

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

Wafer butterfly valve initial range for cold and hot water, sea water, demineralized water, alcohol, milk of lime, mercury, alcalins, hydroxid of soda.

Cast iron EN GJL-250 body, stainless steel disc and EPDM seat.

Between flanges PN6, PN10, PN16, Class 150 or JIS10K according to DN.

Handling possible with gearbox.

Thanks to the ISO 5211 plate, an actuator can be installed on the valve.



Size : DN32/40 to DN1200

Connection : Between flanges PN6, PN10/16, Class 150 or JIS10K*

Min Temperature : -15°C

Max Temperature : +110°C (130°C temporarily)

Max Pressure : 16 Bars up to DN300

Specifications : Long neck for isolation
Stainless steel disc
Vulcanised EPDM seat
ISO 5211 mounting pad

Materials : Cast iron EN GJL250 body, EPDM seat

*according to DN

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
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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
- Stainless steel disc
- Epoxy painting RAL003 80 microns thickness
- Vulcanised EPDM seat

USE :

- Cold and hot water, sea water, demineralized water, alcohol, milk of lime, mercury, alcalins, hydroxid of soda
- 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 | 75406 | 103569 | 148105 |

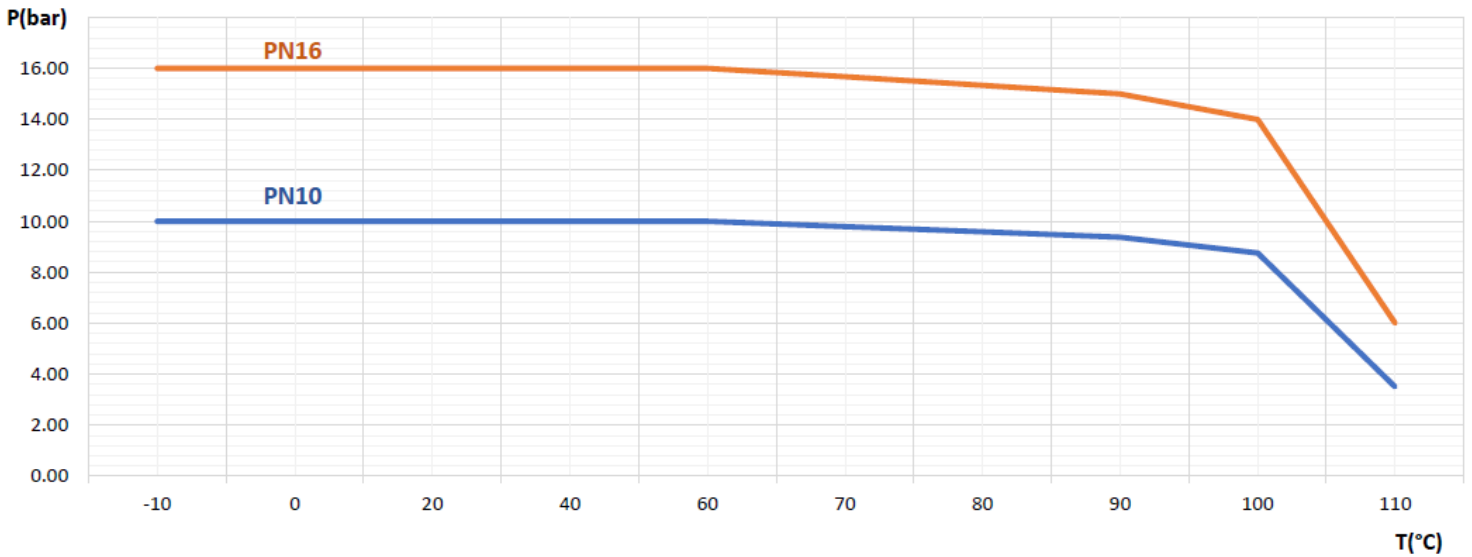
**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

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 :

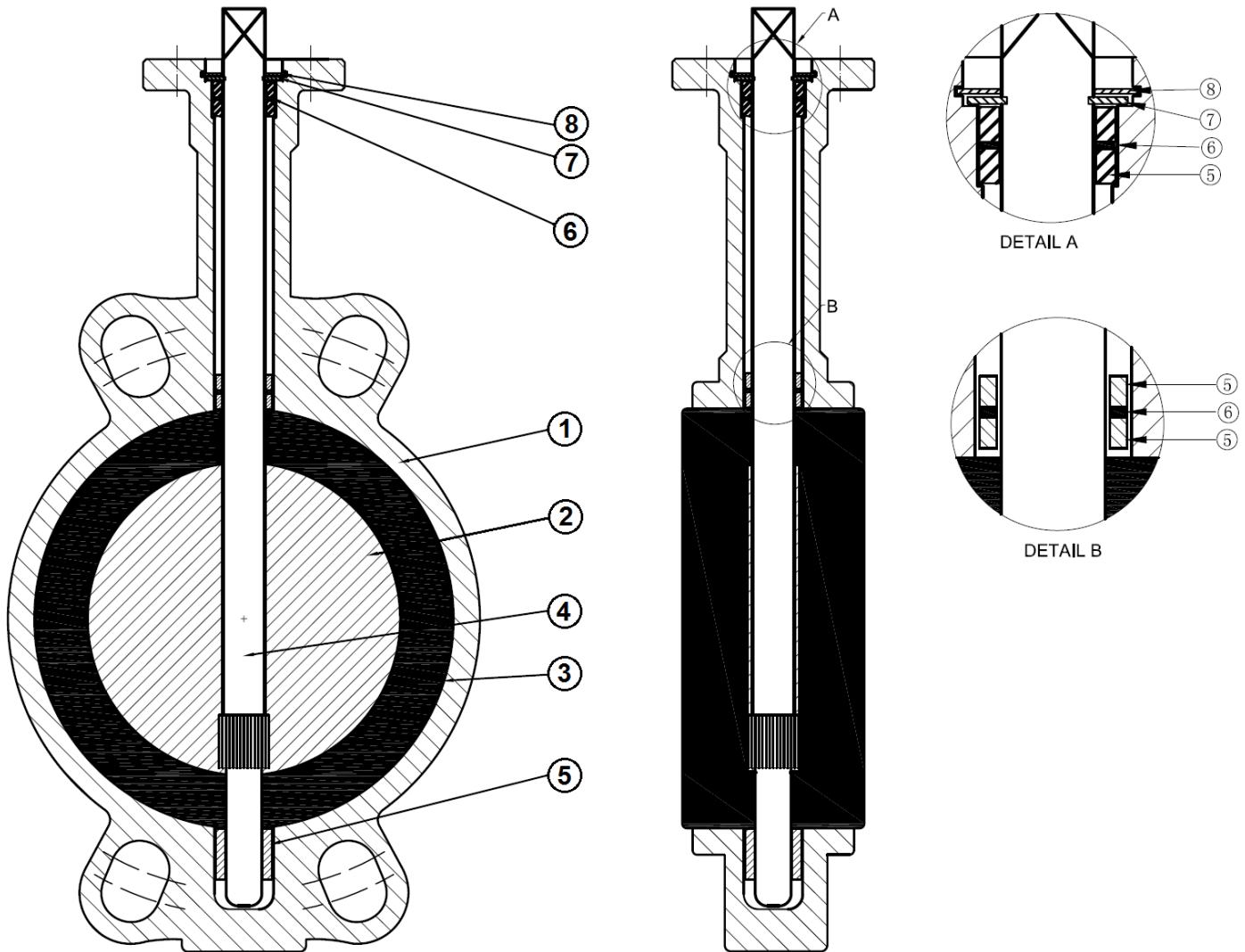
- With lever from DN32/40 to DN300

- With gear box from DN350 to DN1200

- Gear box possible from DN32/40 to DN300 **Ref.1198**

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

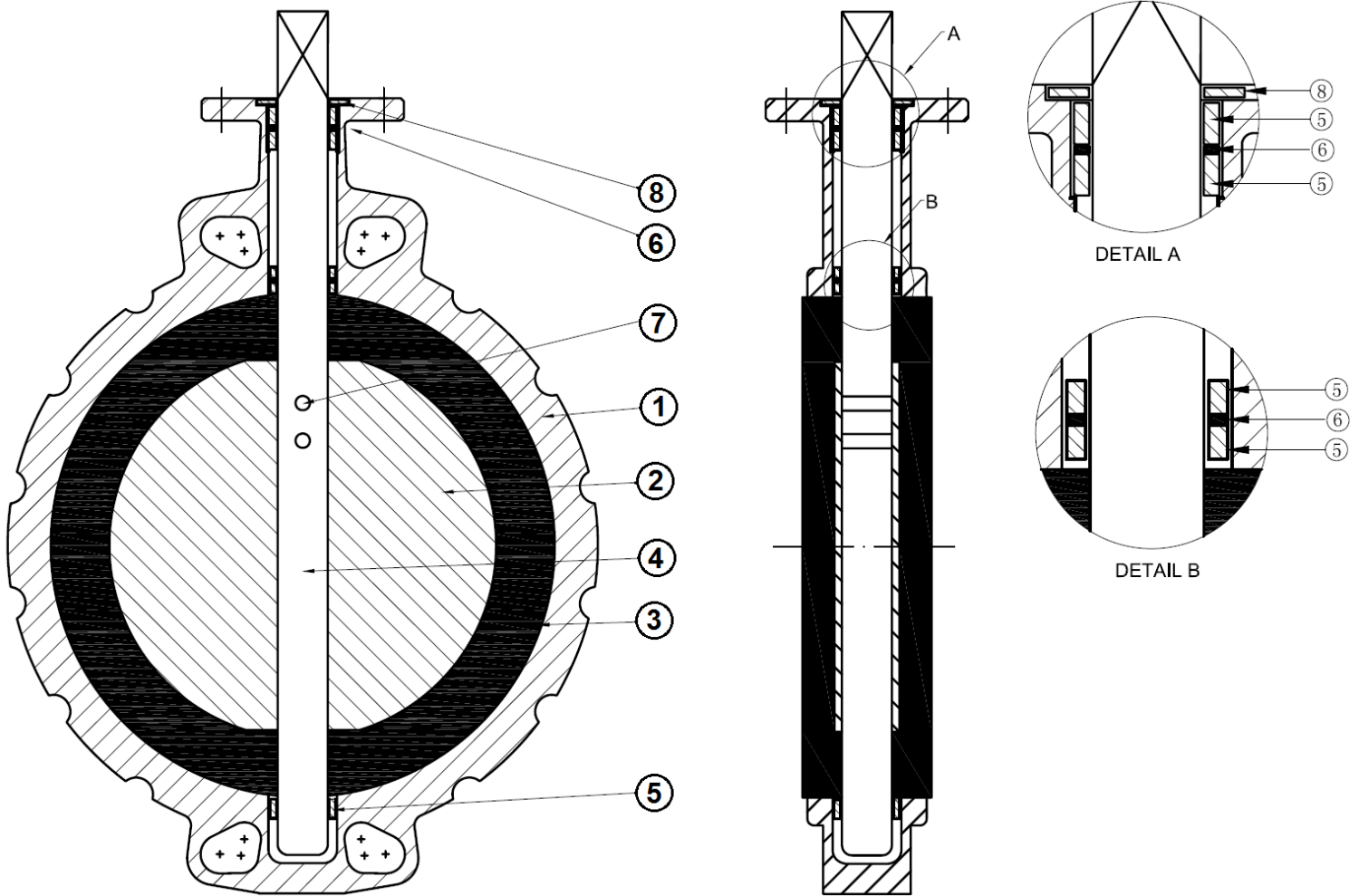
MATERIALS DN 32/40 – 300 :



| Item | Designation | Materials |
|------|-------------|----------------------|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 416 |
| 5 | Bushing | PTFE |
| 6 | O ring | EPDM |
| 7 | Circlip | Steel |
| 8 | Circlip | Steel |
| | Lever | Aluminium |

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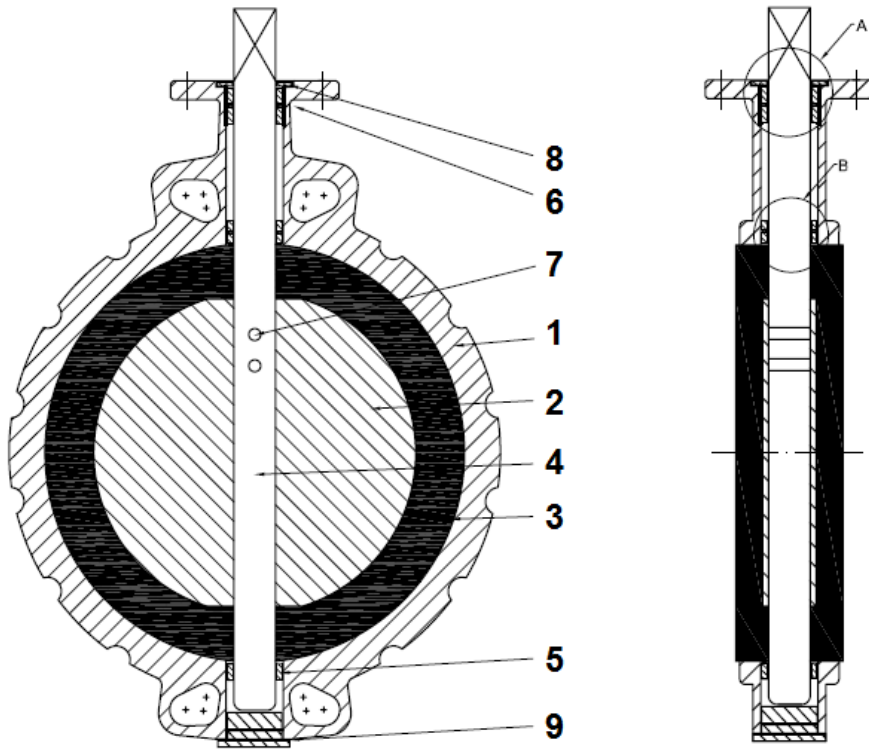
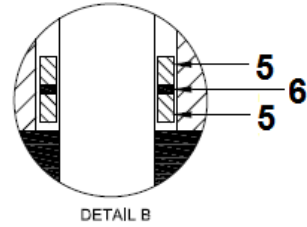
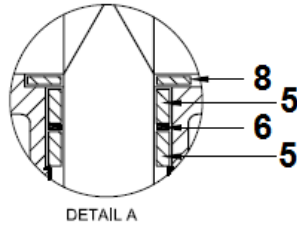
MATERIALS DN 350 :



| Item | Designation | Materials |
|------|-------------|----------------------|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 431 |
| 5 | Bushing | PTFE |
| 6 | O ring | EPDM |
| 7 | Pin | AISI 316 |
| 8 | Gasket | EPDM |

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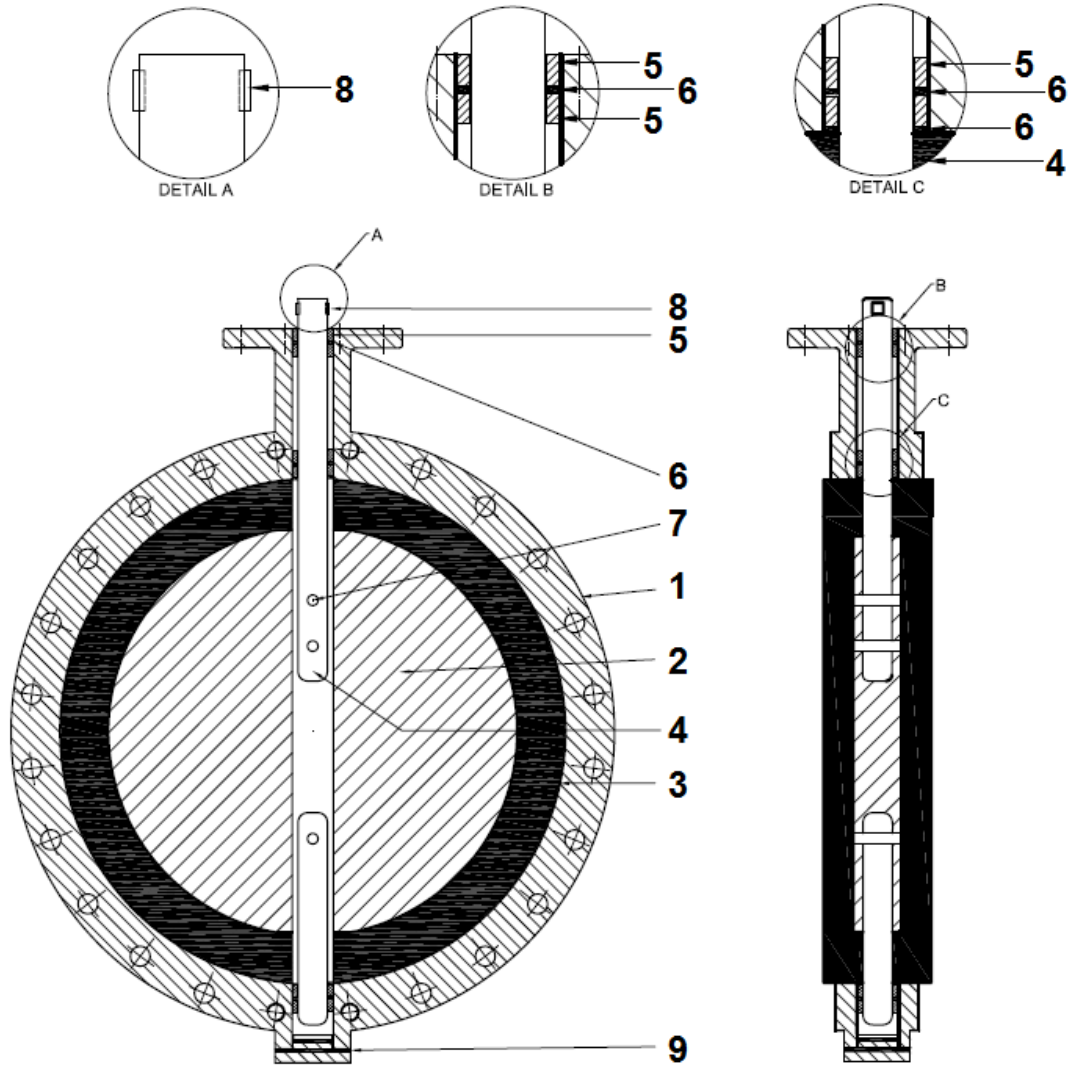
MATERIALS DN 400-600 :



| Item | Designation | Materials |
|------|-------------|----------------------|
| 1 | Body | Cast iron EN GJL-250 |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Seat | EPDM |
| 4 | Stem | AISI 431 |
| 5 | Bushing | PTFE |
| 6 | O ring | EPDM |
| 7 | Pin | AISI 316 |
| 8 | Gasket | EPDM |
| 9 | | |

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STAINLESS STEEL DISC AND EPDM SEAT**

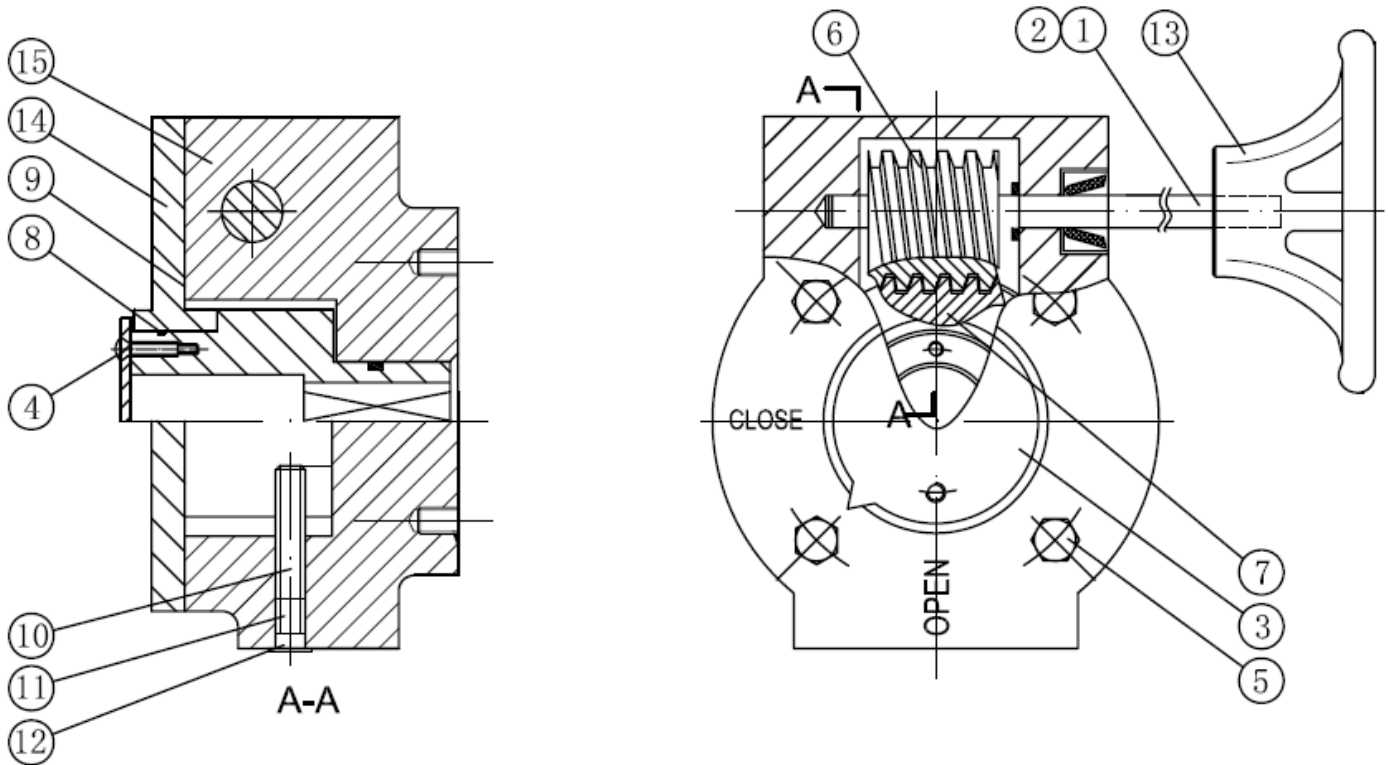
MATERIALS DN 700 – 1200 :



| Item | Designation | Materials |
|------|-------------|----------------------------|
| 1 | Body | Ductile iron EN GJS-400-15 |
| 2 | Disc | ASTM A351 CF8M |
| 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 |

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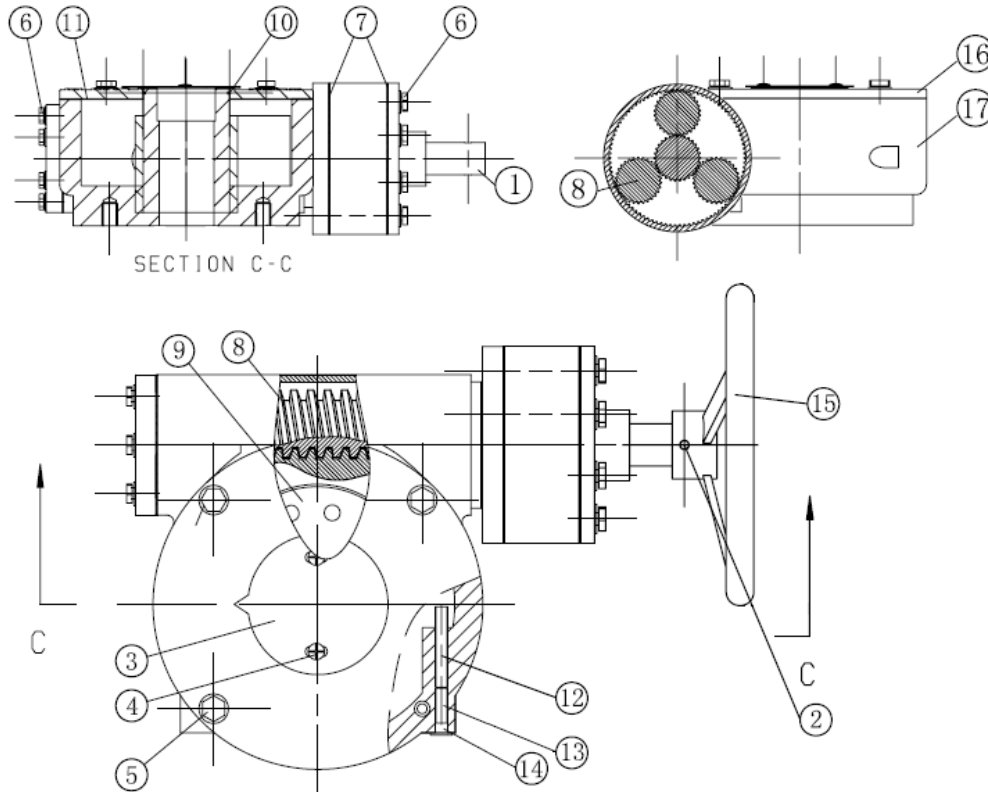
MATERIALS GEARBOX DN40-450 :



| 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 |

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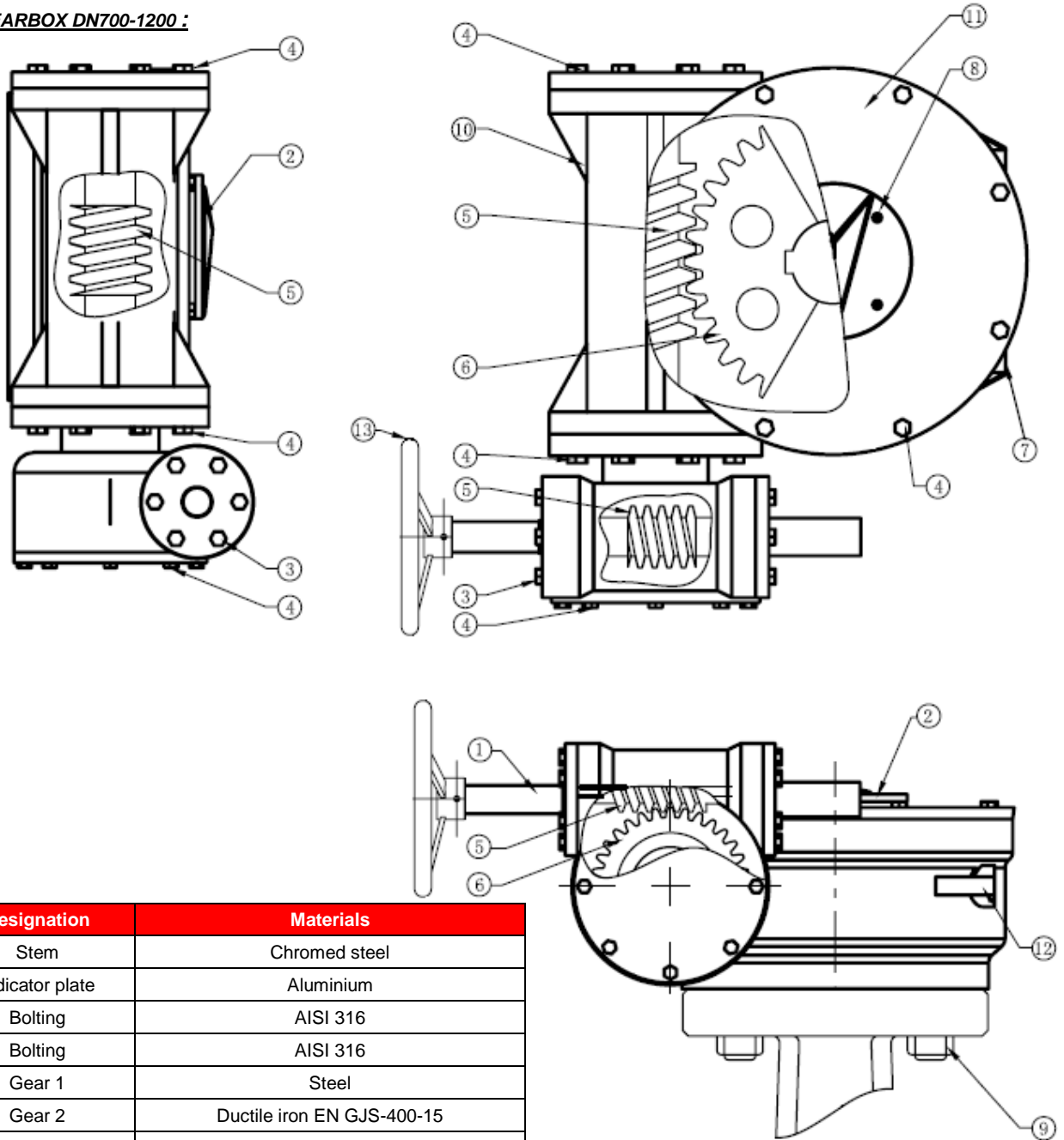
MATERIALS GEARBOX DN500-600 :



| 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 |

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MATERIALS GEARBOX DN700-1200 :

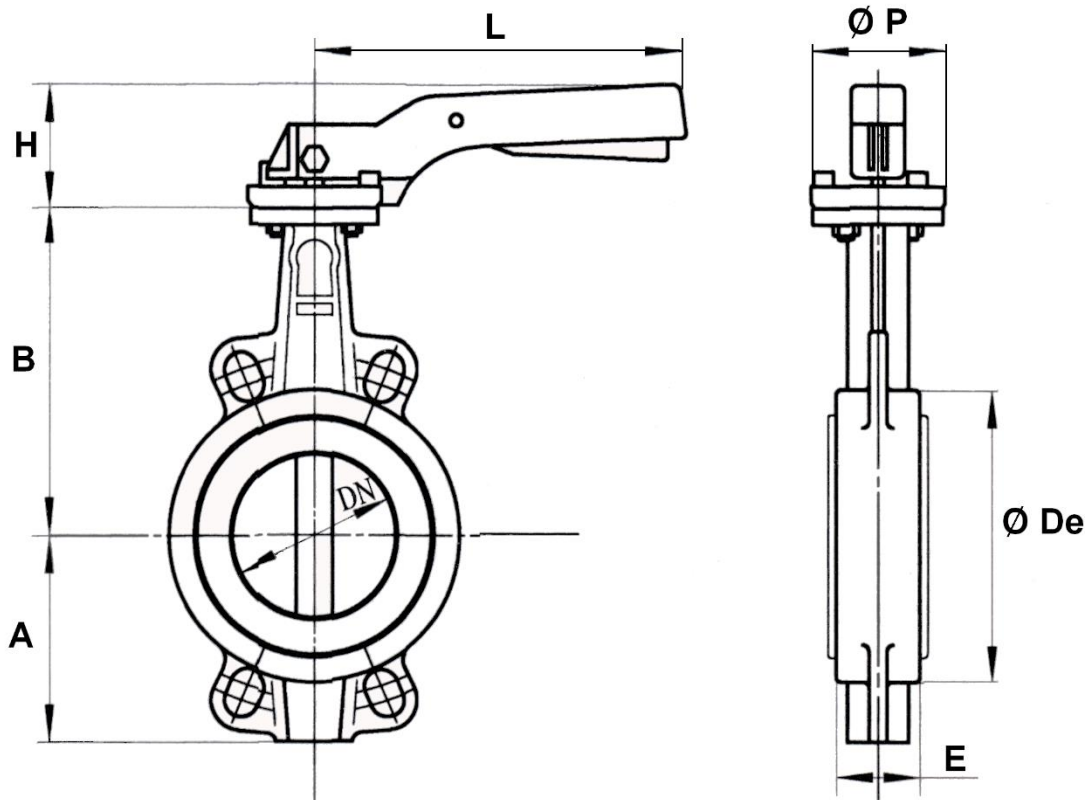


| Item | Designation | Materials |
|------|--------------------|--|
| 1 | Stem | Chromed steel |
| 2 | Indicator plate | Aluminium |
| 3 | Bolting | AISI 316 |
| 4 | Bolting | AISI 316 |
| 5 | Gear 1 | Steel |
| 6 | Gear 2 | Ductile iron EN GJS-400-15 |
| 7 | External set screw | AISI 316 |
| 8 | Screw | 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 |

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

- **VALVES WITH LEVER DN 32/40 - 300 :**

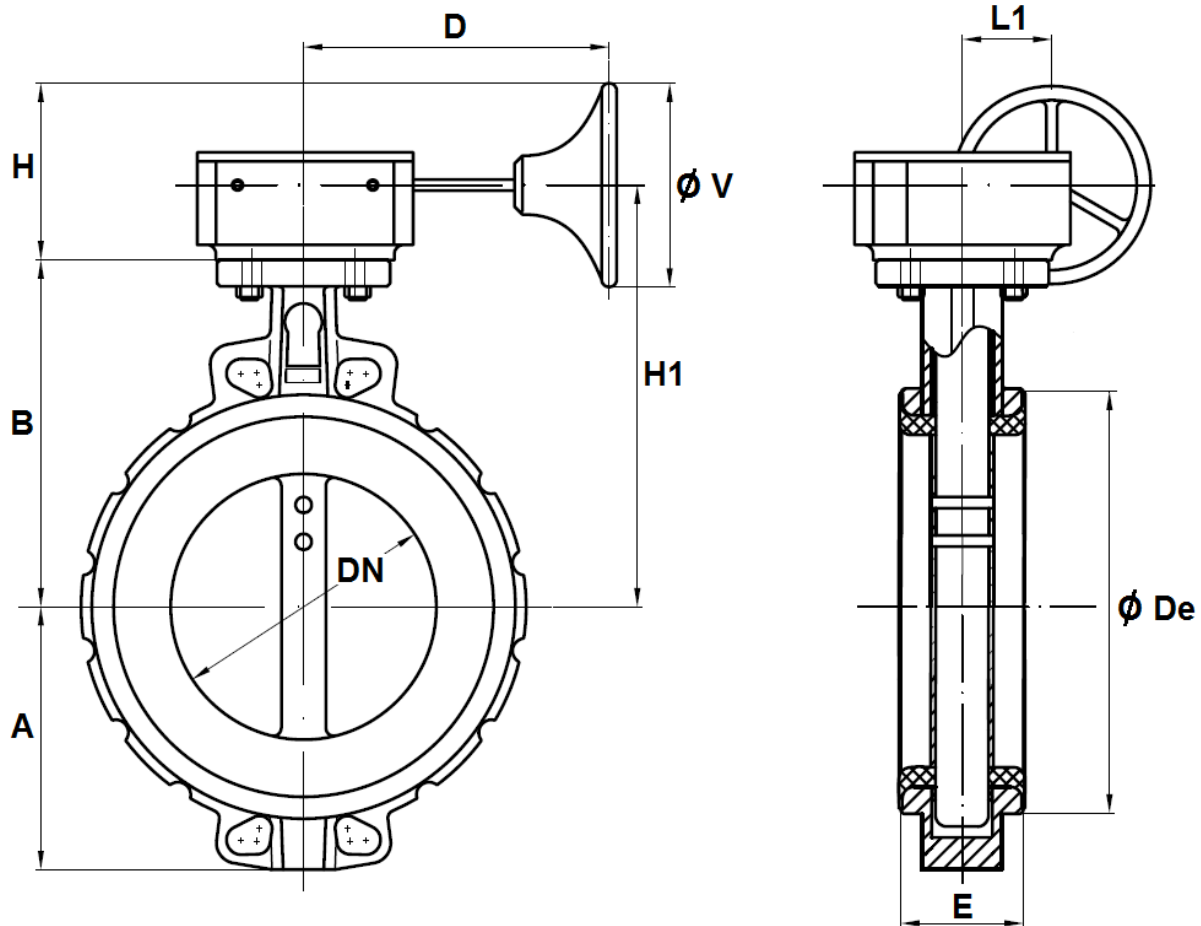


| DN | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A | 61 | 77 | 87,5 | 95 | 107 | 121,5 | 144 | 171 | 205 | 235 |
| B | 130 | 136,5 | 142 | 158 | 180 | 192 | 215 | 242 | 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 |
| Ref. | 1123040 | 1123050 | 1123065 | 1123080 | 1123100 | 1123125 | 1123150 | 1123200 | 1123250 | 1123300 |

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VALVES SIZE (in mm) :

- **VALVES WITH GEAR BOX DN 350 :**

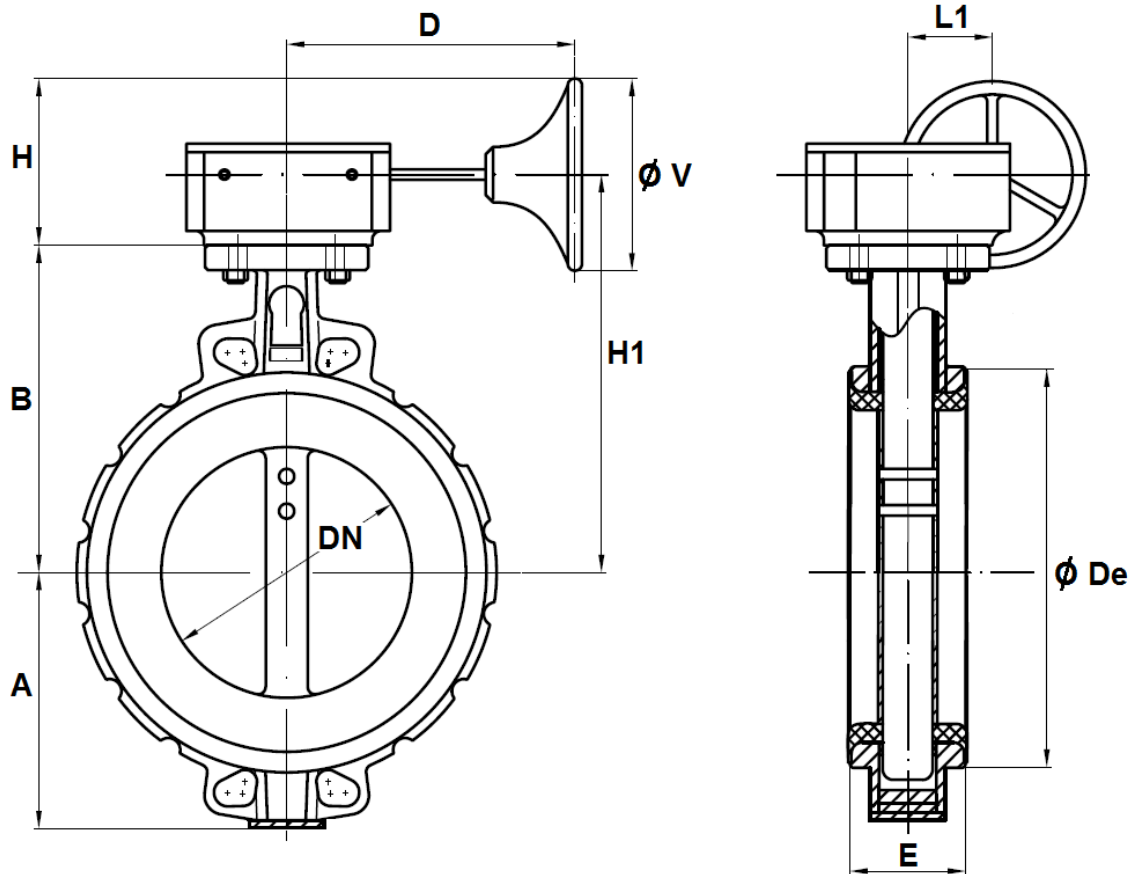


| DN | 350 |
|-------------|---------|
| A | 260 |
| B | 334 |
| D | 223 |
| Ø De | 418 |
| E | 78 |
| H | 190 |
| H1 | 379 |
| L1 | 78 |
| Ø V | 300 |
| Weight (Kg) | 54.5 |
| Ref. | 1123350 |

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
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VALVES SIZE (in mm) :

- **VALVES WITH GEAR BOX DN 400-600 :**

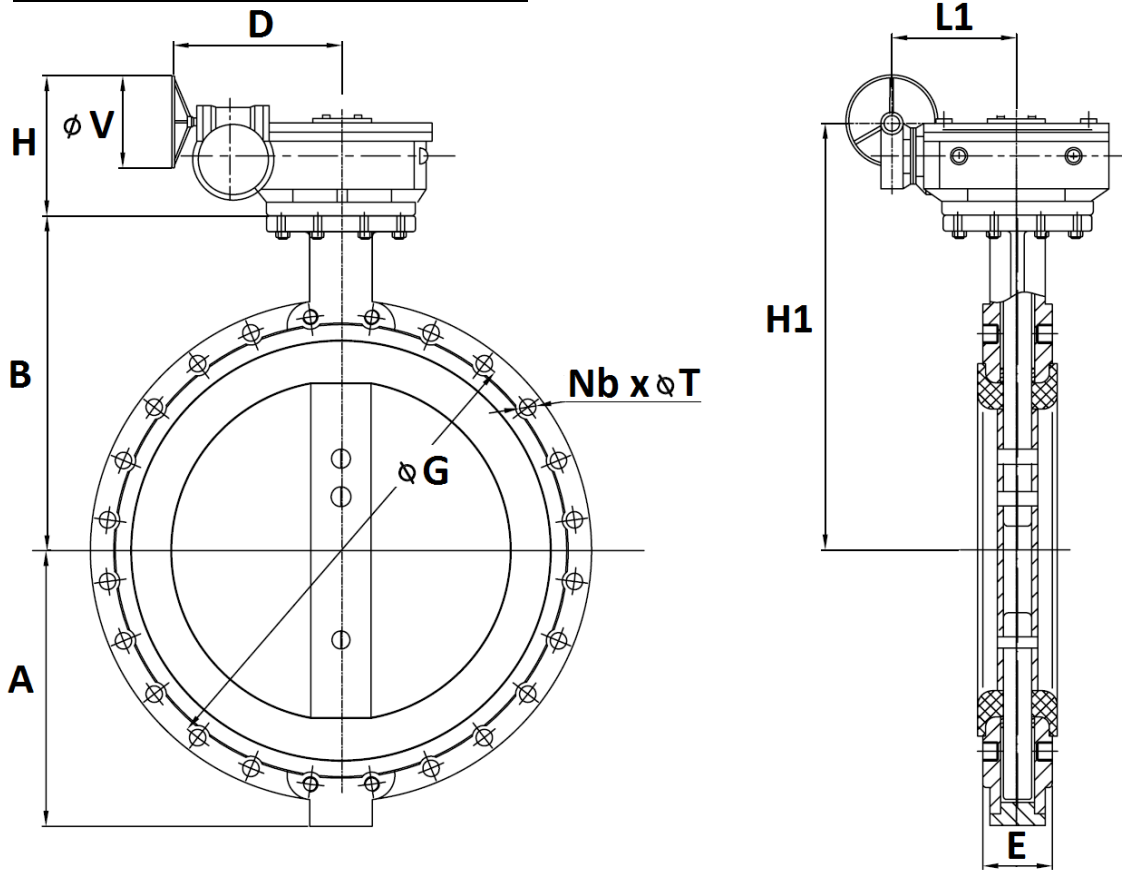


| DN | 400 | 450 | 500 | 600 |
|-------------|---------|---------|---------|---------|
| A | 307 | 339 | 368 | 459 |
| B | 361 | 401 | 480 | 565 |
| D | 270 | 270 | 339 | 339 |
| Ø De | 470 | 525 | 570 | 697 |
| E | 102 | 114 | 127 | 154 |
| H | 208 | 258 | 222 | 222 |
| H1 | 423 | 463 | 545 | 630 |
| L1 | 120 | 120 | 120 | 120 |
| Ø V | 400 | 400 | 300 | 300 |
| Weight (Kg) | 77.4 | 107.4 | 155.8 | 231.1 |
| Ref. | 1123400 | 1123450 | 1123500 | 1123600 |

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

VALVES SIZE (in mm) :

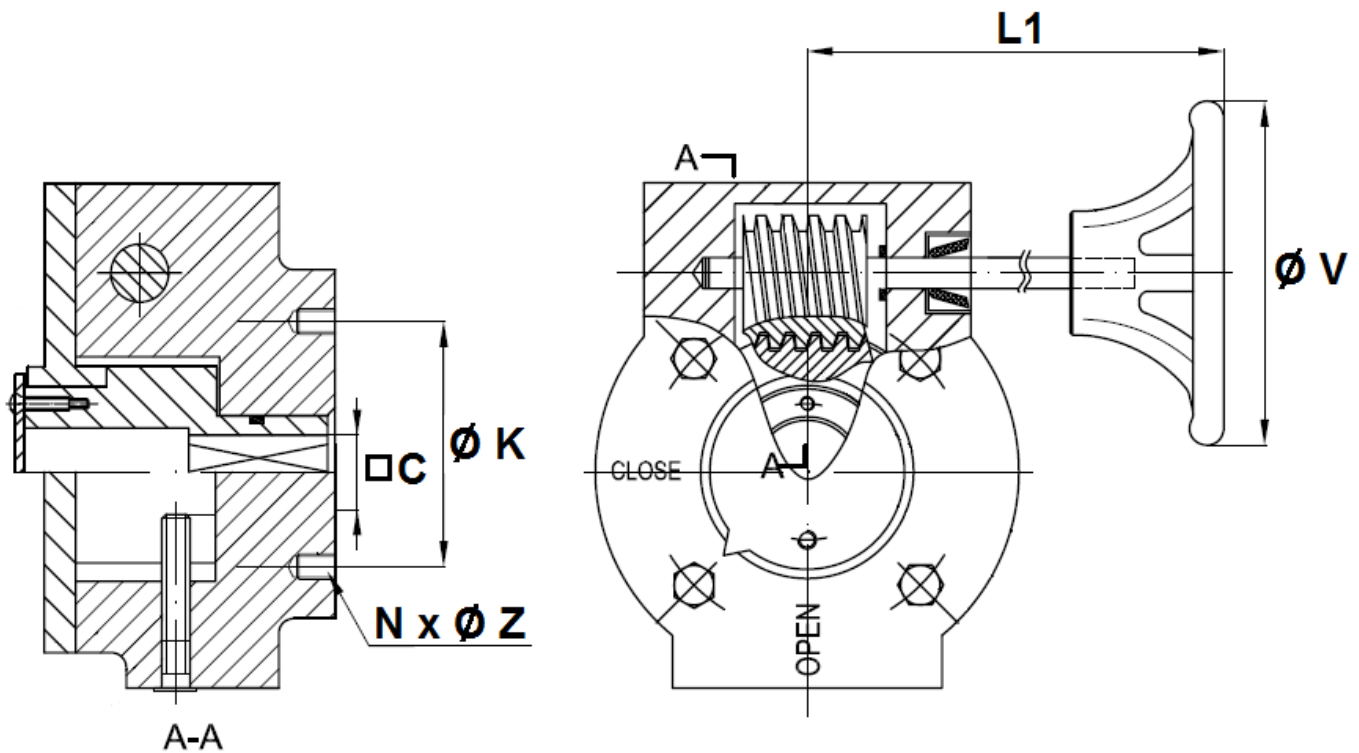
- VALVES WITH GEAR BOX DN 700-1200 :**



| DN | 700 | 800 | 900 | 1000 | 1200 |
|-------------|----------|----------|----------|----------|----------|
| 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 |
| Ø V | 400 | 400 | 400 | 400 | 450 |
| Ø G | 840 | 950 | 1050 | 1160 | 1380 |
| Nb x Ø T | 24 x Ø31 | 24 x Ø34 | 28 x Ø34 | 28 x Ø37 | 32 x Ø40 |
| Weight (Kg) | 372 | 428 | 831 | 982 | 1510 |
| Ref. | 1123700 | 1123800 | 1123900 | 1123990 | |

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STAINLESS STEEL DISC AND EPDM SEAT**

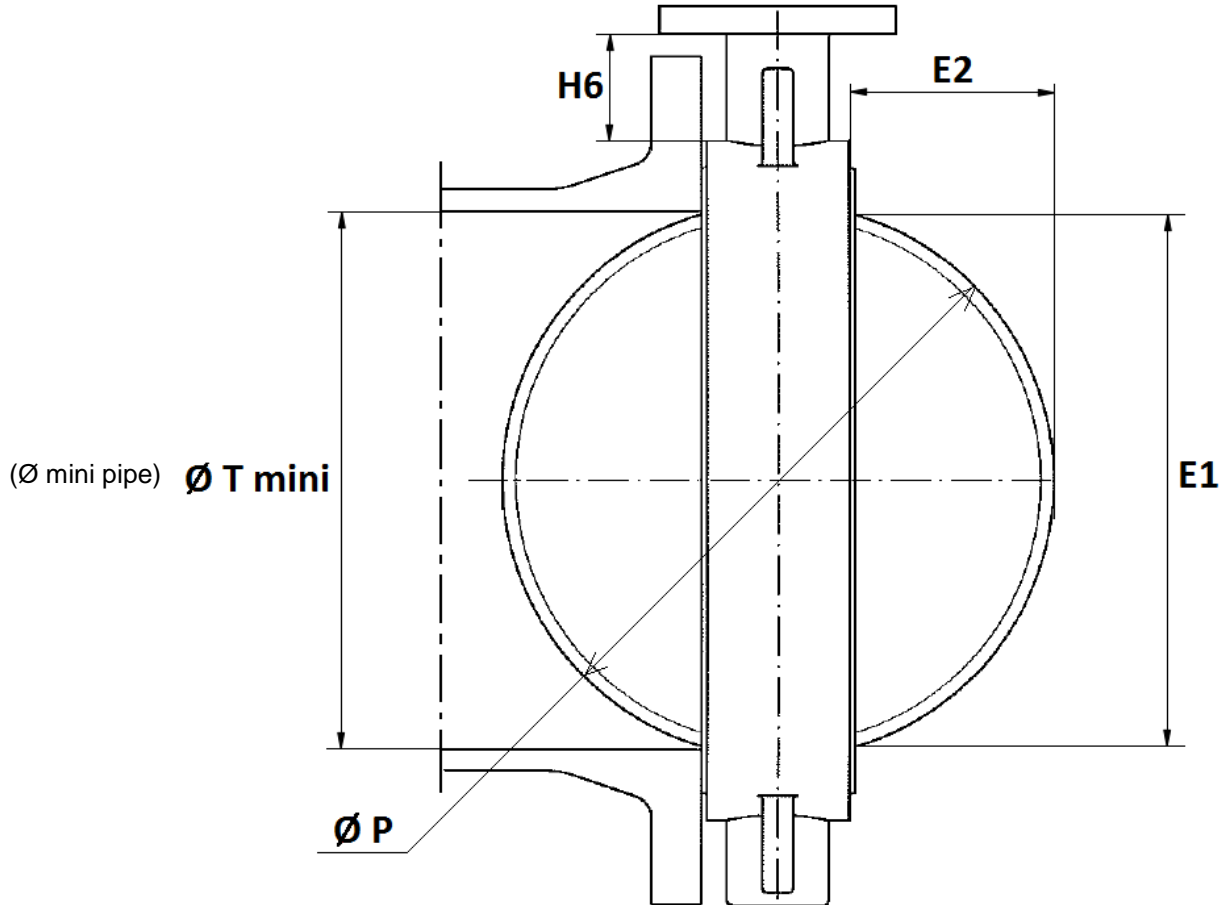
GEAR BOX SIZE DN32/40-300 (in mm) :



| 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 |

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

DISC AND NECK SIZE (in mm) :

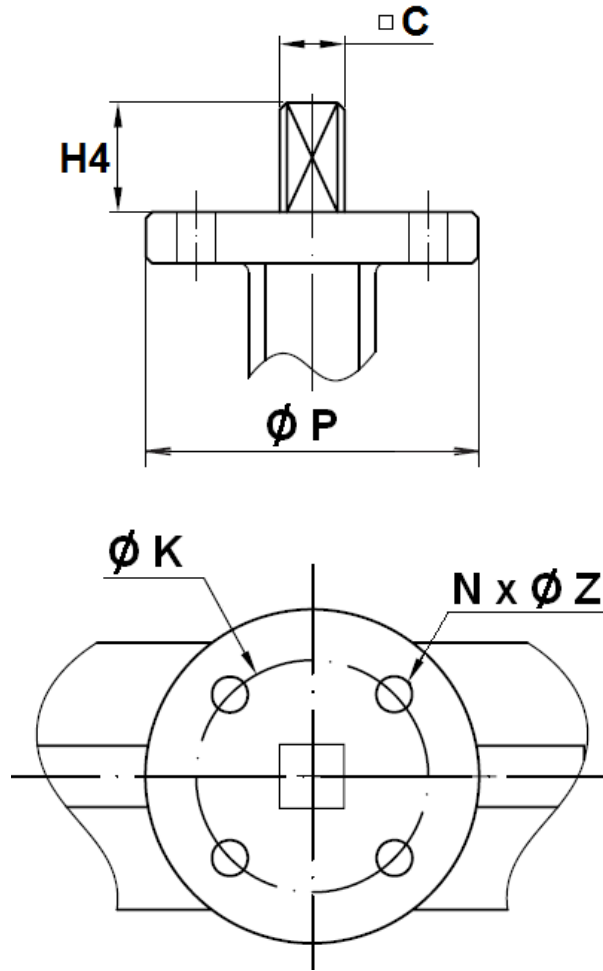


| DN | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----------|------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| E1 | 37.7 | 47.06 | 59.81 | 75.56 | 98.37 | 117.02 | 147.65 | 195.3 | 242.5 | 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 |

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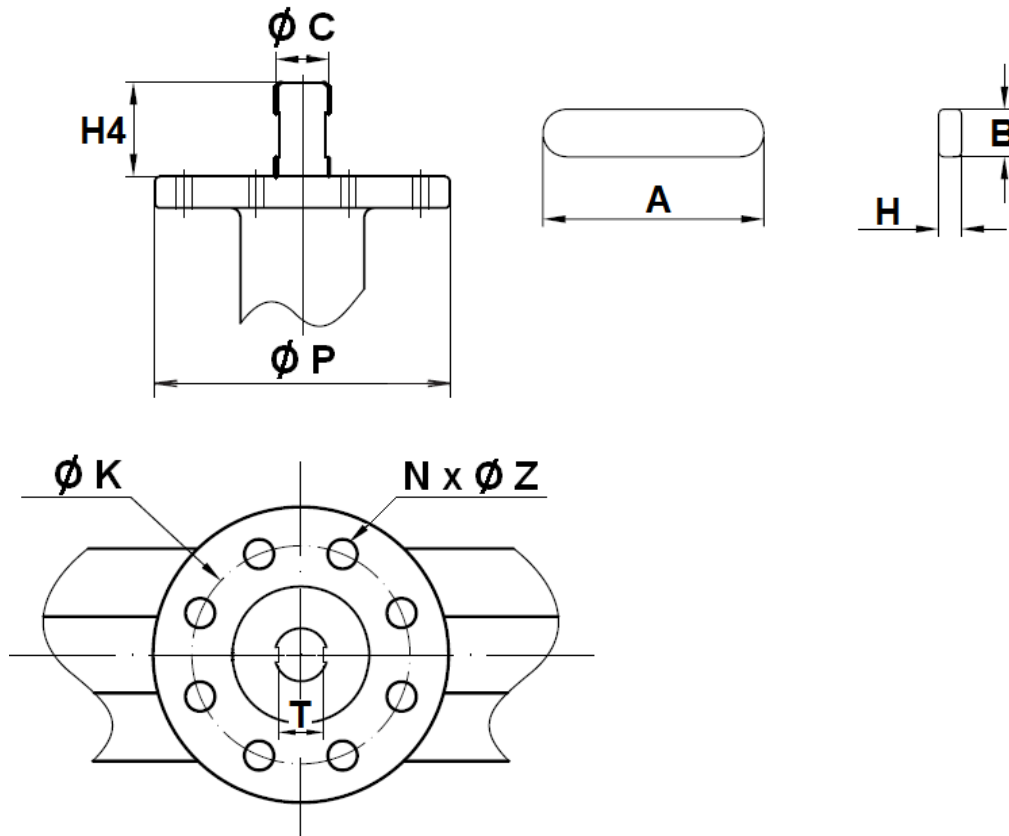
ISO MOUNTING PAD SIZE (in mm) DN 32 – 600 :



| 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 |
| Ø 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 x Ø 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 |
| Ø P | 65 | 65 | 65 | 65 | 65 | 90 | 90 | 125 | 150 | 150 | 150 | 150 | 210 | 210 | 300 |

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL DISC AND EPDM SEAT**

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



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

**CONCENTRIC WAFER BUTTERFLY VALVE INITIAL RANGE CAST IRON BODY
STAINLESS STEEL 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 :

- Manufacturer certified 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)
- Valves according to LR Rules and Regulation for the classification of Ships, July 2018 (Type Approval Certificate) **Marine LLOYD'S REGISTER**. Marine and offshore subject to the valves complying LR Rules and Regulations for the particular services.
 - API 607 - 2016
 - ISO 19921:2005
 - GB/T 22218 - 2008

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