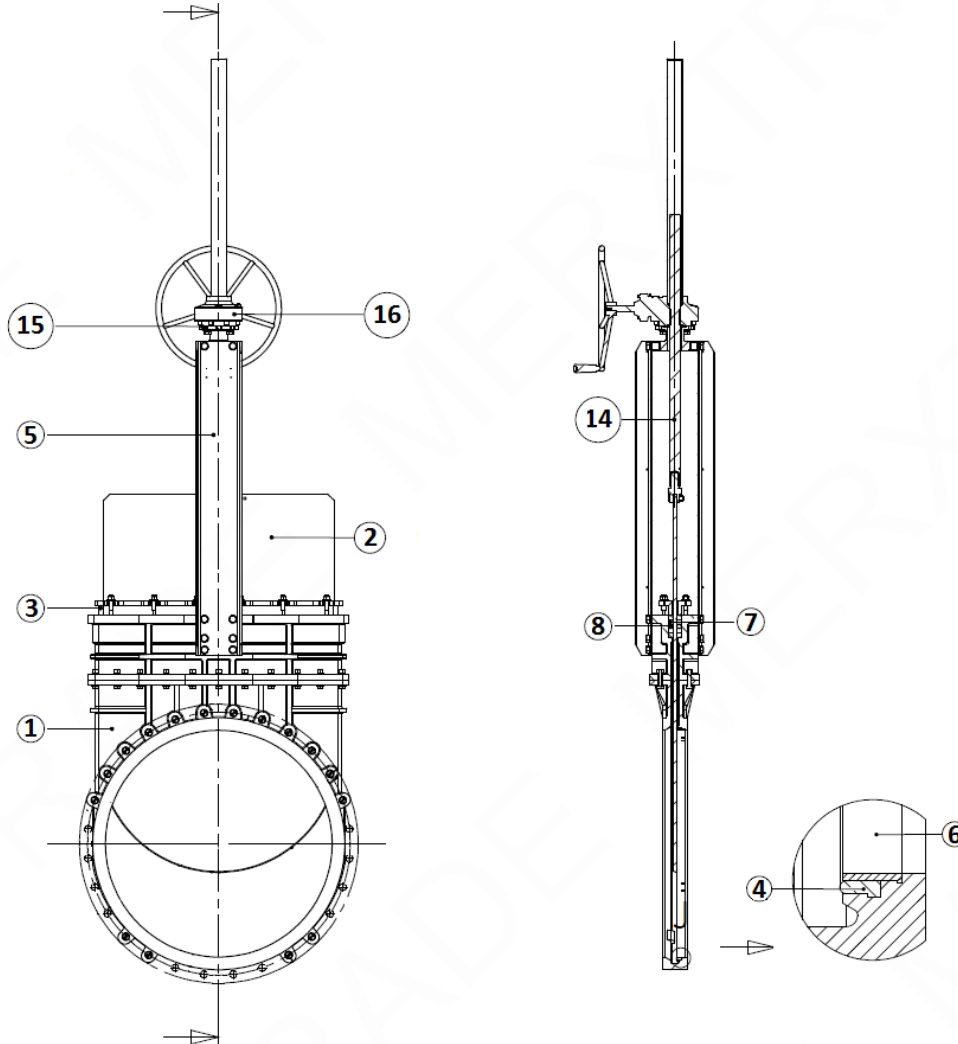


(\*) : Included in gaskets kit

| Item | Designation        | Materials                  |
|------|--------------------|----------------------------|
| 1    | Body               | Cast iron EN GJL-250       |
| 2    | Gate               | AISI 304                   |
| 3    | Packing gland nut  | Ductile iron EN GJS-400-15 |
| 4(*) | Seat               | NBR                        |
| 5    | Support            | Painted steel              |
| 6(*) | Retainer           | AISI 304                   |
| 7(*) | Packing (Tress)    | PTFE                       |
| 8(*) | Packing ( O ring ) | NBR                        |
| 9    | Yoke               | Steel                      |
| 10   | Greaser            | Brass                      |
| 11   | Fixing screw       | Steel                      |
| 12   | Hood               | Steel                      |
| 13   | Hood cover         | Plastic                    |
| 14   | Spindle            | AISI 304                   |
| 15   | Stem nut           | Bronze                     |
| 16   | Handwheel          | Steel                      |
| 17   | Washer             | Brass                      |
| 18   | Upper screw        | AISI 304                   |
| 19   | Lower screw        |                            |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

MATERIALS WITH GEARBOX REF. 170 DN900-1000 :

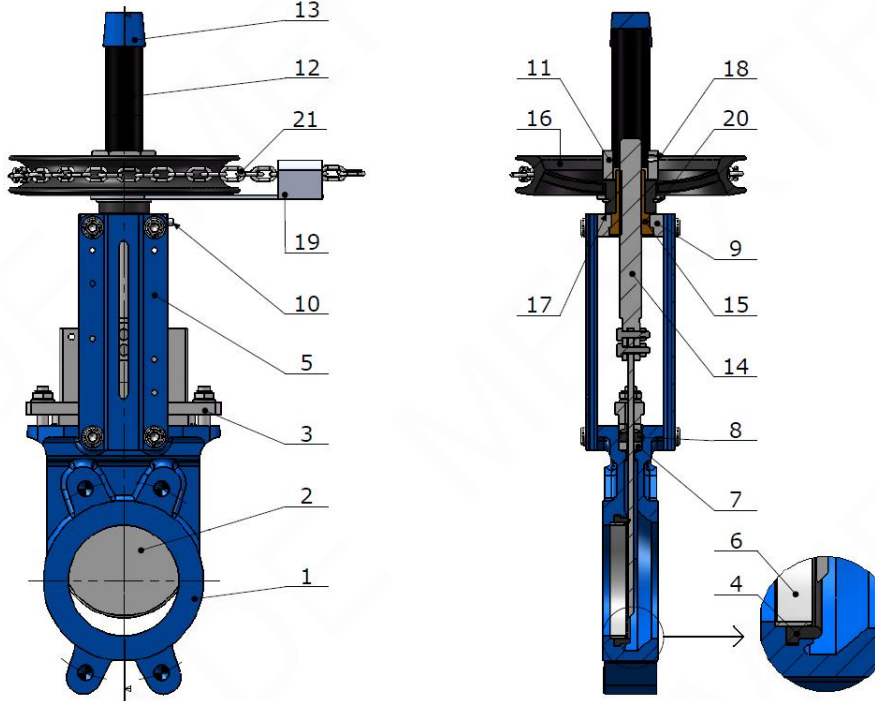


(\*) : Included in gaskets kit

| Item | Designation        | Materials Ref. 170 DN900-1000 |
|------|--------------------|-------------------------------|
| 1    | Body               | Ductile iron EN-GJS 400-15    |
| 2    | Gate               | AISI 304                      |
| 3    | Packing gland nut  | Steel                         |
| 4(*) | Seat               | NBR                           |
| 5    | Support            | Painted steel                 |
| 6(*) | Retainer           | AISI 304                      |
| 7(*) | Packing (Tress)    | PTFE                          |
| 8(*) | Packing ( O ring ) | NBR                           |
| 14   | Spindle            | AISI 304                      |
| 15   | Bracket            | Steel                         |
| 16   | Gearbox            |                               |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

**MATERIALS WITH CHAIN HANDWHEEL :**



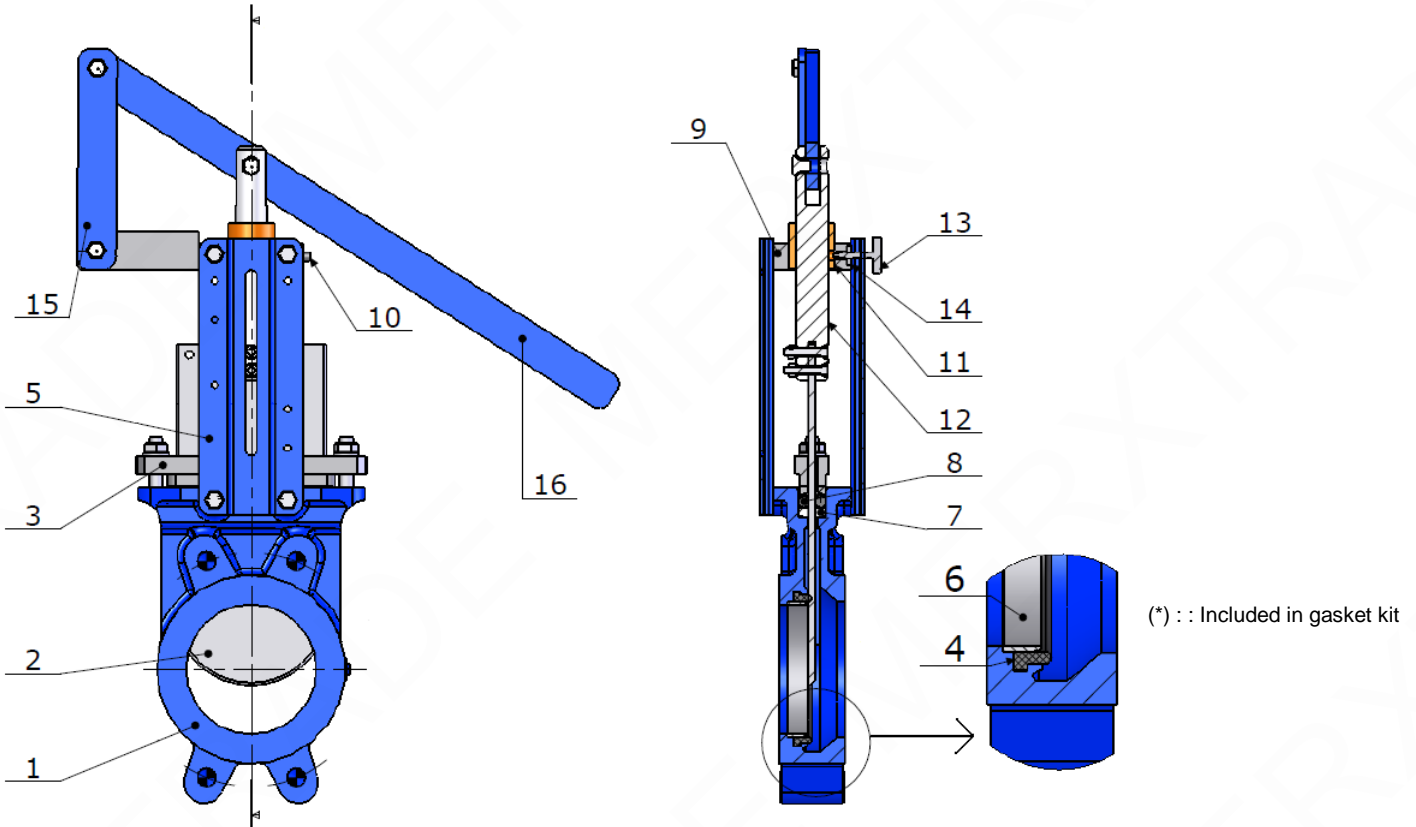
(\*) : Included in gaskets kit

| Item | Designation        | Materials Ref. 170 + 980179 |
|------|--------------------|-----------------------------|
| 1    | Body               | Cast iron EN GJL-250        |
| 2    | Gate               | AISI 304                    |
| 3    | Packing gland nut  | Ductile iron EN GJS-400-15  |
| 4(*) | Seat               | NBR                         |
| 5    | Support            | Painted steel               |
| 6(*) | Retainer           | AISI 304                    |
| 7(*) | Packing (Tress)    | PTFE                        |
| 8(*) | Packing ( O ring ) | NBR                         |
| 9    | Yoke               | Steel                       |
| 10   | Oil hole           | Steel                       |
| 11   | Fixing screw       | Steel                       |
| 12   | Hood               | Steel                       |
| 13   | Hood cover         | Plastic                     |
| 14   | Spindle            | AISI 304                    |
| 15   | Stem nut           | Bronze                      |
| 16   | Handwheel          | Steel                       |
| 17   | Washer             | Brass                       |
| 18   | Fixing screw       | AISI 304                    |
| 19   | Chain guide        | Cast iron                   |
| 20   | Washer             | Brass                       |
| 21   | Chain              | Steel or stainless steel    |



**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

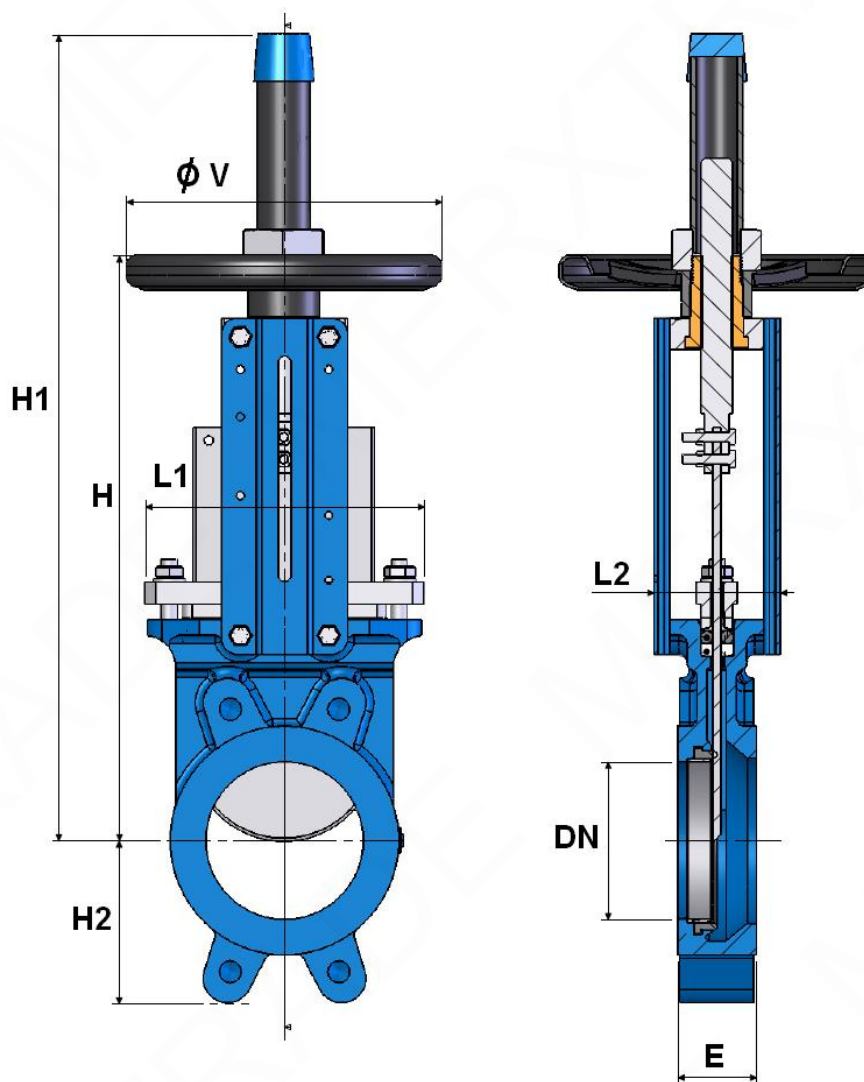
**MATERIALS WITH LEVER :**



| Item | Designation        | Materials Ref. 170 + 980178 |
|------|--------------------|-----------------------------|
| 1    | Body               | Cast iron EN GJL-250        |
| 2    | Gate               | AISI 304                    |
| 3    | Packing gland nut  | Ductile iron EN GJS-400-15  |
| 4(*) | Seat               | NBR                         |
| 5    | Support            | Painted steel               |
| 6(*) | Retainer           | AISI 304                    |
| 7(*) | Packing (Tress)    | PTFE                        |
| 8(*) | Packing ( O ring ) | NBR                         |
| 9    | Yoke               | Steel                       |
| 10   | Oil hole           | Steel                       |
| 11   | Stem nut           | Bronze                      |
| 12   | Spindle            | AISI 304                    |
| 13   | Fixing screw       | Steel                       |
| 14   | Wedge              | Steel                       |
| 15   | Link               | Steel                       |
| 16   | Lever              | Steel                       |

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

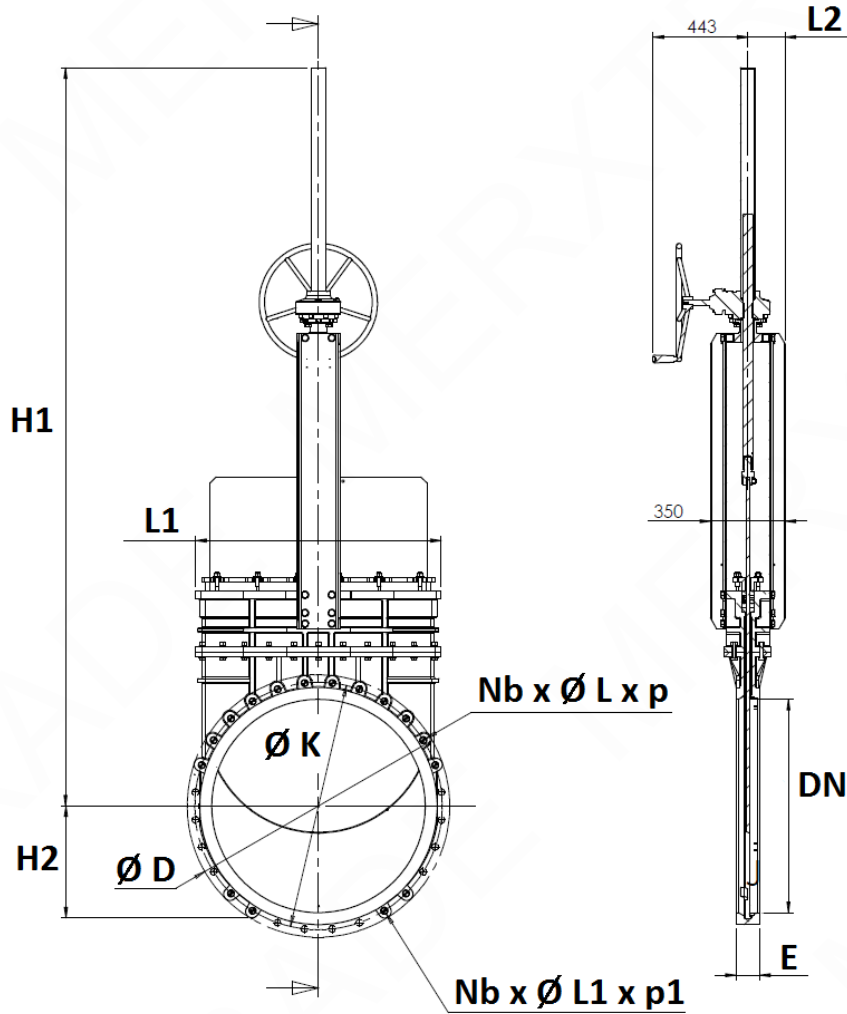
**SIZE WITH HANDWHEEL ( in mm ) :**



| DN          | 50   | 65  | 80   | 100 | 125  | 150   | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 600  | 700  | 800  |
|-------------|------|-----|------|-----|------|-------|------|------|------|------|------|------|------|------|------|------|
| E           | 40   | 40  | 50   | 50  | 50   | 60    | 60   | 70   | 70   | 96   | 100  | 106  | 110  | 110  | 110  | 110  |
| H           | 289  | 316 | 342  | 382 | 415  | 458   | 575  | 676  | 776  | 906  | 1012 | 1098 | 1210 | 1416 | 1611 | 1870 |
| H1          | 409  | 436 | 462  | 502 | 585  | 637   | 815  | 1016 | 1116 | 1336 | 1442 | 1628 | 1740 | 2046 | 2461 | 2820 |
| H2          | 63   | 70  | 92   | 105 | 120  | 130   | 160  | 198  | 234  | 256  | 292  | 308  | 340  | 400  | 452  | 505  |
| L1          | 124  | 139 | 154  | 174 | 192  | 217   | 270  | 326  | 380  | 438  | 493  | 546  | 620  | 714  | 830  | 970  |
| L2          | 92   | 92  | 92   | 92  | 102  | 102   | 119  | 119  | 119  | 290  | 290  | 290  | 290  | 290  | 320  | 320  |
| Ø V         | 200  | 200 | 200  | 200 | 250  | 250   | 300  | 300  | 300  | 500  | 500  | 500  | 500  | 500  | 800  | 800  |
| Weight (Kg) | 6.53 | 7.1 | 8.53 | 9.8 | 12.7 | 16.16 | 26.8 | 41   | 50   | 108  | 132  | 170  | 210  | 298  | 446  | 524  |

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

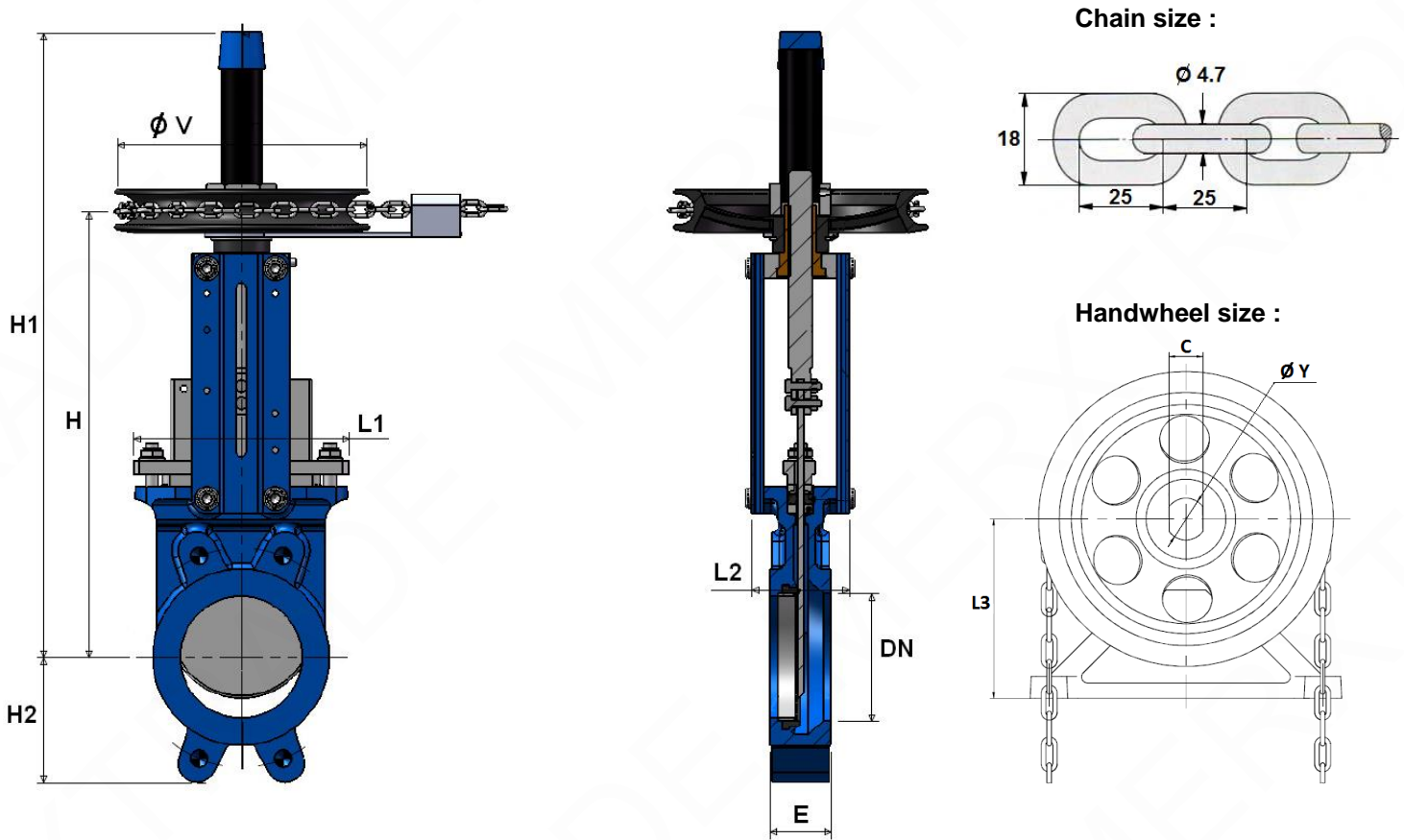
**SIZE WITH GEARBOX REF.170 DN900-1000 ( in mm ):**



| DN                                    | 900           | 1000          |
|---------------------------------------|---------------|---------------|
| E                                     | 110           | 110           |
| H1                                    | 3167          | 3462          |
| H2                                    | 479           | 525           |
| L1                                    | 1050          | 1150          |
| L2                                    | 170           | 175           |
| $\varnothing D$                       | 1116          | 1230          |
| $\varnothing K$                       | 1050          | 1160          |
| Nb x $\varnothing L$ x p (per face)   | 12 x M30 x 20 | 12 x M33 x 20 |
| Nb x $\varnothing L1$ x p1 (per face) | 4 x M30 x 45  | 4 x M33 x 45  |
| Weight (Kg)                           | 677           | 820           |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

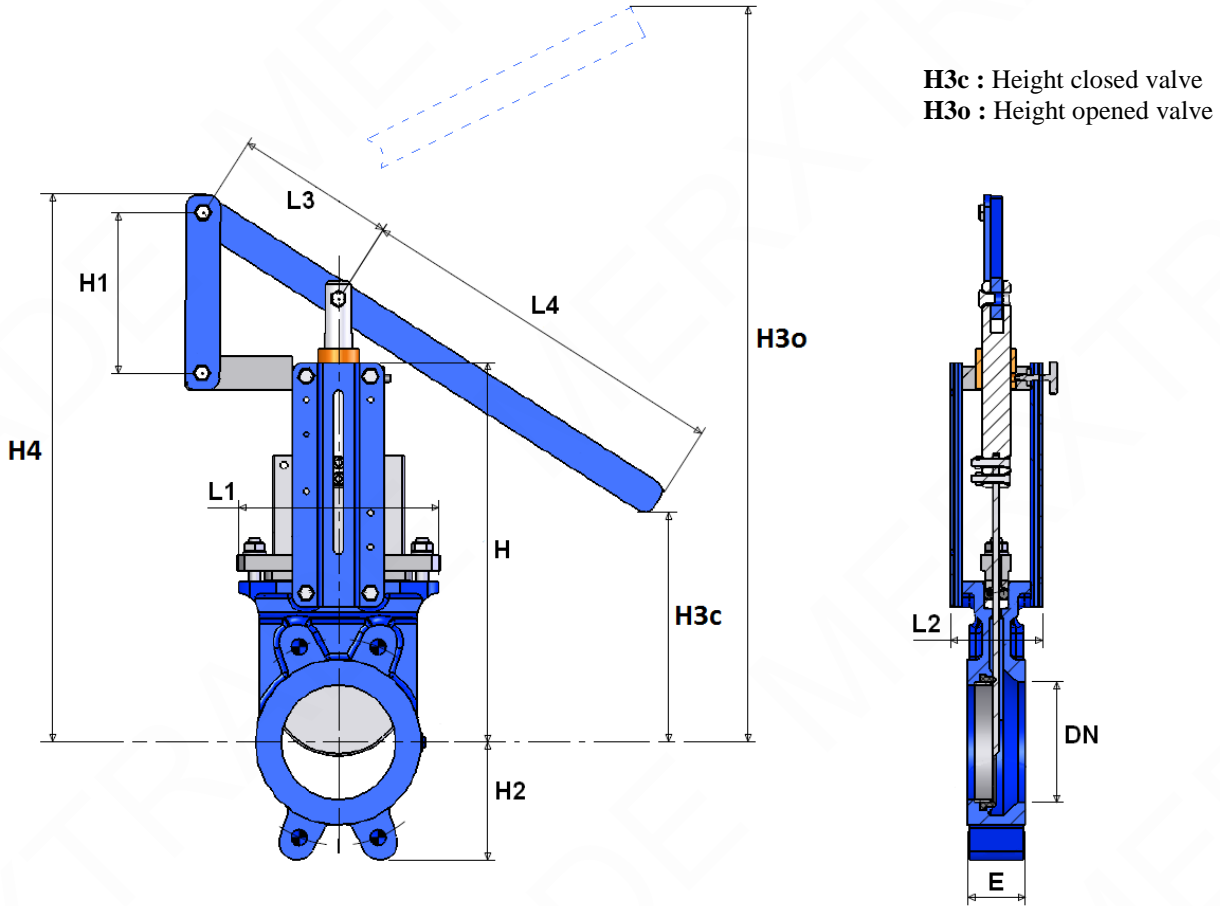
**SIZE WITH CHAIN HANDWHEEL REF.170 + 980179 ( in mm ) :**



| DN                            | 50   | 65  | 80   | 100  | 125  | 150 | 200  | 250  | 300  | 350   | 400   | 450   | 500   | 600   |
|-------------------------------|------|-----|------|------|------|-----|------|------|------|-------|-------|-------|-------|-------|
| E                             | 40   | 40  | 50   | 50   | 50   | 60  | 60   | 70   | 70   | 96    | 100   | 106   | 110   | 110   |
| H                             | 289  | 316 | 342  | 382  | 415  | 458 | 575  | 676  | 776  | 906   | 1012  | 1098  | 1210  | 1416  |
| H1                            | 409  | 436 | 462  | 502  | 585  | 637 | 815  | 1016 | 1116 | 1336  | 1442  | 1628  | 1740  | 2046  |
| H2                            | 63   | 70  | 92   | 105  | 120  | 130 | 160  | 198  | 234  | 256   | 292   | 308   | 340   | 400   |
| L1                            | 124  | 139 | 154  | 174  | 192  | 217 | 270  | 326  | 380  | 438   | 493   | 546   | 620   | 714   |
| L2                            | 92   | 92  | 92   | 92   | 102  | 102 | 119  | 119  | 119  | 290   | 290   | 290   | 290   | 290   |
| Ø V                           | 212  | 212 | 212  | 212  | 212  | 212 | 296  | 296  | 296  | 482   | 482   | 482   | 482   | 482   |
| Ø Y                           | 34   | 34  | 34   | 34   | 34   | 34  | 42   | 42   | 42   | 52    | 52    | 52    | 52    | 52    |
| C                             | 26   | 26  | 26   | 26   | 26   | 26  | 34   | 34   | 34   | 44    | 44    | 44    | 44    | 44    |
| L3                            | 135  | 135 | 135  | 135  | 135  | 135 | 180  | 180  | 180  | 278   | 278   | 278   | 278   | 278   |
| Weig. Ref.170 + 980179 ( Kg ) | 11.4 | 12  | 13.4 | 14.7 | 17.6 | 21  | 34.3 | 48.5 | 57.5 | 122.5 | 146.5 | 184.5 | 224.5 | 312.5 |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

**SIZE WITH LEVER REF.170 + 980178 ( in mm ) :**



| DN                           | 50  | 65  | 80  | 100  | 125 | 150  | 200  | 250  | 300  |
|------------------------------|-----|-----|-----|------|-----|------|------|------|------|
| E                            | 40  | 40  | 50  | 50   | 50  | 60   | 60   | 70   | 70   |
| H                            | 240 | 265 | 290 | 330  | 360 | 412  | 520  | 618  | 718  |
| H1                           | 95  | 95  | 95  | 95   | 140 | 140  | 160  | 255  | 255  |
| H2                           | 63  | 70  | 92  | 105  | 120 | 130  | 160  | 198  | 234  |
| H3c (closed)                 | 248 | 263 | 277 | 329  | 301 | 262  | 420  | 315  | 248  |
| H3o (opened)                 | 452 | 526 | 592 | 704  | 858 | 911  | 1210 | 1318 | 1762 |
| H4                           | 343 | 370 | 389 | 436  | 511 | 563  | 690  | 868  | 986  |
| L1                           | 124 | 139 | 154 | 174  | 192 | 217  | 270  | 326  | 380  |
| L2                           | 92  | 92  | 92  | 92   | 102 | 102  | 120  | 120  | 120  |
| L3                           | 140 | 140 | 140 | 140  | 140 | 140  | 230  | 230  | 230  |
| L4                           | 330 | 330 | 330 | 330  | 430 | 430  | 630  | 630  | 882  |
| Weight Ref.170 + 980178 (Kg) | 8.9 | 9.8 | 11  | 13.3 | 16  | 18.9 | 32.9 | 51.1 | 60   |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

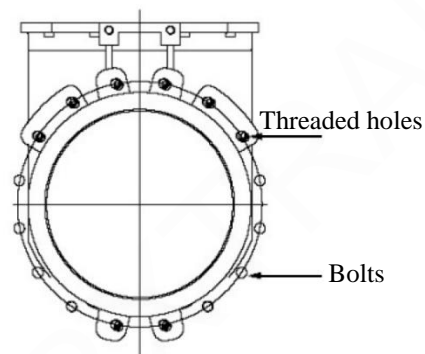
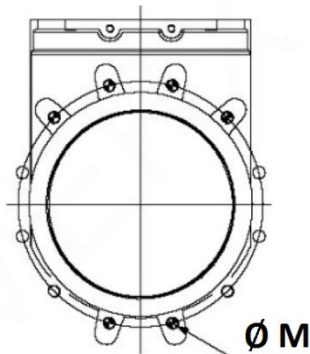
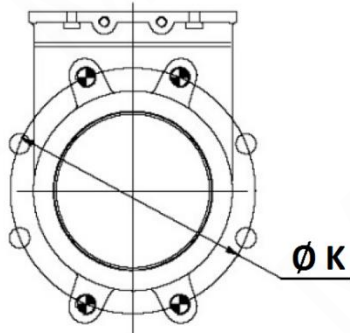
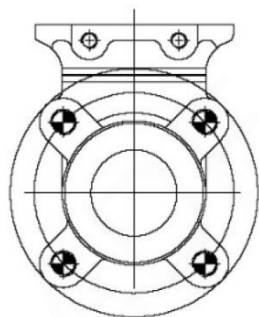
SIZE FIXING VALVE THREADED HOLES ( BETWEEN FLANGES PN10 in mm ) :

**DN 50 – 65**

**DN 80 – 200**

**DN 250 – 300**

**DN350**

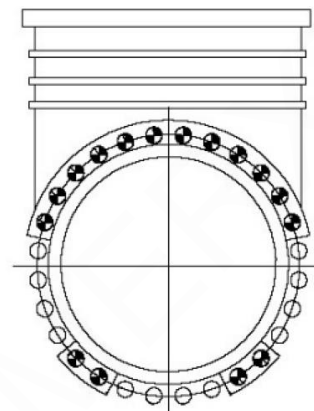
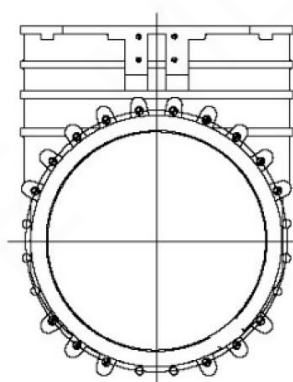
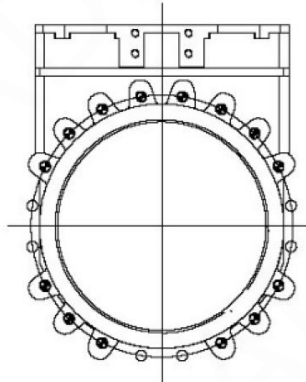
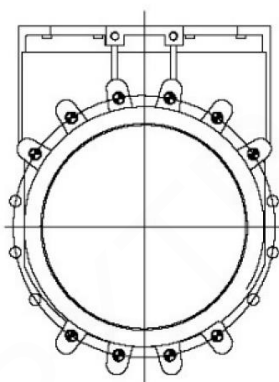


**DN400**

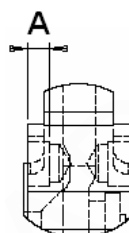
**DN 450 – 600**

**DN 700-800**

**DN 900 - 1000**



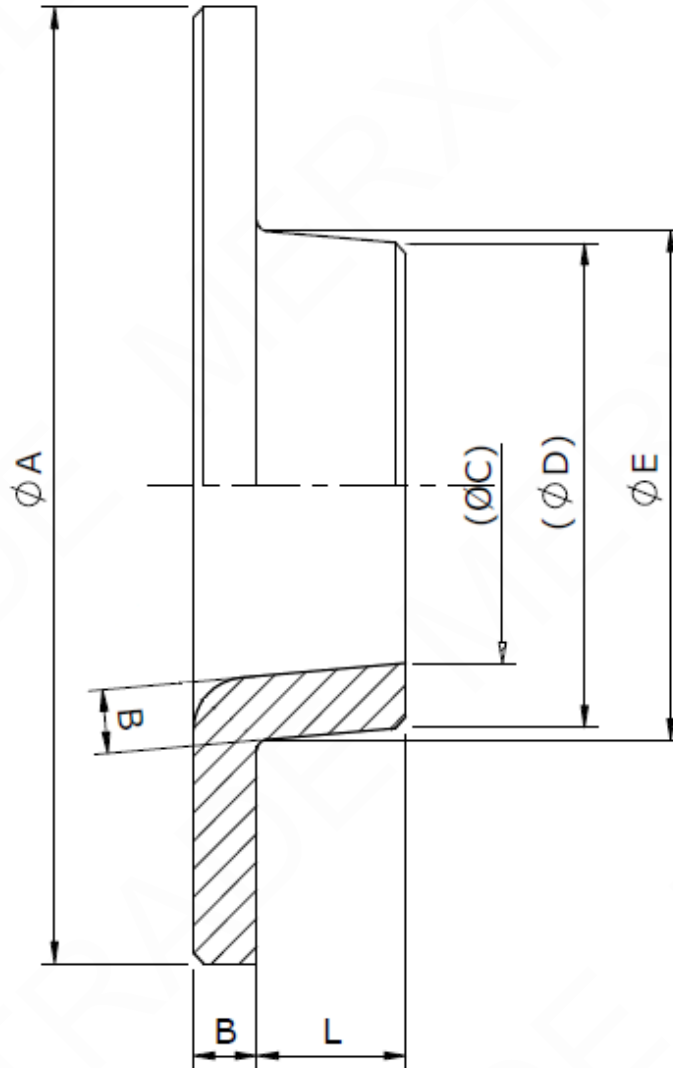
THREADED LENGHT FOR TOP BLIND HOLES :



| DN                | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900  | 1000 |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Ø K               | 125 | 145 | 160 | 180 | 210 | 240 | 295 | 350 | 400 | 460 | 515 | 565 | 620 | 725 | 840 | 950 | 1050 | 1160 |
| Ø M               | M16 | M16 | M16 | M16 | M16 | M20 | M20 | M20 | M20 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M30  | M33  |
| Nb threaded holes | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 6   | 6   | 8   | 10  | 14  | 14  | 14  | 16  | 16  | 16   | 16   |
| A                 | 8   | 8   | 10  | 10  | 10  | 12  | 12  | 15  | 15  | 19  | 20  | 24  | 24  | 24  | 20  | 20  | 20   | 20   |
| Nb of bolts       | 0   | 0   | 4   | 4   | 4   | 4   | 4   | 6   | 6   | 8   | 6   | 6   | 6   | 6   | 8   | 8   | 12   | 12   |

## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

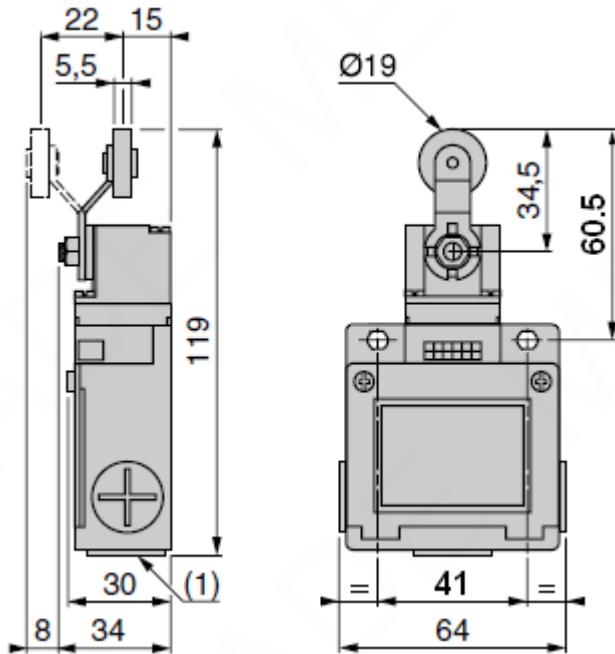
**DEFLECTOR SIZE ( in mm ) :**



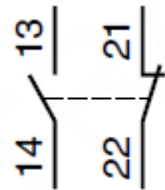
| DN              | 50 | 65   | 80   | 100  | 125   | 150   | 200   | 250   | 300   | 350   | 400 | 450   | 500   | 600   |
|-----------------|----|------|------|------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| $\varnothing A$ | 90 | 105  | 120  | 145  | 170   | 195   | 250   | 310   | 365   | 420   | 472 | 527   | 582   | 683   |
| $\varnothing C$ | 32 | 47.5 | 59.5 | 78.5 | 104.5 | 127.5 | 178.5 | 226.5 | 278.5 | 323.5 | 374 | 402.7 | 451.7 | 552.7 |
| $\varnothing D$ | 44 | 59.5 | 73.5 | 92.5 | 118.5 | 141.5 | 192.5 | 240.5 | 292.5 | 339.5 | 390 | 423.4 | 472.4 | 573.4 |
| $\varnothing E$ | 48 | 63   | 78   | 98   | 123   | 148   | 198   | 247   | 297   | 347   | 397 | 447   | 497   | 597   |
| B               | 6  | 6    | 7    | 7    | 7     | 7     | 7     | 7     | 7     | 8     | 8   | 10    | 10    | 8     |
| L               | 14 | 14   | 19   | 19   | 18.5  | 23.5  | 22.5  | 27    | 26    | 39    | 40  | 44    | 46    | 44    |

**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE**

**SENSOR SIZE ( in mm ) AND SCHEMA :**



Bipolar sensor O + C  
( XE2S P2151 )



**STANDARDS :**

- Manufacturer certified ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : Products excluded from directive ( Article 4, § 3 )
- Certificate 3.1 on request
- Pressure test according to ISO 5208, Rate A
- Between flanges PN10 according to EN 1092-1 PN10

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



## KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE

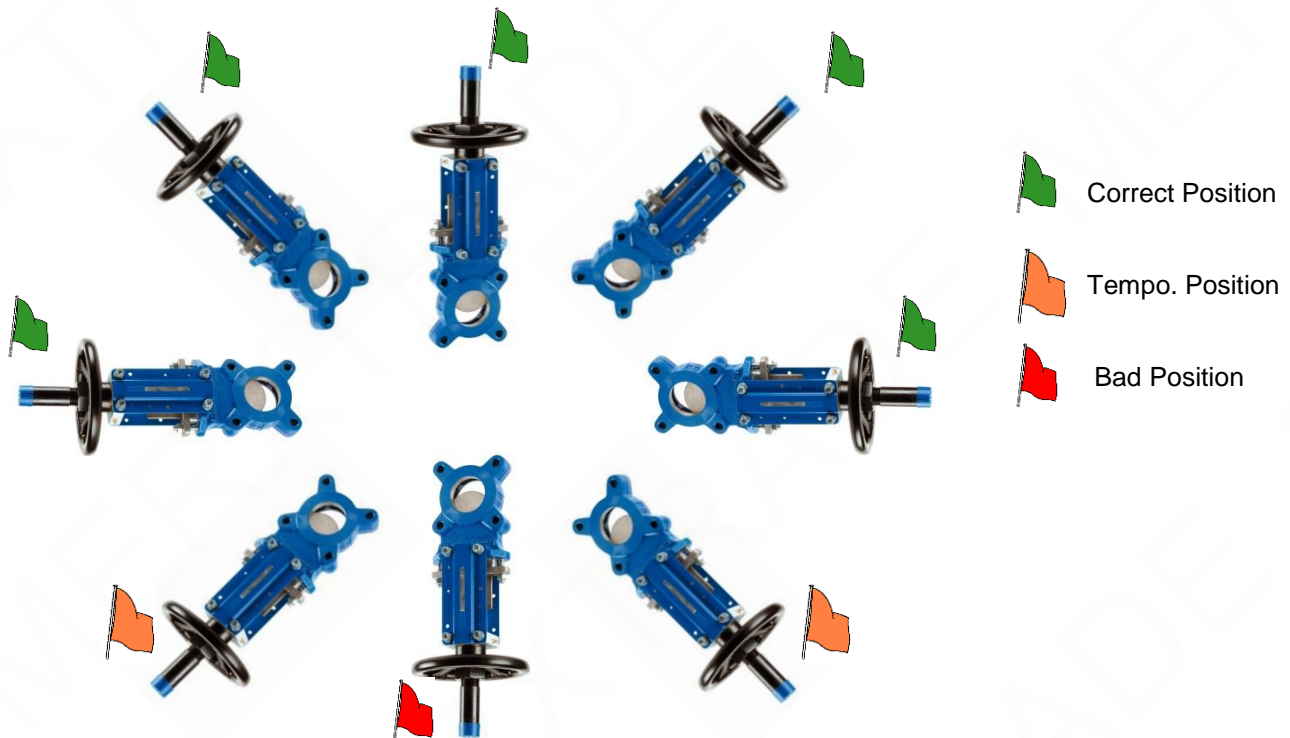
### INSTALLATION INSTRUCTIONS :

#### 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.
- **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.**
- During installation operation, do not carry the valves by the handwheel.
- Valves can be installed in all positions but we recommend the above positions :



**KNIFE GATE VALVE CAST IRON-STAINLESS STEEL-NBR PN10 S-GATE****INSTALLATION INSTRUCTIONS ( SUITE ) :**

- If the valve is installed at the end of the pipe, it must be between 2 flanges.
- The knife gate valves are unidirectional, respect the flow direction indicated on the body by the arrow. When using powders, inverse flow direction
- Tighten the bolts in cross. For blind holes, use studs to have a good tightening and tighten them carefully so that they don't touch the gate.
- During cleaning operation, the valves must be opened.
- Tests must be done with cleaned installation and pipe.
- Test must be done with partially opened valve. Test pressure must not exceed valve specification according to ISO 5208.
- Open carefully the valve.
- Tighten the gland packing at the first start of the installation ( with a moderate torque ) so that there's no leakage and the handwheel is easy to operate. Make sure there's no contact between the gate and the gland.
- Keep greased the stem.
- It's recommended to operate the valve ( open and close ) 1 time per month