

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**



Certificate 3.1

Size : DN 32/40 to DN 1200
Ends : Between flanges PN6,PN10/16,Class 150,JIS10K*
Min Temperature : -15°C
Max Temperature : + 110°C (130°C temporarily)
Max Pressure : 16 Bars up to DN300
Specifications : Long neck for isolation
Ductile iron disc
Vulcanised EPDM seat

Materials : Cast iron body

* according to DN

WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT

SPECIFICATIONS :

- Long neck for isolation
- ISO 5211 mounting pad
- Wafer type
- Between flanges PN6 from DN40 to 150 and for DN300, PN10/16 from DN32 to 600, Class 150 (PN20) from DN40 to 600
- Between flanges JIS10K from DN40 to 300
- Between flanges PN10 from DN 700 to DN1200
- Full crossing stem up to DN600
- With 10 positions lever and locking device up to DN150
- Double PTFE seal on stem up to DN600
- Ductile iron disc nickeled coated (20-30 microns thickness)
- Epoxy painting RAL003 80 microns thickness
- Vulcanised EPDM seat

USE :

- Cold and hot water
- Min and max Temperature Ts : - 15°C to + 110°C (130°C temporarily)
- Max Pressure Ps : 16 bars up to DN300 , 10 bars over

FLOW COEFFICIENT Kv (M3 / h) :

| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | |
|---------------|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Opening angle | 10° | 0,04 | 0,05 | 0,09 | 0,17 | 0,26 | 0,43 | 0,68 | 1,7 | 2,6 | 3,4 | 5,1 | 6,8 | 9,4 | 11,9 | 18,8 |
| | 20° | 2 | 3 | 5 | 8 | 15 | 25 | 38 | 76 | 129 | 200 | 288 | 396 | 525 | 675 | 1042 |
| | 30° | 5 | 6 | 10 | 15 | 31 | 52 | 81 | 160 | 273 | 422 | 610 | 839 | 1101 | 1428 | 2207 |
| | 40° | 10 | 13 | 21 | 33 | 67 | 113 | 175 | 348 | 592 | 914 | 1321 | 1817 | 2407 | 3095 | 4781 |
| | 50° | 18 | 23 | 38 | 60 | 119 | 202 | 312 | 620 | 1055 | 1630 | 2355 | 3239 | 4289 | 5515 | 8521 |
| | 60° | 30 | 38 | 64 | 99 | 196 | 334 | 516 | 1025 | 1746 | 2697 | 3897 | 5359 | 7097 | 9125 | 14098 |
| | 70° | 48 | 60 | 102 | 156 | 310 | 529 | 817 | 1623 | 2764 | 4269 | 6167 | 8481 | 11232 | 14442 | 22312 |
| | 80° | 72 | 90 | 152 | 235 | 466 | 793 | 1226 | 2434 | 4145 | 6403 | 9250 | 12720 | 16848 | 21662 | 33468 |
| | 90° | 78 | 98 | 167 | 258 | 512 | 872 | 1347 | 2675 | 4555 | 7037 | 10165 | 13799 | 18514 | 23805 | 36778 |

| DN | 700 | 800 | 900 | 1000 | 1200 | |
|---------------|-----|-------|-------|-------|--------|--------|
| Opening angle | 10° | 31 | 39 | 52 | 72 | 104 |
| | 20° | 1568 | 2064 | 2612 | 3617 | 5172 |
| | 30° | 3147 | 4143 | 5243 | 7260 | 10379 |
| | 40° | 5739 | 7555 | 9561 | 13238 | 18932 |
| | 50° | 8648 | 11925 | 15091 | 20894 | 29879 |
| | 60° | 12929 | 17827 | 22561 | 31279 | 44730 |
| | 70° | 19692 | 27153 | 34362 | 47641 | 68126 |
| | 80° | 30182 | 41615 | 52667 | 73017 | 104415 |
| | 90° | 42811 | 59028 | 77406 | 103569 | 148105 |

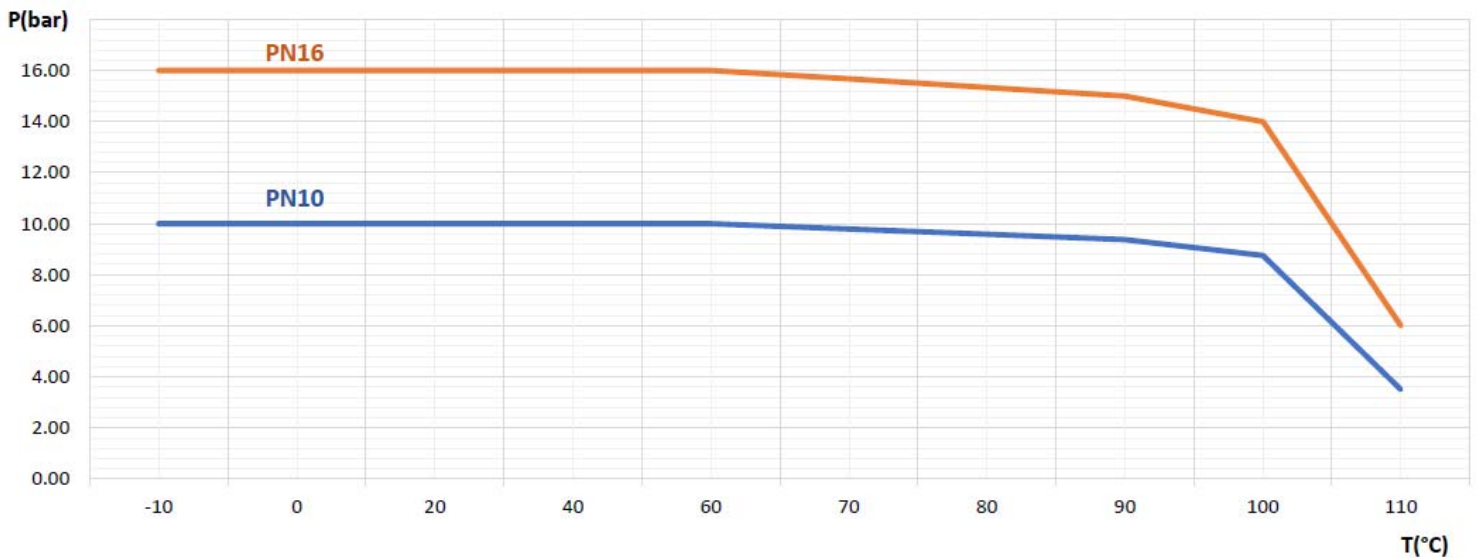
**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

TORQUE VALUE (Nm, without safety coefficient) :

We recommend a safety coefficient of 30% minimum to determinate the actuator.

| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|------|-------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|-------|-------|
| PN10 | 11 | 15 | 24 | 31 | 48 | 73 | 106 | 177 | 281 | 410 | 475 | 746 | 1112 | 1356 | 2468 | 4908 | 6462 | 7886 | 13389 | 18833 |
| PN16 | 12 | 16 | 26 | 33 | 53 | 81 | 119 | 194 | 308 | 441 | - | - | - | - | - | - | - | - | - | - |

PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :

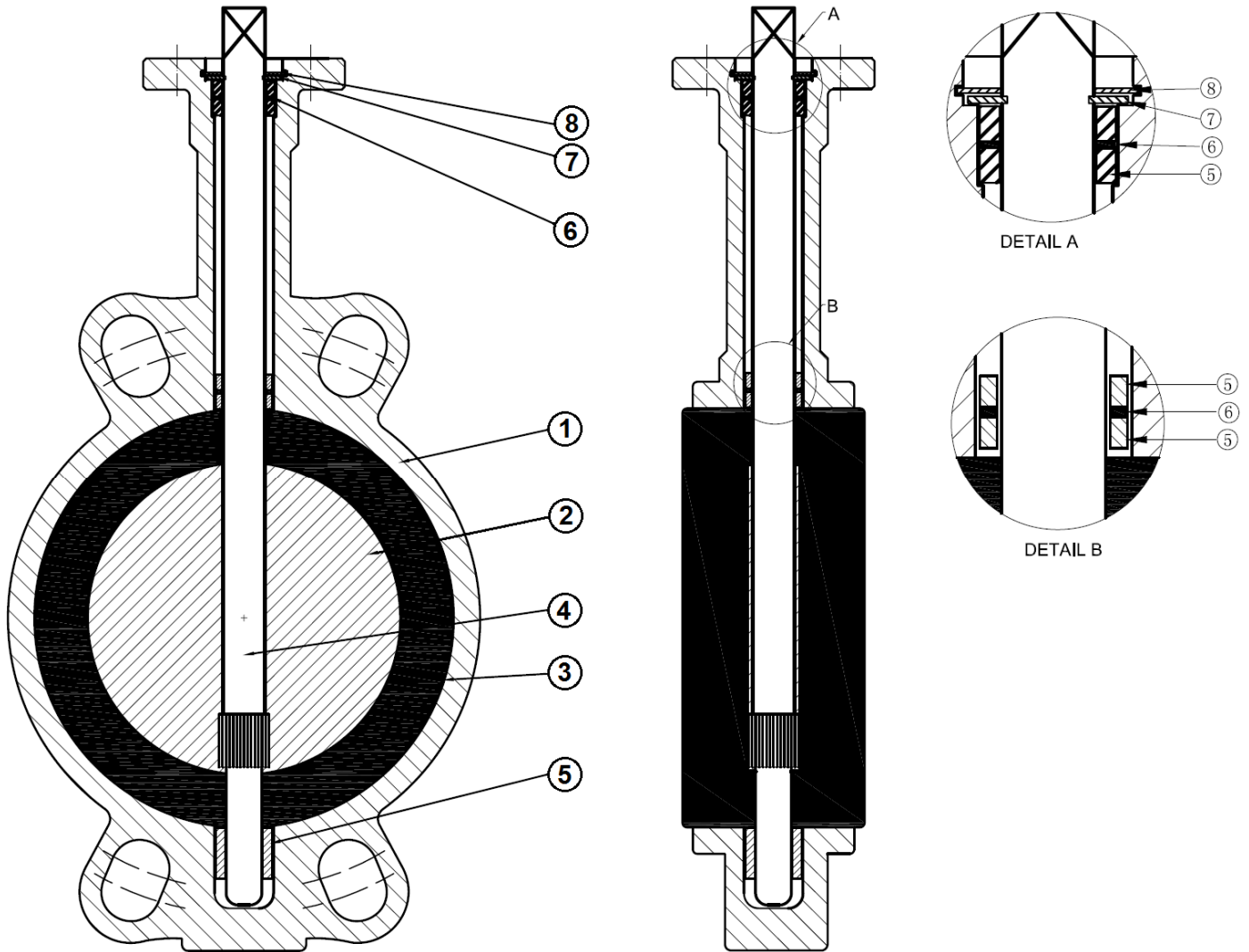


RANGE :

- With lever from DN32/40 to DN300
- With gear box from DN350 to DN1200
- Gear box possible from DN32/40 to DN300 **Ref.1198**

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

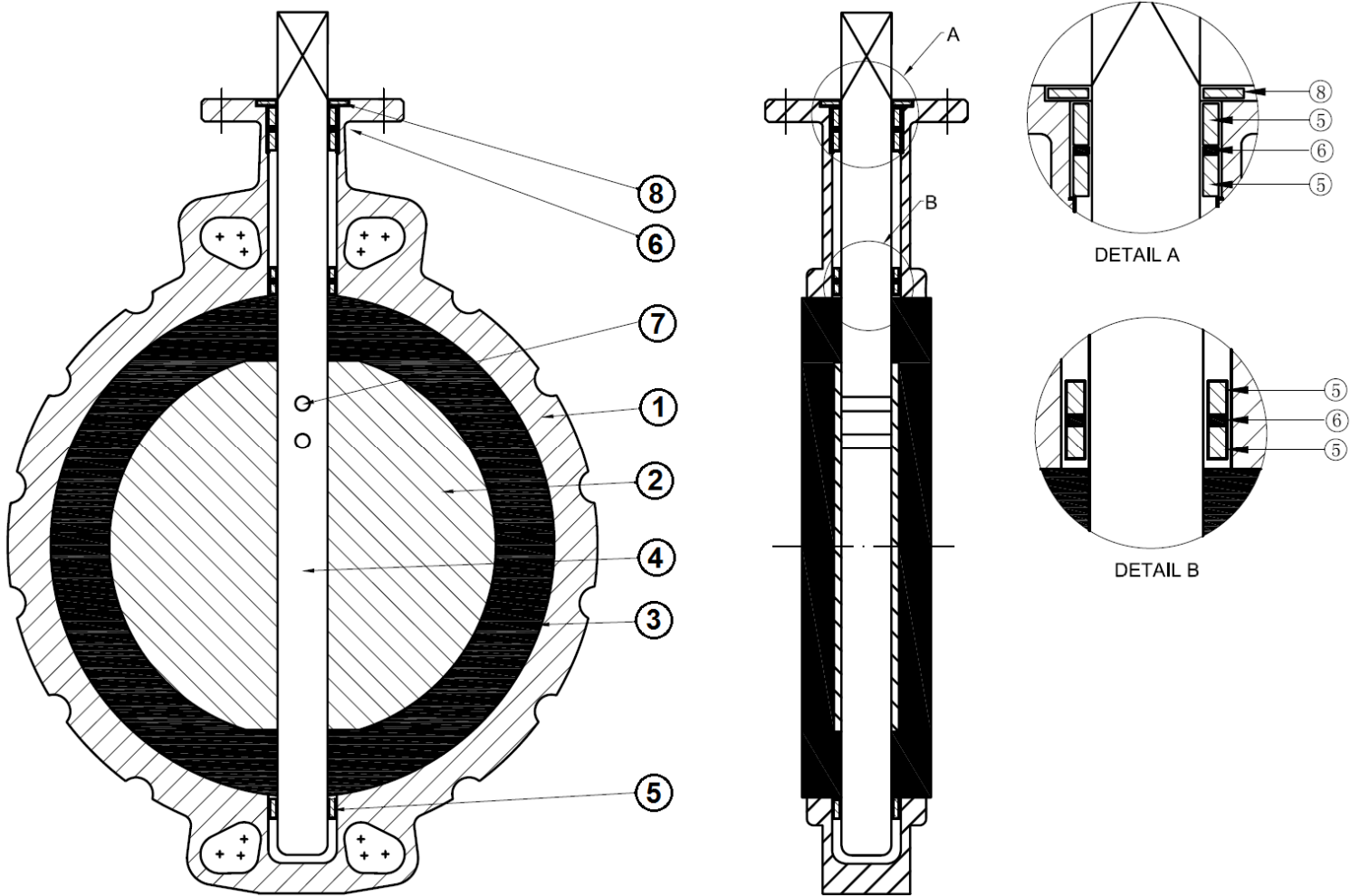
MATERIALS DN 32/40 – 300 :



| Item | Designation | Materials |
|------|-------------|--|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | Ductile iron EN GJS-400-15 nickeled coated |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 416 |
| 5 | Bearing | PTFE |
| 6 | O ring | EPDM |
| 7 | Circlip | Steel |
| 8 | Circlip | Steel |
| | Lever | Aluminium |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

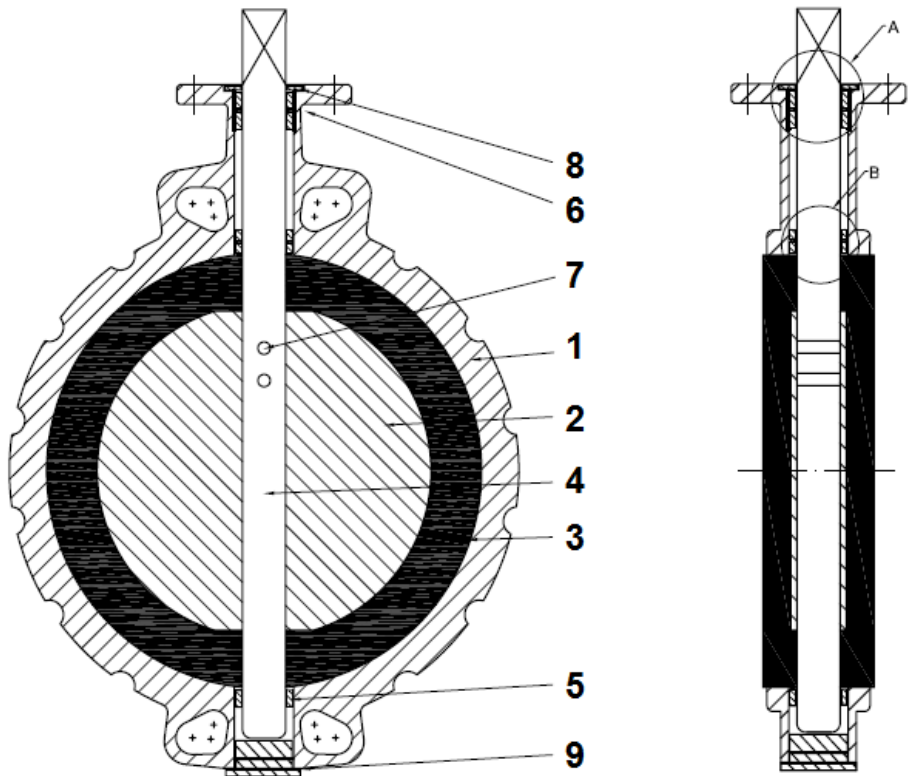
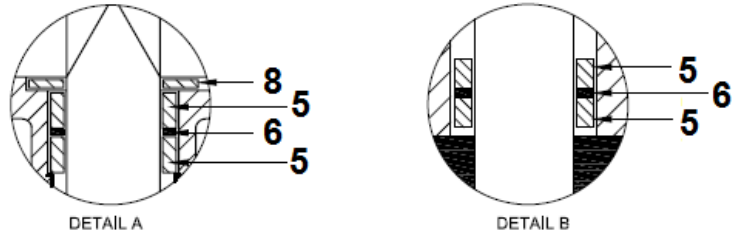
MATERIALS DN 350 :



| Item | Designation | Materials |
|------|-------------|--|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | Ductile iron EN GJS-400-15 nickeled coated |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 431 |
| 5 | Bearing | PTFE |
| 6 | O ring | EPDM |
| 7 | Pin | AISI 316 |
| 8 | Gasket | EPDM |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

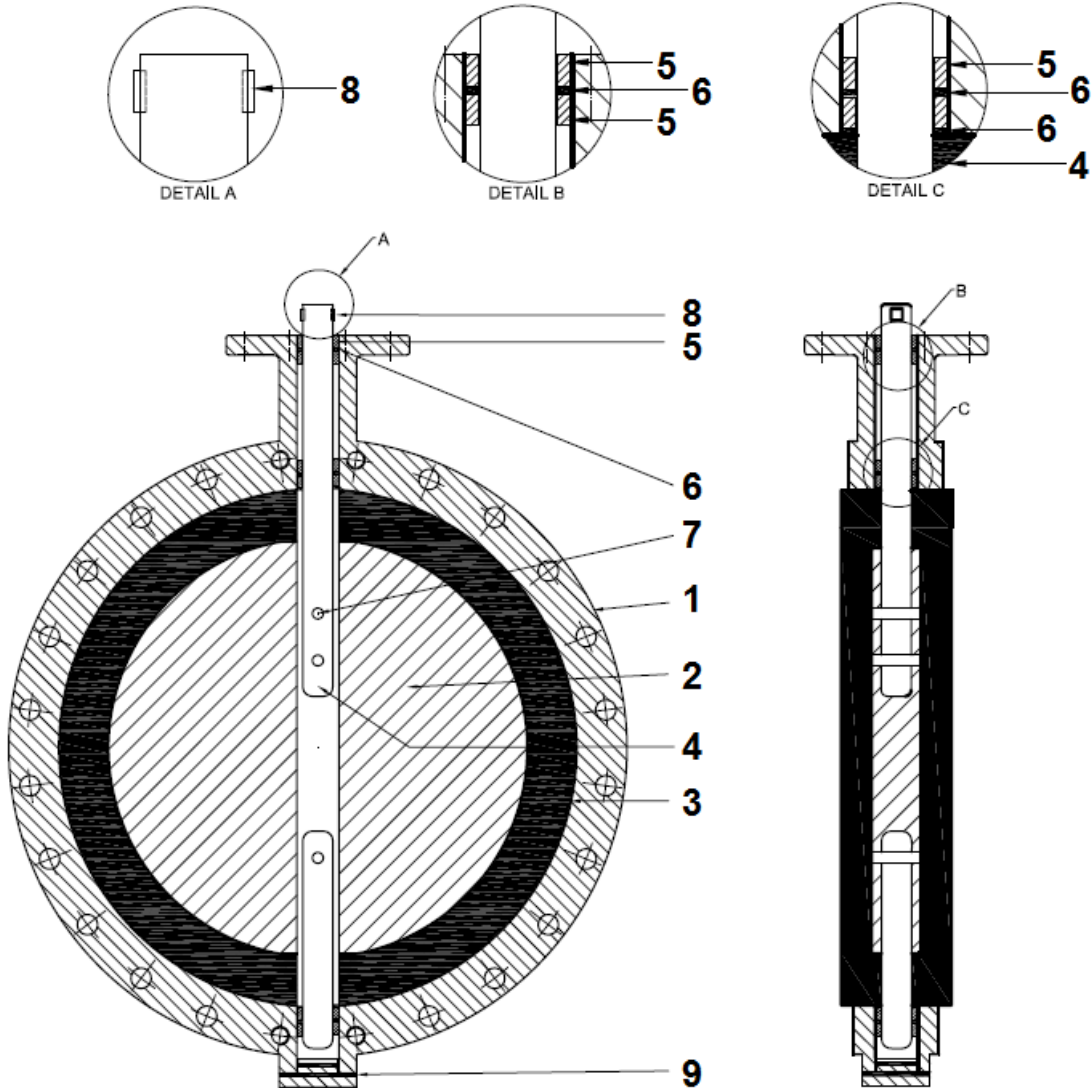
MATERIALS DN 400-600 :



| Item | Designation | Materials |
|------|-------------|--|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | Ductile iron EN GJS-400-15 nickeled coated |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 431 |
| 5 | Bushing | PTFE |
| 6 | O ring | EPDM |
| 7 | Pin | AISI 316 |
| 8 | Gasket | EPDM |
| 9 | Gasket | EPDM |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

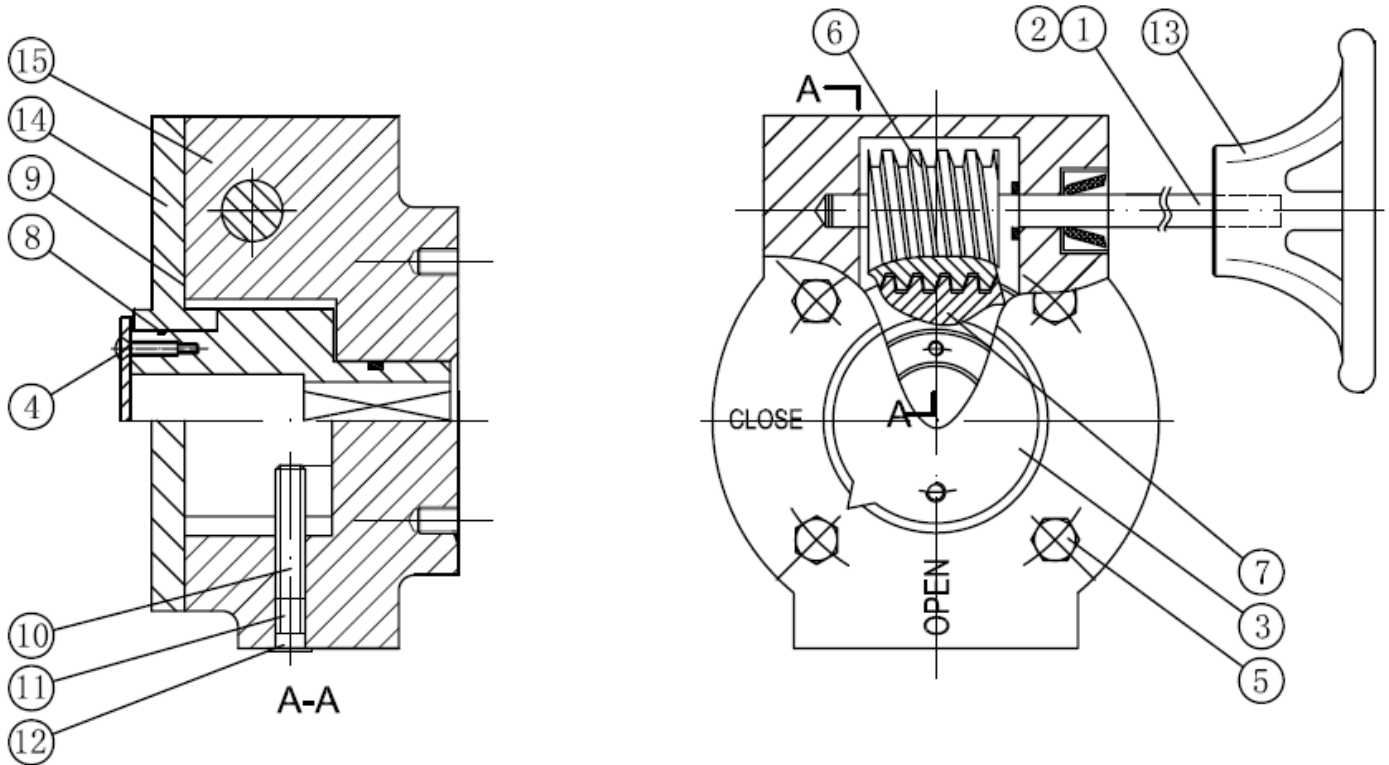
MATERIALS DN 700 – 1200 :



| Item | Designation | Materials |
|------|-------------|--|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | Ductile iron EN GJS-400-15 nickeled coated |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 431 |
| 5 | Bushing | Aluminium + Bronze |
| 6 | O ring | EPDM |
| 7 | Pin | AISI 316 |
| 8 | Pin | SQ 719 |
| 9 | Gasket | EPDM |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

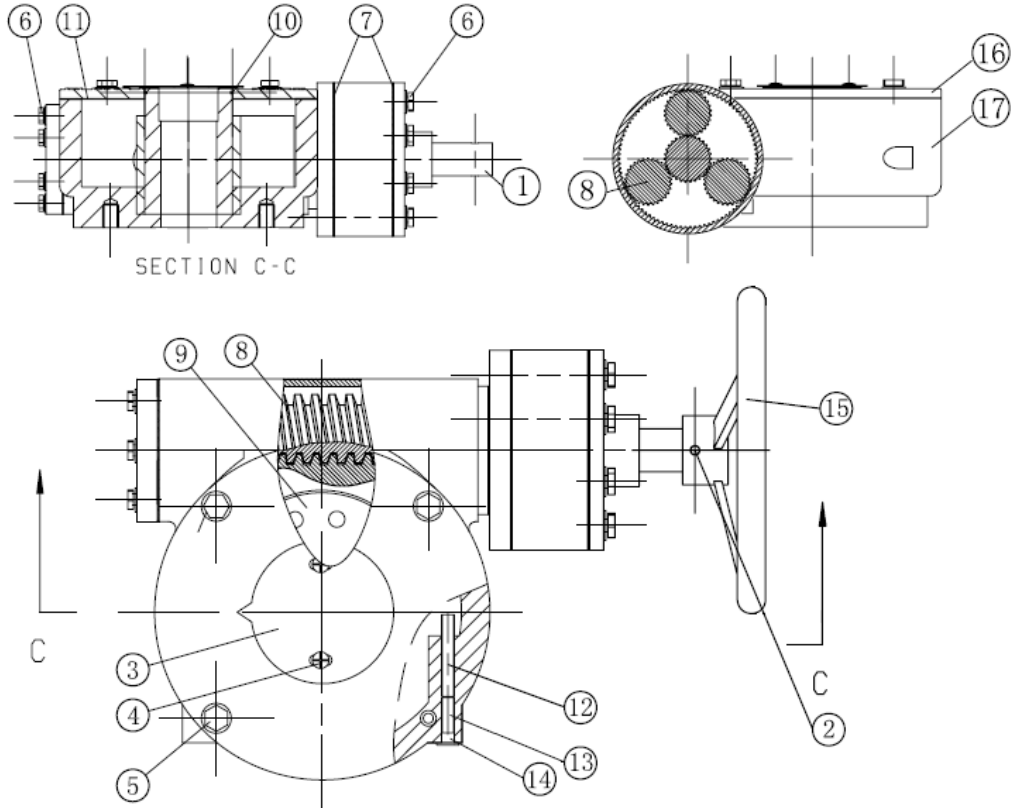
MATERIALS GEARBOX DN40-450 :



| Item | Designation | Materials |
|------|-------------------------|------------------------------------|
| 1 | Stem | Chromed steel |
| 2 | Pin | AISI 316 |
| 3 | Indicator plate | Aluminium + NBR gasket |
| 4 | Indicator bolt, washer | AISI 316 |
| 5 | Bolt, washer | AISI 316 |
| 6 | Gear 1 | Steel |
| 7 | Gear 2 | Ductile iron EN GJS-400-15 |
| 8 | O ring | NBR |
| 9 | Bonnet gasket | NBR |
| 10 | Internal set screw | Carbon steel |
| 11 | External set screw | AISI 316 |
| 12 | Plastic cap | Plastic |
| 13 | Handwheel | Cast iron EN GJL-250 epoxy coating |
| 14 | Bonnet | Cast iron EN GJL-250 epoxy coating |
| 15 | Body | Cast iron EN GJL-250 epoxy coating |
| | Bolting to fix on valve | AISI 304 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

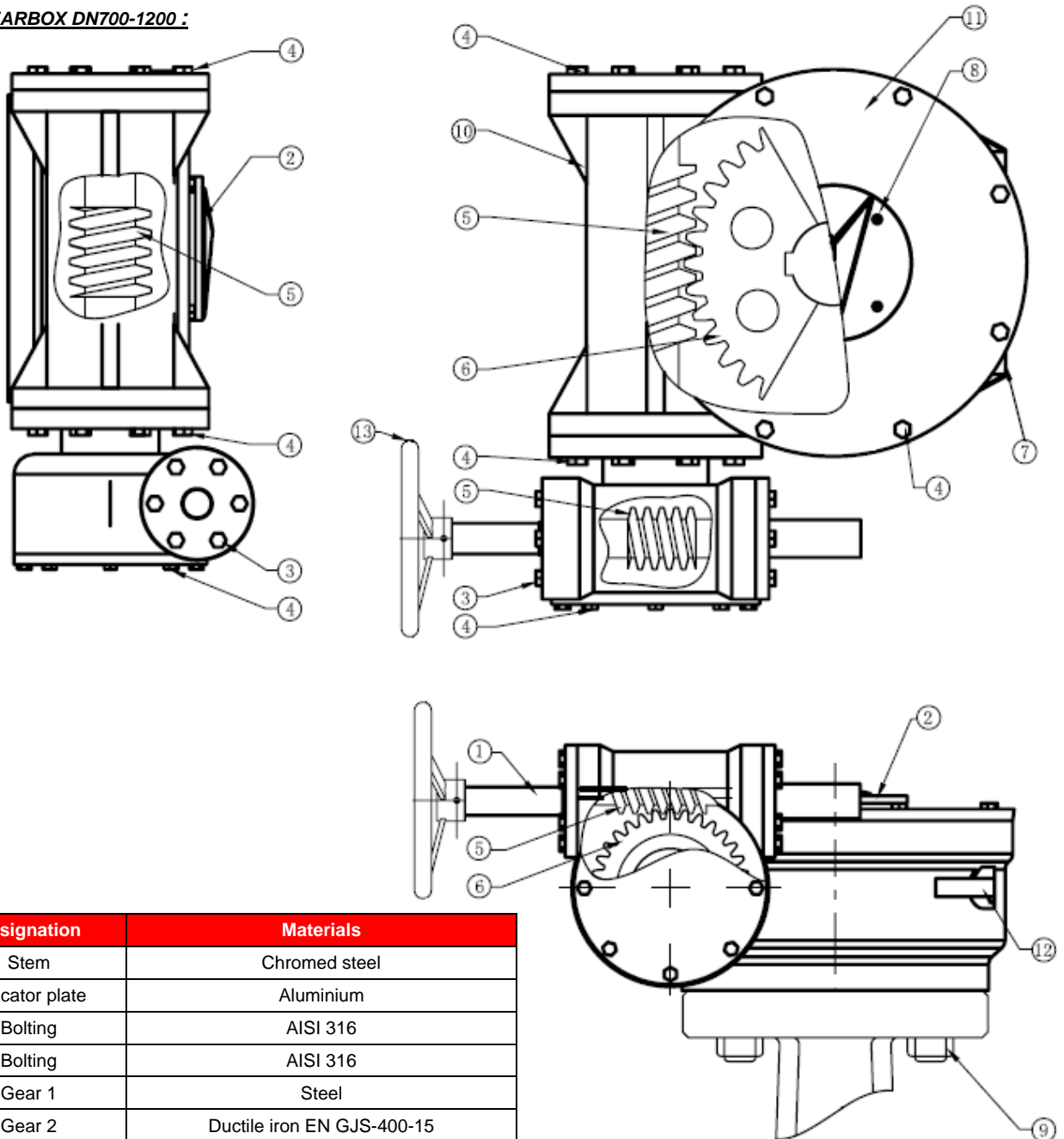
MATERIALS GEARBOX DN500-600 :



| Item | Designation | Materials |
|------|-------------------------|------------------------------------|
| 1 | Stem | Chromed steel |
| 2 | Pin | AISI 316 |
| 3 | Indicator plate | Aluminium + NBR |
| 4 | Indicator bolt, washer | AISI 316 |
| 5 | Bolt, washer | AISI 316 |
| 6 | Bolting | AISI 316 |
| 7 | Body gasket | NBR |
| 8 | Gear 1 | Steel |
| 9 | Gear 2 | Ductile iron EN GJS-400-15 |
| 10 | O ring | NBR |
| 11 | Bonnet gasket | NBR |
| 12 | Internal set screw | Acier |
| 13 | External set screw | AISI 316 |
| 14 | Cap | Plastic |
| 15 | Handwheel | Cast iron EN GJL-250 epoxy coating |
| 16 | Bonnet | Cast iron EN GJL-250 epoxy coating |
| 17 | Body | Cast iron EN GJL-250 epoxy coating |
| | Bolting to fix on valve | AISI 304 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

MATERIALS GEARBOX DN700-1200 :

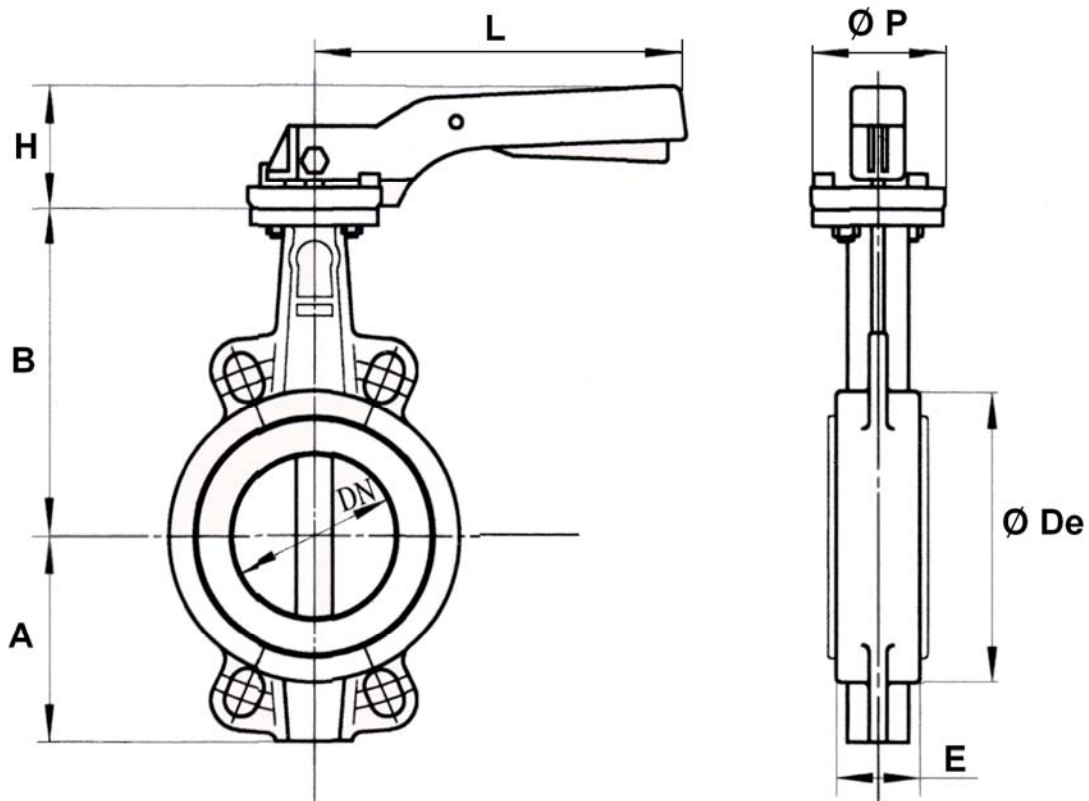


| Item | Designation | Materials |
|------|--------------------|--|
| 1 | Stem | Chromed steel |
| 2 | Indicator plate | Aluminium |
| 3 | Bolting | AISI 316 |
| 4 | Bolting | AISI 316 |
| 5 | Gear 1 | Steel |
| 6 | Gear 2 | Ductile iron EN GJS-400-15 |
| 7 | External set screw | AISI 316 |
| 8 | Screw | AISI 316 |
| 9 | Bolting | AISI 304 |
| 10 | Body | Cast iron EN GJL-250 epoxy coating |
| 11 | Bonnet | Cast iron EN GJL-250 epoxy coating |
| 12 | Internal set screw | Steel |
| 13 | Handwheel | Ductile iron EN GJS-400-15 epoxy coating |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

- VALVES WITH LEVER DN 32/40 - 300 :

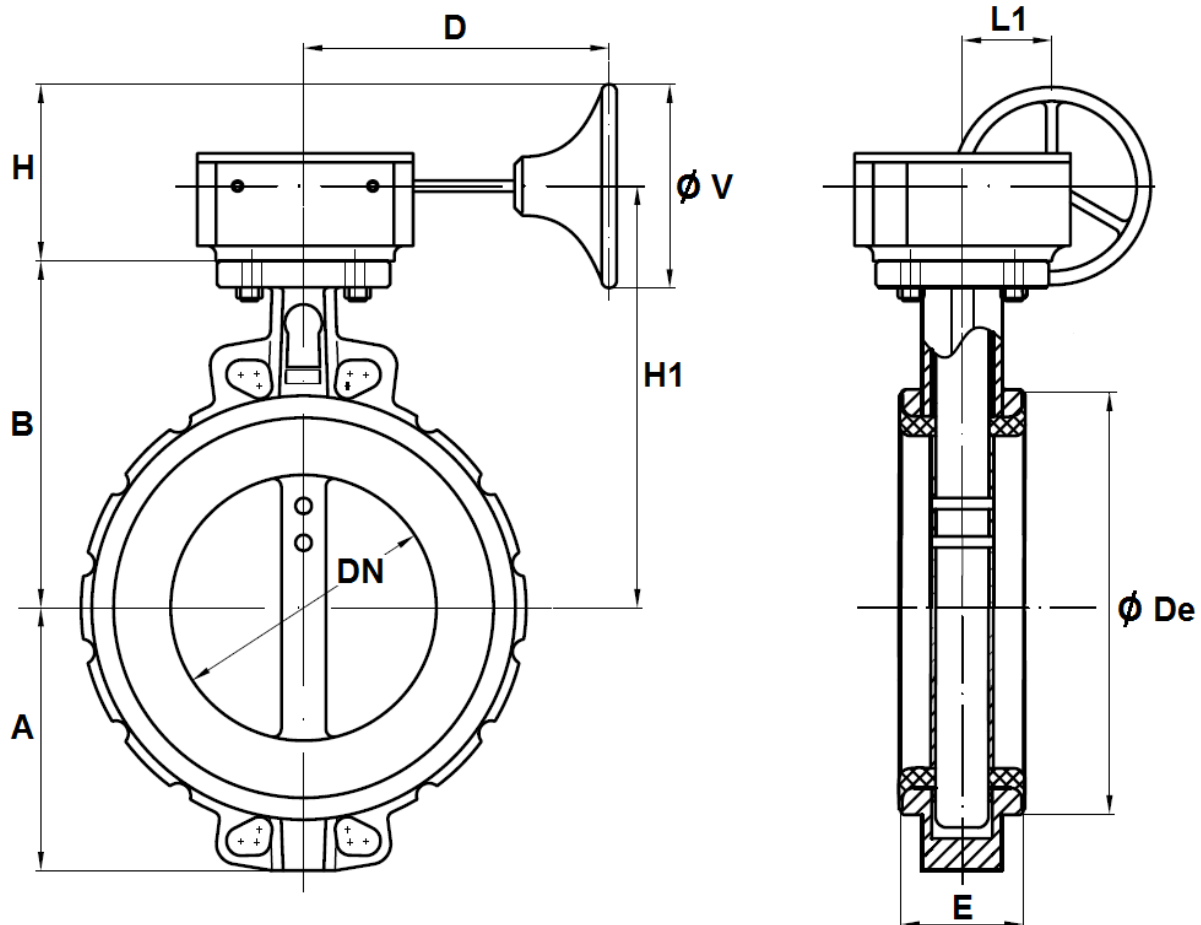


| Ref. | DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
|------|------------|-------|-------|------|------|------|-------|------|-------|------|------|
| 1125 | A | 61 | 77 | 87,5 | 95 | 107 | 121,5 | 144 | 171 | 205 | 235 |
| | B | 130 | 136,5 | 142 | 158 | 180 | 192 | 215 | 242 | 280 | 310 |
| | Ø De | 82 | 95 | 109 | 121 | 152 | 180 | 207 | 260 | 315 | 370 |
| | E | 33 | 43 | 46 | 46 | 52 | 56 | 56 | 60 | 68 | 78 |
| | H | 70 | 70 | 70 | 70 | 70 | 71 | 71 | 40 | 44 | 44 |
| | L | 195 | 195 | 195 | 195 | 195 | 278 | 278 | 355 | 507 | 507 |
| | Ø P | 65 | 65 | 65 | 65 | 65 | 90 | 90 | 125 | 150 | 150 |
| | Weig. (Kg) | 1.85 | 2.53 | 2.86 | 3.16 | 4.21 | 6.67 | 7.66 | 14.67 | 23.4 | 33.8 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

- VALVES WITH GEAR BOX DN 350 :

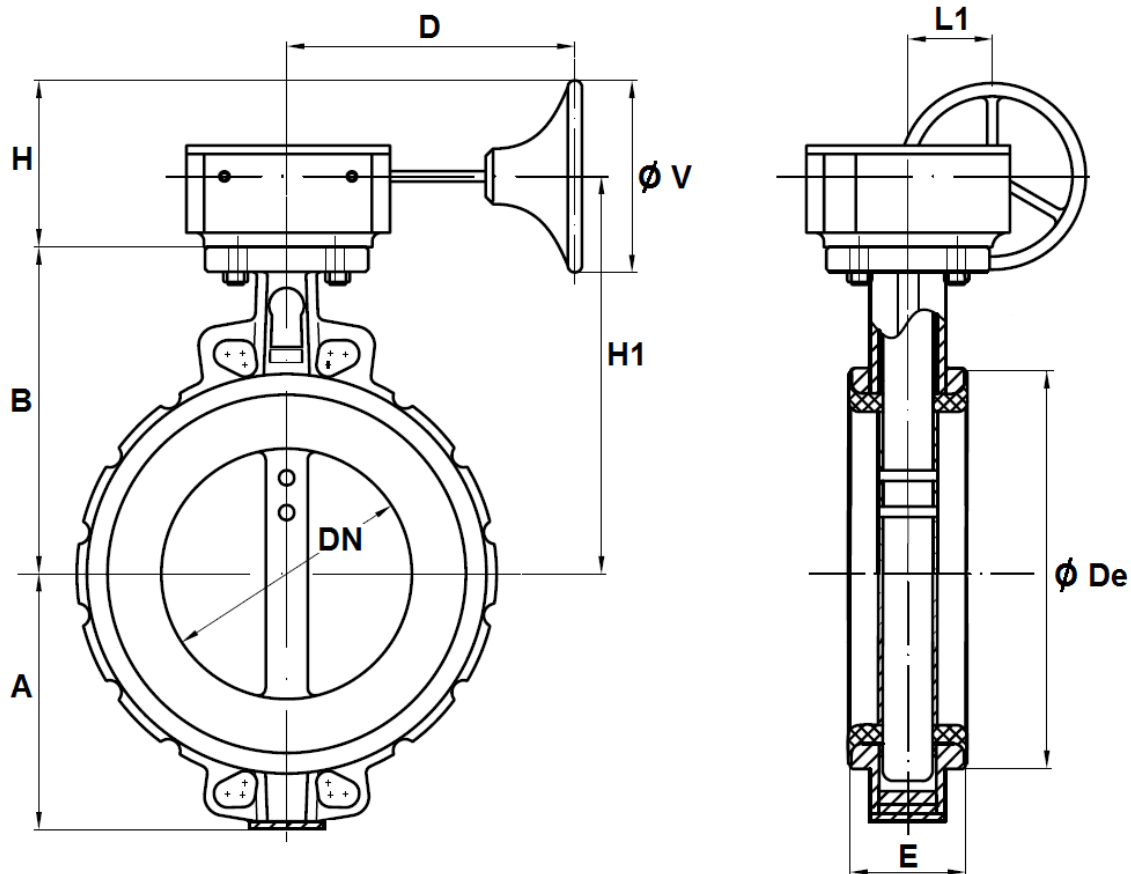


| Ref. | DN | 350 |
|------|-------------|------|
| 1125 | A | 260 |
| | B | 334 |
| | D | 223 |
| | Ø De | 418 |
| | E | 78 |
| | H | 190 |
| | H1 | 379 |
| | L1 | 78 |
| | Ø V | 300 |
| | Weight (Kg) | 54.5 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

- VALVES WITH GEAR BOX DN 400-600 :

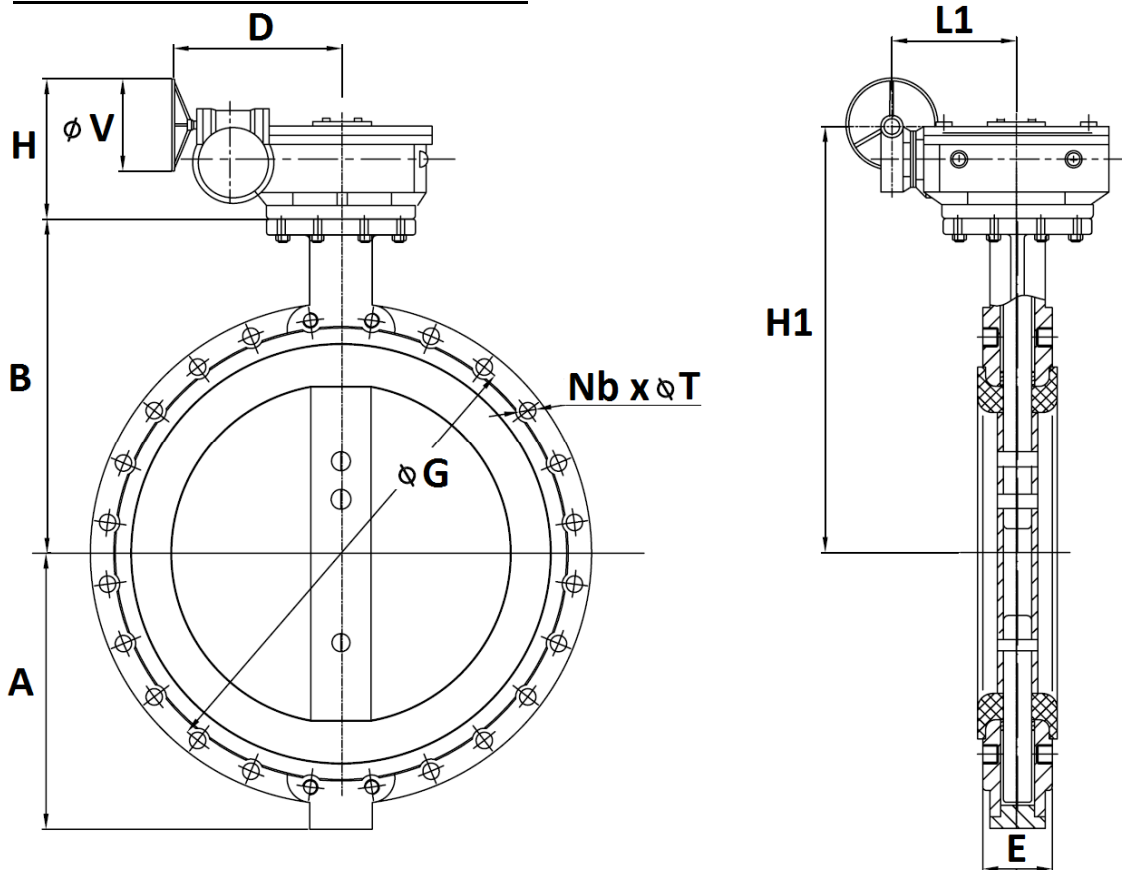


| Ref. | DN | 400 | 450 | 500 | 600 |
|------|-------------|-------|-------|-------|-------|
| 1125 | A | 307 | 339 | 368 | 459 |
| | B | 361 | 401 | 480 | 565 |
| | D | 270 | 270 | 339 | 339 |
| | Ø De | 470 | 525 | 570 | 697 |
| | E | 102 | 114 | 127 | 154 |
| | H | 208 | 258 | 222 | 222 |
| | H1 | 423 | 463 | 545 | 630 |
| | L1 | 120 | 120 | 120 | 120 |
| | Ø V | 400 | 400 | 300 | 300 |
| | Weight (Kg) | 89.85 | 107.4 | 155.8 | 231.1 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

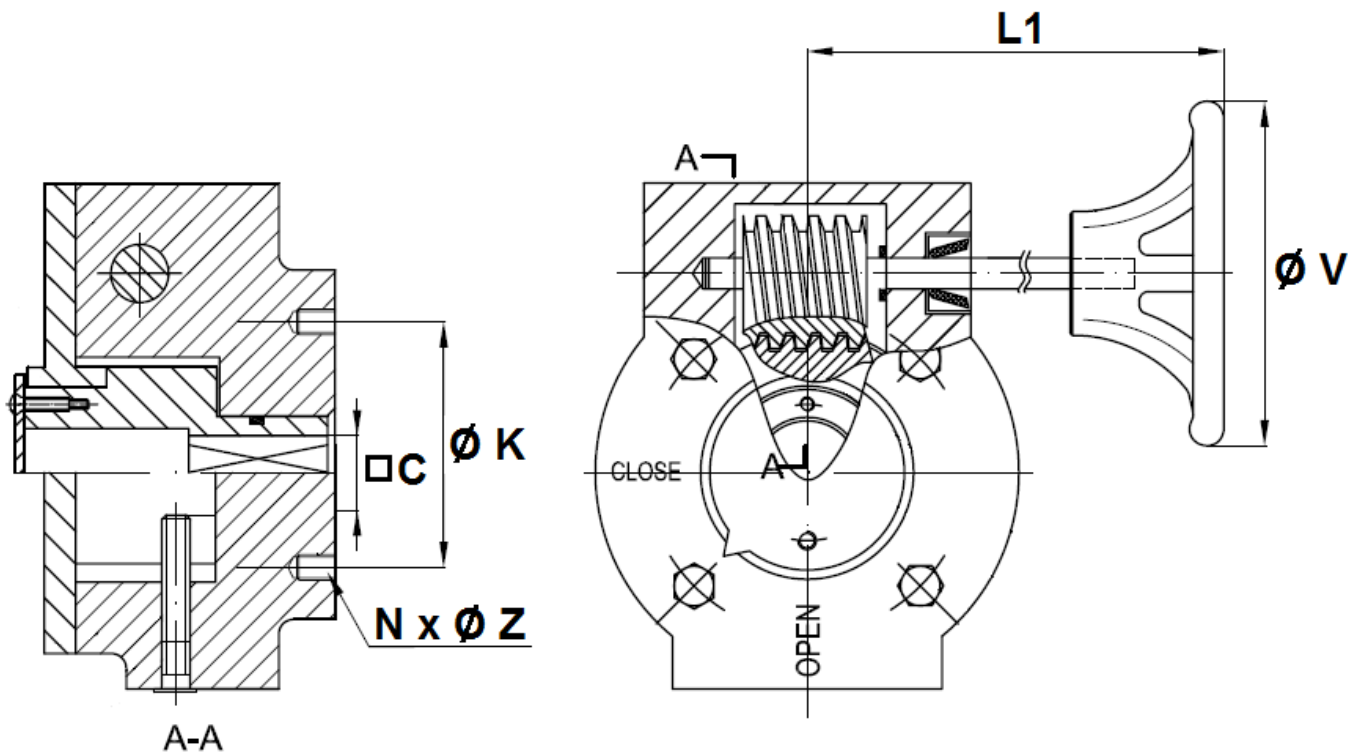
- VALVES WITH GEAR BOX DN 700-1200 :



| Ref. | DN | 700 | 800 | 900 | 1000 | 1200 |
|-------------|---------------|----------------|----------------|----------------|----------------|----------------|
| 1125 | A | 520 | 591 | 656 | 721 | 860 |
| | B | 624 | 672 | 720 | 800 | 941 |
| | D | 355 | 355 | 377.5 | 377.5 | 476 |
| | E | 163 | 188 | 203 | 216 | 276 |
| | H | 357 | 357 | 370 | 370 | 434 |
| | H1 | 781 | 829 | 890 | 970 | 1150 |
| | L1 | 228 | 228 | 243 | 243 | 302 |
| | ϕV | 400 | 400 | 400 | 400 | 450 |
| | ϕG | 840 | 950 | 1050 | 1160 | 1380 |
| | Nb x ϕT | 24 x $\phi 31$ | 24 x $\phi 34$ | 28 x $\phi 34$ | 28 x $\phi 37$ | 32 x $\phi 40$ |
| Weight (Kg) | 372 | 456 | 831 | 982 | 1510 | |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

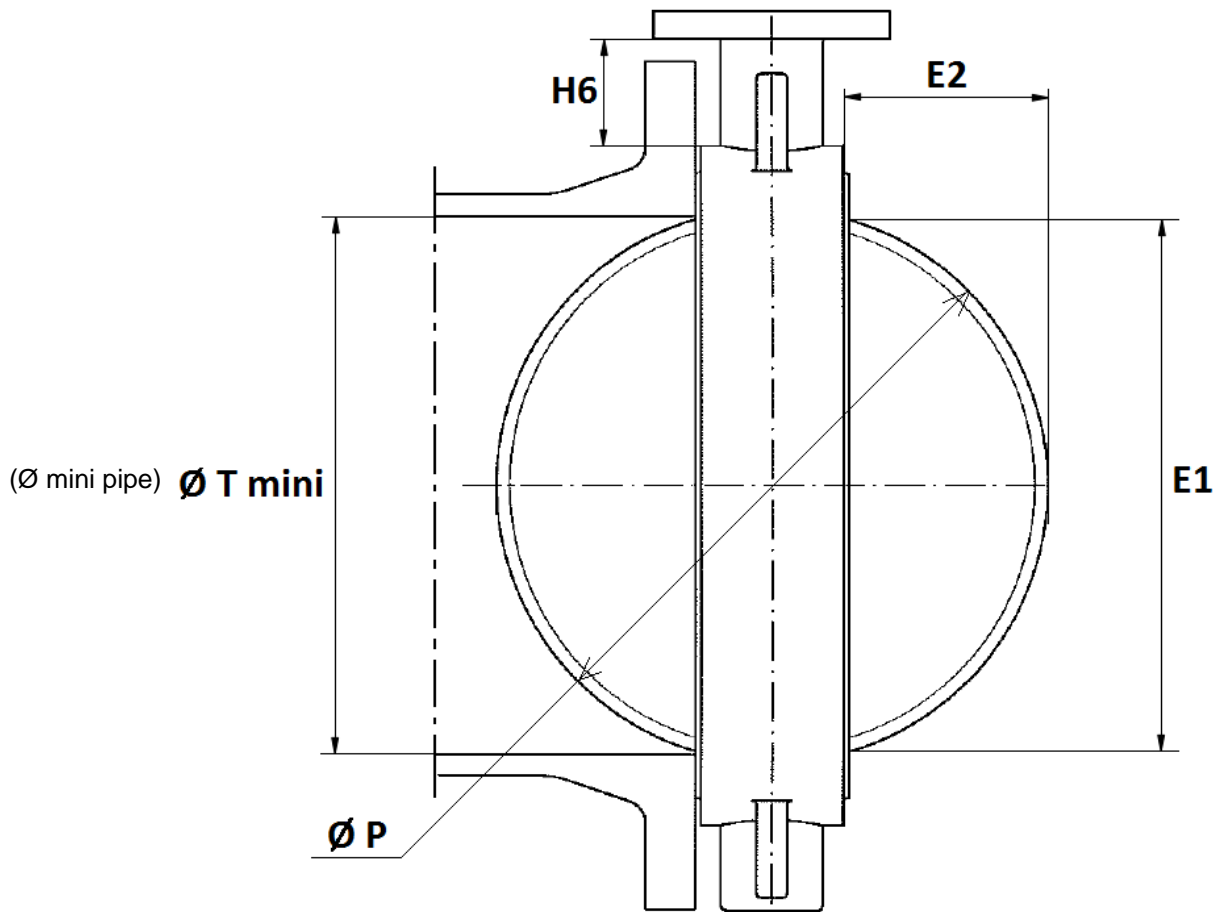
GEAR BOX SIZE DN32/40-300 (in mm) :



| DN | 32/80 | 100 | 125/150 | 200 | 250 | 300 |
|-------------|---------|---------|---------|---------|---------|---------|
| C | 9 | 11 | 14 | 17 | 22 | 27 |
| Ø K | 50 | 50 | 70 | 102 | 125 | 125 |
| ISO | F05 | F05 | F07 | F10 | F12 | F12 |
| Nx ØZ | 4 x M6 | 4 x M6 | 4 x M8 | 4 x M10 | 4 x M12 | 4 x M12 |
| L1 | 156 | 156 | 156 | 241 | 223 | 223 |
| Ø V | 145 | 145 | 245 | 295 | 295 | 295 |
| Weight (kg) | 3.51 | 4.22 | 3.53 | 6.99 | 7.42 | 9.6 |
| Ref. | 1198001 | 1198002 | 1198003 | 1198004 | 1198005 | 1198006 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

DISC AND NECK SIZE (in mm) :

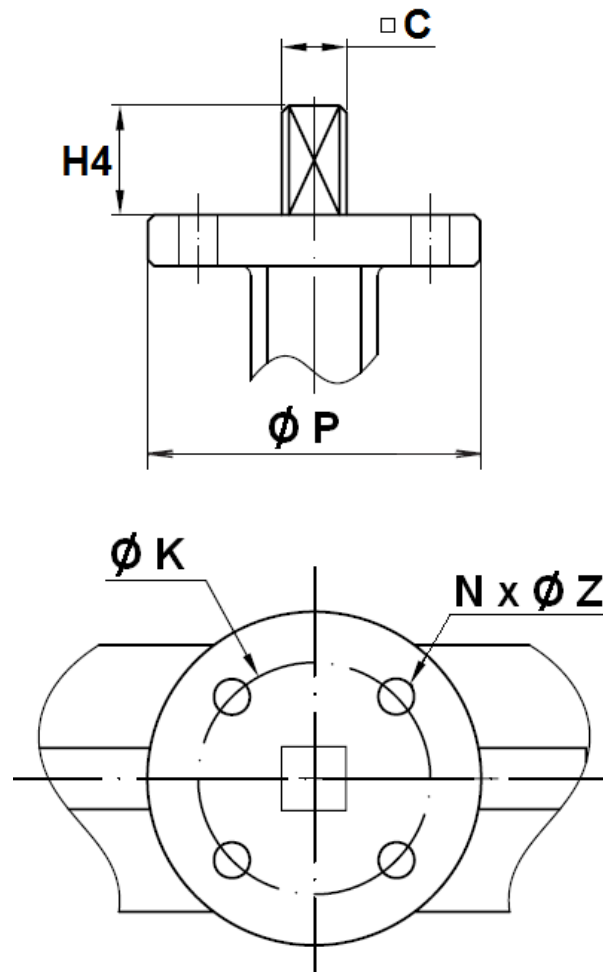


| DN | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----------|------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| E1 | 37.7 | 47.06 | 59.81 | 75.56 | 98.37 | 117.02 | 147.65 | 195.3 | 242.5 | 292.6 | 325.4 | 379.8 | 429 | 480.2 | 580.5 |
| E2 | 4.9 | 5 | 9.4 | 16.5 | 26.1 | 33.9 | 49.7 | 71.2 | 91.2 | 111.8 | 127.8 | 143.9 | 163.3 | 182.3 | 219.3 |
| H6 ±2 | 76.7 | 79 | 79 | 87.5 | 92.3 | 90.3 | 99.2 | 99.5 | 103.8 | 105.8 | 105.8 | 109.5 | 113 | 172 | 192 |
| Ø P | 42.8 | 53 | 64.8 | 79.1 | 104.25 | 123.8 | 155.4 | 202.4 | 250.5 | 301.6 | 333.7 | 389.8 | 440.7 | 491.8 | 592.7 |
| Ø T mini | 43 | 53 | 65 | 79.5 | 104.5 | 124 | 155.5 | 202.5 | 250.5 | 302 | 334 | 390 | 441 | 492 | 593 |

| DN | 700 | 800 | 900 | 1000 | 1200 |
|----------|-----|-----|-----|------|------|
| Ø T mini | 694 | 795 | 865 | 964 | 1158 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

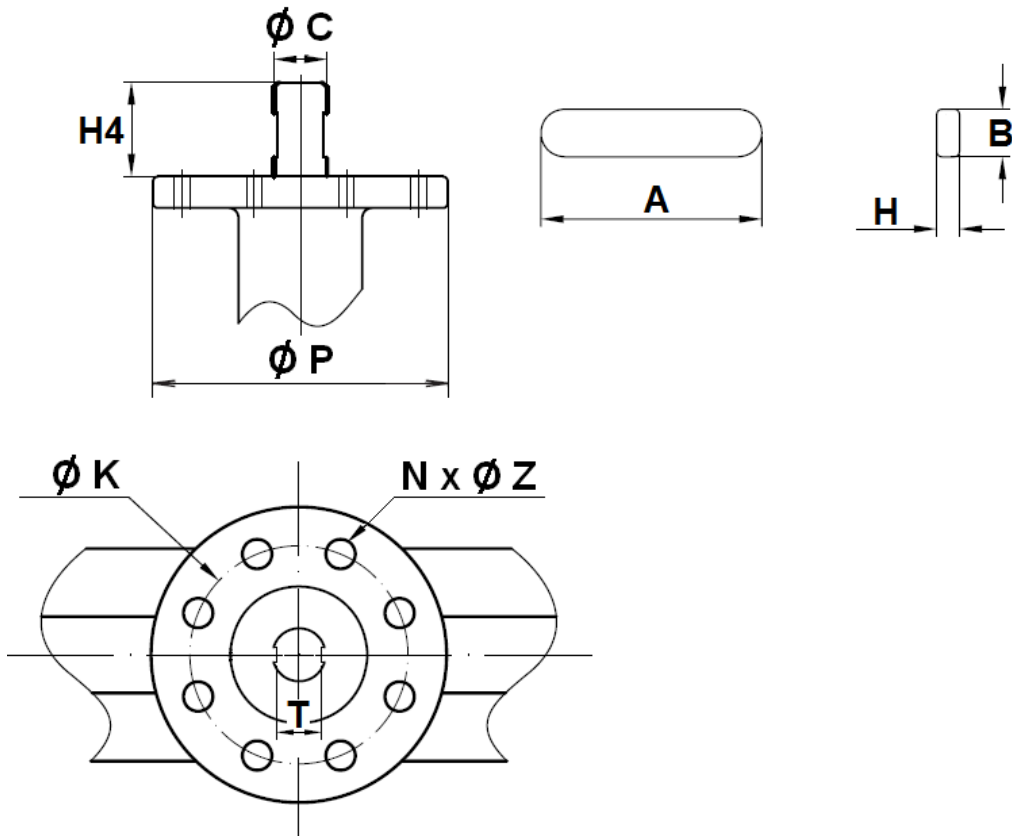
ISO MOUNTING PAD SIZE (in mm) DN 32 – 600 :



| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| C | 9 | 9 | 9 | 9 | 11 | 14 | 14 | 17 | 22 | 27 | 27 | 27 | 30 | 36 | 46 |
| $\varnothing K$ | 50 | 50 | 50 | 50 | 50 | 70 | 70 | 102 | 125 | 125 | 125 | 125 | 165 | 165 | 165 |
| ISO | F05 | F05 | F05 | F05 | F05 | F07 | F07 | F10 | F12 | F12 | F12 | F12 | F16 | F16 | F16 |
| $N \times \varnothing Z$ | 4 x 7 | 4 x 7 | 4 x 7 | 4 x 7 | 4 x 7 | 4 x 9 | 4 x 9 | 4 x 11 | 4 x 13 | 4 x 13 | 4 x 14 | 4 x 14 | 4 x 22 | 4 x 22 | 4 x 22 |
| H4 | 32 | 32 | 32 | 32 | 32 | 42 | 42 | 36 | 38 | 38 | 45 | 50 | 50 | 65 | 70 |
| $\varnothing P$ | 65 | 65 | 65 | 65 | 65 | 90 | 90 | 125 | 150 | 150 | 150 | 150 | 210 | 210 | 300 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

ISO MOUNTING PAD SIZE (in mm) DN 700 – 1200 :



| DN | 700 | 800 | 900 | 1000 | 1200 |
|-------|--------|--------|--------|--------|--------|
| Ø C | 63.35 | 63.35 | 75 | 85 | 105 |
| Ø K | 254 | 254 | 254 | 254 | 298 |
| ISO | F25 | F25 | F25 | F25 | F30 |
| Nx ØZ | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 22 |
| H4 | 80 | 80 | 118 | 142 | 150 |
| Ø P | 300 | 300 | 300 | 300 | 350 |
| A | 60 | 60 | 100 | 110 | 110 |
| B | 18 | 18 | 20 | 22 | 28 |
| H | 11 | 11 | 12 | 14 | 16 |

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

GEARBOX SPECIFICATIONS :

| DN | 32/80 | 100 | 125/150 | 200 | 250 | 300 |
|--------------------|---------|---------|---------|---------|---------|---------|
| Ref. | 1198001 | 1198002 | 1198003 | 1198004 | 1198005 | 1198006 |
| Ratio factor | 24 :1 | 24 :1 | 24 :1 | 30 :1 | 30 :1 | 50 :1 |
| Input torque (Nm) | 18 | 18 | 18 | 58 | 58 | 60 |
| Output torque (Nm) | 170 | 170 | 170 | 700 | 700 | 1200 |

| DN | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|--------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|---------|
| Ratio factor | 50 :1 | 80 :1 | 80 :1 | 260 :1 | 300 :1 | 704 :1 | 704 :1 | 832 :1 | 832 :1 | 1056 :1 |
| Input torque (Nm) | 60 | 78 | 78 | 30 | 45 | 95 | 95 | 178 | 178 | 260 |
| Output torque (Nm) | 1200 | 2500 | 2500 | 2500 | 4000 | 8000 | 8000 | 15000 | 15000 | 25000 |

STANDARDS :

- Fabrication according to ISO 9001 :2015
- Designing according to API 609
- DIRECTIVE 2014/68/EU : CE N° 0035 (up to DN600)
Risk category III module H (up to DN600)
- Certificate 3.1 on request
- Pressure tests according to API 598, table 6
- Length according to ISO 5752 series 20, EN 558 series 20 (NF 29305)
- ISO 5211 mounting pad
- Between flanges according to EN 1092-1 PN6-PN10/16 and ASME B16.5 Class 150 (PN20)

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.

**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

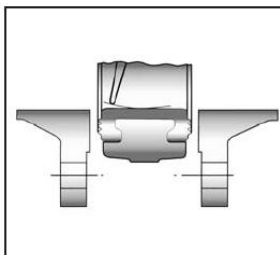
INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

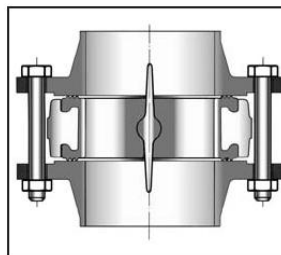
- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves 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 :

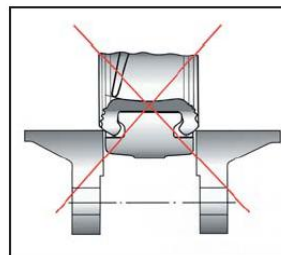
- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not 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.**
- 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 API 598.
- 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)**



**WAFER BUTTERFLY VALVE INITIAL RANGE
CAST IRON BODY WITH DUCTILE IRON DISC AND EPDM SEAT**

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.