

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

Resilient seat gate valve full and total bore for water distribution.  
Sliding pad to facilitating the wedge movement up to DN200.  
3 NBR O ring on stem and NBR bonnet gasket.  
Possibility to change stem gasket under pressure from DN80 to DN1000

**EN 1074**

**Certificate**

**3.1**



**Size :** DN40 to DN1000  
**Connection :** Flanges PN10/16  
**Min Temperature :** -10°C  
**Max Temperature :** +70°C  
**Max Pressure :** 16 Bars up to DN400, 10 bars over  
**Specifications :** Non rising stem  
Clockwise to close (CTC)  
Full and total bore

**Materials :** Ductile iron body EN GJS-500-7

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

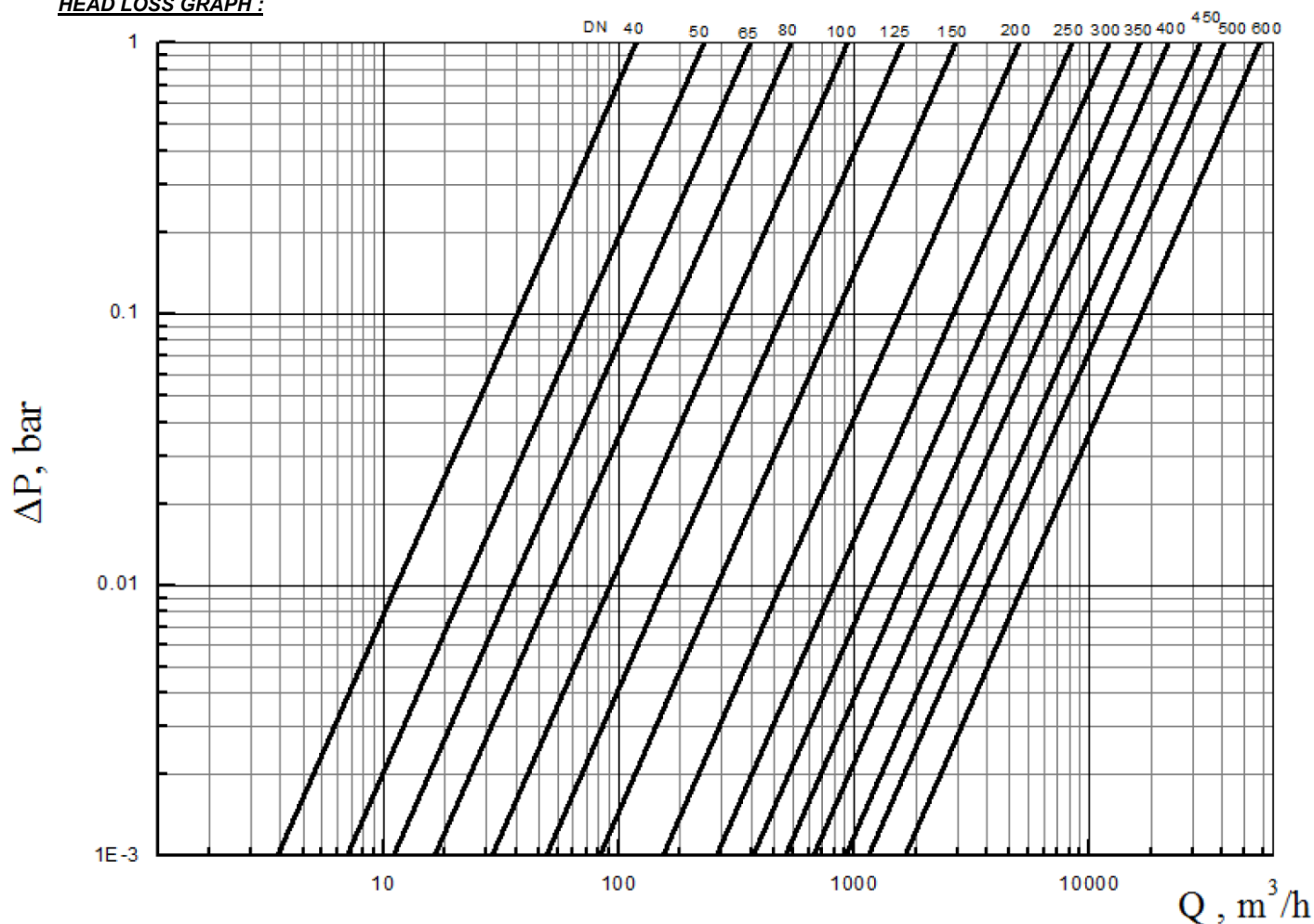
**SPECIFICATIONS :**

- Full and total bore
- Stainless steel non rising stem
- Clockwise to close (CTC)
- Sliding pad ( to facilitating the wedge movement ) up to DN200
- Ductile iron wedge EPDM
- No retention area
- Heel positioning
- NBR bonnet gasket
- Screws bonnet protected
- 3 NBR O ring on stem
- Possibility to change stem gasket under pressure from DN80 to DN1000
- Epoxy painting RAL 5005 color 250 µm thickness GSK certified
- Dust-coat on stem
- PN10/16 flanges R.F.

**USE :**

- For water distribution
- Min and max Temperature Ts : - 10°C to + 70°C
- Max pressure Ps : 16 bars for PN16 flanged valves up to DN400
- Max pressure Ps : 10 bars for PN10 flanged valves from DN200 to 1000

**HEAD LOSS GRAPH :**



Sferaco 90 rue du Ruisseau 38297 St Quentin Fallavier Tel: + 33 (0) 474.94.15.90 Fax: + 33 (0) 474.95.62.08 Internet: [www.sferaco.com](http://www.sferaco.com) E-mail : [info@sferaco.fr](mailto:info@sferaco.fr)

Date : 03/25

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Rev.18

Information provided as an indication and subject to possible modification

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**
**FLOW COEFFICIENT Kvs ( M3 / h ) :**

| DN           | 40  | 50  | 65  | 80  | 100 | 125  | 150  | 200  | 250  | 300   |
|--------------|-----|-----|-----|-----|-----|------|------|------|------|-------|
| Kvs ( m3/h ) | 118 | 229 | 360 | 537 | 933 | 1595 | 2685 | 5004 | 8393 | 12072 |

| DN           | 350   | 400   | 450   | 500   | 600   | 700   | 800   | 900    |
|--------------|-------|-------|-------|-------|-------|-------|-------|--------|
| Kvs ( m3/h ) | 16348 | 21528 | 29372 | 37117 | 52626 | 66733 | 92011 | 161440 |

**HEAD LOSS CALCULATION FOR WATER :**

$$\Delta p = ( Q / Kvs )^2$$

Q : flow in m³/h

Δp : Head loss in bar

**TORQUE VALUE ( in Nm without safety coefficient ) :**

| DN            | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
|---------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Torque ( Nm ) | 15 | 20 | 20 | 30 | 40  | 40  | 75  | 125 | 175 | 200 |

| DN            | 350 | 400 | 450 | 500 | 600 | 700  | 800  |
|---------------|-----|-----|-----|-----|-----|------|------|
| Torque ( Nm ) | 325 | 350 | 430 | 460 | 480 | 1100 | 1250 |

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

| DN               | 40 | 50   | 65    | 80   | 100  | 125  | 150 | 200 | 250   | 300   |
|------------------|----|------|-------|------|------|------|-----|-----|-------|-------|
| Number of cycles | 13 | 14.5 | 18.75 | 21.5 | 21.5 | 24.5 | 30  | 34  | 45.25 | 49.75 |

| DN               | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 1000 |
|------------------|-----|-----|-----|-----|-----|-----|-----|------|
| Number of cycles | 55  | 61  | 52  | 57  | 66  | 72  | 82  | 102  |

**GEARBOX SPECIFICATIONS :**

| DN                                             | 500     | 600     | 700     | 800     | 1000     |
|------------------------------------------------|---------|---------|---------|---------|----------|
| Ref.                                           | 9801600 | 9801601 | 9801602 | 9801603 |          |
| Ratio factor                                   | 4.5 : 1 | 4.5 : 1 | 4.5 : 1 | 4.5 : 1 | 5.22 : 1 |
| Number of cycles to close or to open the valve | 256.5   | 297     | 324     | 369     | 532.4    |
| Input torque ( Nm )                            | 107     | 167     | 245     | 277     | 380      |
| Max Output torque ( Nm )                       | 900     | 1500    | 1500    | 1500    | 2800     |

## RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM

### RANGE :

- Ductile iron body with PN10/16 flanges R.F. and handwheel with EPDM wedge **Ref. 180** from DN 40 to DN 400
- Ductile iron body with PN10 flanges R.F. and handwheel with EPDM wedge **Ref. 180** DN 450 and 500
- Ductile iron body with PN10 flanges R.F. and gearbox with EPDM wedge **Ref. 180** from DN 600 to 1000

### ACCESSORIES :



- Possible with square drive nut ( option ) **Ref. 9801831-9801838**



- Possible with gearbox ( on request ) from DN500 to DN800 **Ref. 9801600-9801603**
- Stem extension 1 meter long **Ref. 9802020** from DN50 to DN300 and **Ref. 9802029** from DN350 to DN400
- Stem extension 1,25 meter long **Ref. 9802031** from DN50 to DN300 and **Ref. 9802040** from DN350 to DN400
- Stem extension 1,5 meter long **Ref. 9802042** from DN50 to DN300 and **Ref. 9802051** from DN350 to DN400



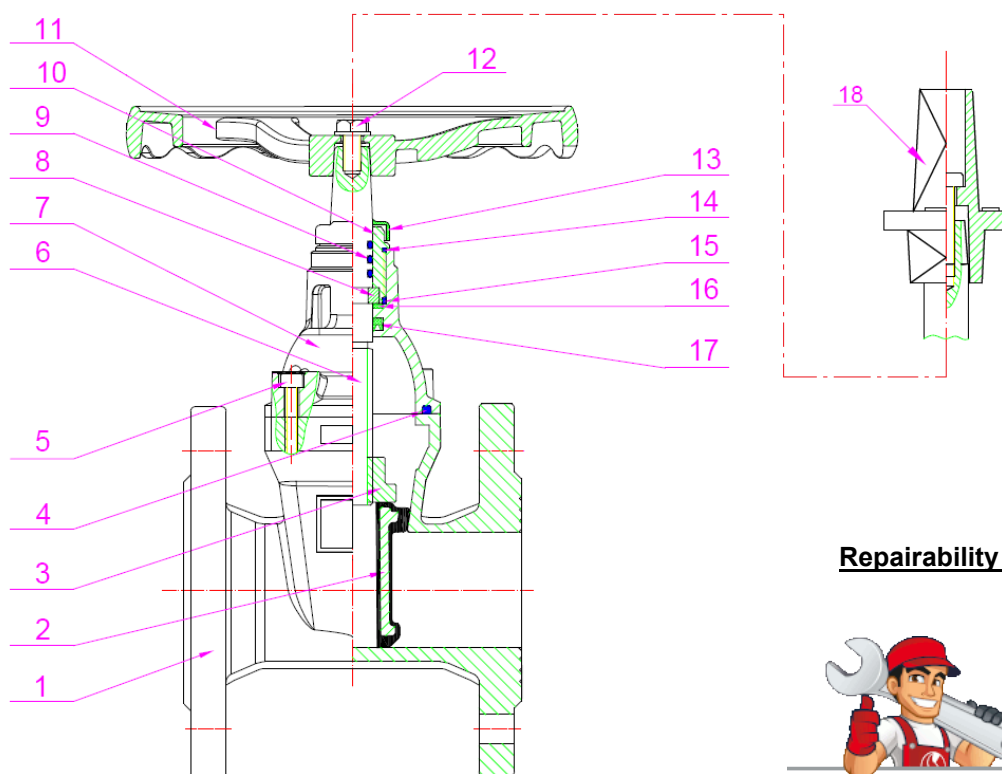
- Stem extension 1,3 to 1,8 meter long **Ref. 9802060** from DN50 to DN200



- Stem extension 2 to 2,5 meter long **Ref. 9802070** from DN50 to DN200
- Tee key
  - 1 meter long square 35 mm **Ref.9802080** from DN50 to DN300
  - 1.8 meter long square 35 mm **Ref.9802081** from DN50 to DN300
  - 1 meter long square 35 mm **Ref.9802082** from DN350 to DN400

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**MATERIALS DN40-65 :**



**Repairability :**

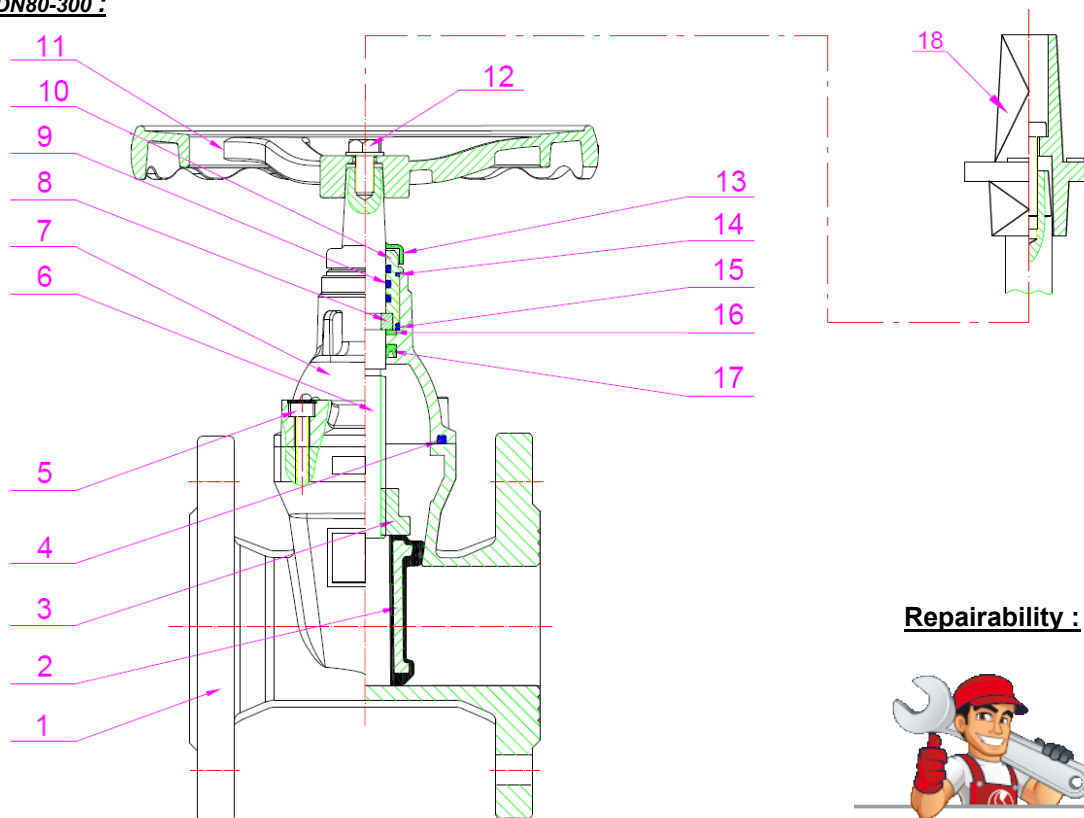


| Item | Designation       | Materials DN40-65                |
|------|-------------------|----------------------------------|
| 1    | Body              | Ductile iron EN GJS-500-7        |
| 2    | Wedge             | Ductile iron EN GJS-500-7 + EPDM |
| 3    | Stem nut          | Brass CuZn40Pb3                  |
| 4*   | Gasket bonnet     | NBR                              |
| 5    | Bonnet screw      | Steel C35                        |
| 6    | Stem              | SS 420                           |
| 7    | Bonnet            | Ductile iron EN GJS-500-7        |
| 8    | Holding ring      | Brass CuZn39Pb2                  |
| 9    | O ring            | NBR                              |
| 10   | Pusher nut        | Brass CuZn39Pb2                  |
| 11   | Handwheel         | Ductile iron EN GJS-500-7        |
| 12   | Handwheel screw   | SS 304                           |
| 13*  | Dust-coat         | NBR                              |
| 14   | O ring            | NBR                              |
| 15   | O ring            | NBR                              |
| 16   | Ring              | Nylon 66                         |
| 17   | Auto sealing ring | NBR                              |
| 18   | Square drive nut  | Ductile iron EN GJS-500-7        |

| *Gaskets refs |                   |                |
|---------------|-------------------|----------------|
| DN (mm)       | Bonnet gasket (4) | Dust-coat (13) |
| 40            | 9801260           | 9802123        |
| 50            | 9801261           |                |
| 65            | 9802162           |                |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**MATERIALS DN80-300 :**



**Repairability :**

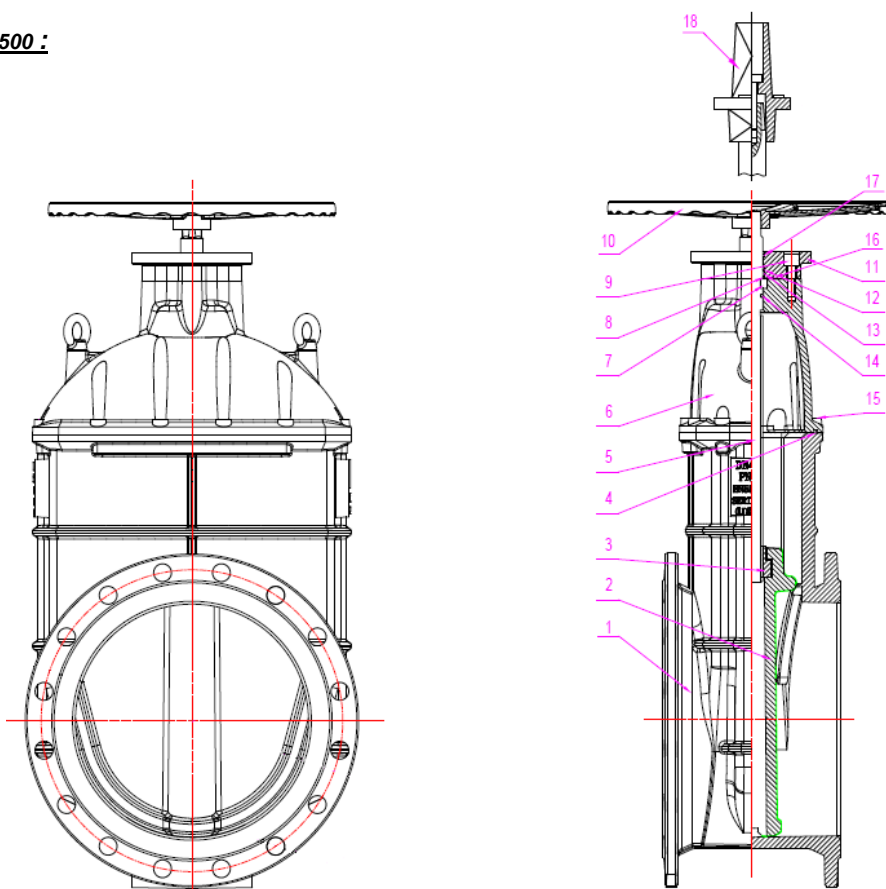


| Item | Designation       | Materials DN80-300               |
|------|-------------------|----------------------------------|
| 1    | Body              | Ductile iron EN GJS-500-7        |
| 2    | Wedge             | Ductile iron EN GJS-500-7 + EPDM |
| 3    | Stem nut          | Brass CuZn40Pb3                  |
| 4*   | Gasket bonnet     | NBR                              |
| 5    | Bonnet screw      | Steel C35                        |
| 6    | Stem              | SS 420                           |
| 7    | Bonnet            | Ductile iron EN GJS-500-7        |
| 8    | Holding ring      | Brass CuZn39Pb2                  |
| 9    | O ring            | NBR                              |
| 10   | Pusher nut        | Brass CuZn39Pb2                  |
| 11   | Handwheel         | Ductile iron EN GJS-500-7        |
| 12   | Handwheel screw   | SS 304                           |
| 13*  | Dust-coat         | NBR                              |
| 14   | O ring            | NBR                              |
| 15   | O ring            | NBR                              |
| 16   | Ring              | Nylon 66                         |
| 17   | Auto sealing ring | NBR                              |
| 18   | Square drive nut  | Ductile iron EN GJS-500-7        |

| *Gaskets refs |                   |                |
|---------------|-------------------|----------------|
| DN (mm)       | Bonnet gasket (4) | Dust-coat (13) |
| 80            | 9802163           | 9802124        |
| 100           | 9802164           | 9802125        |
| 125           | 9802165           |                |
| 150           | 9802166           |                |
| 200           | 9802167           | 9802126        |
| 250           | 9802168           | 9802127        |
| 300           | 9802169           | 9802128        |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

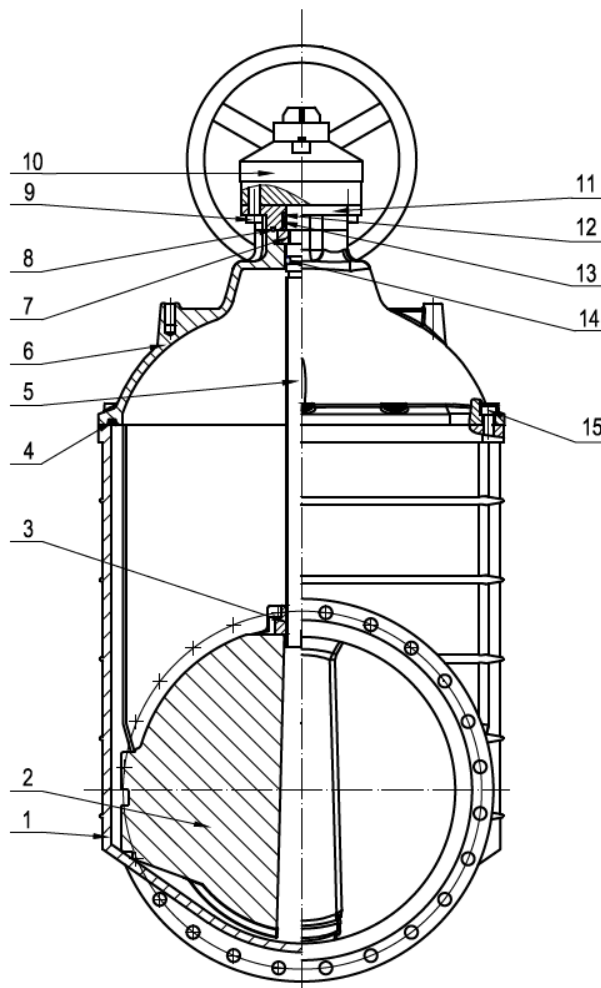
**MATERIALS DN350-500 :**



| Item | Designation      | Materials DN350-500              |
|------|------------------|----------------------------------|
| 1    | Body             | Ductile iron EN GJS-500-7        |
| 2    | Wedge            | Ductile iron EN GJS-500-7 + EPDM |
| 3    | Stem nut         | Brass CuZn39Pb2                  |
| 4    | Bonnet gasket    | NBR                              |
| 5    | Stem             | SS 420                           |
| 6    | Bonnet           | Ductile iron EN GJS-500-7        |
| 7    | Holding ring     | Brass CuZn39Pb2                  |
| 8    | O ring           | NBR                              |
| 9    | Screw            | Steel Rst 37-2                   |
| 10   | Handwheel        | Ductile iron EN GJS-500-7        |
| 11   | Gland            | Ductile iron EN GJS-500-7        |
| 12   | O ring           | NBR                              |
| 13   | Ring             | Nylon 66                         |
| 14   | O ring           | NBR                              |
| 15   | Bonnet bolt      | Steel C35                        |
| 16   | O ring           | NBR                              |
| 17   | Dust-coat        | NBR                              |
| 18   | Square drive nut | Ductile iron EN GJS-500-7        |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

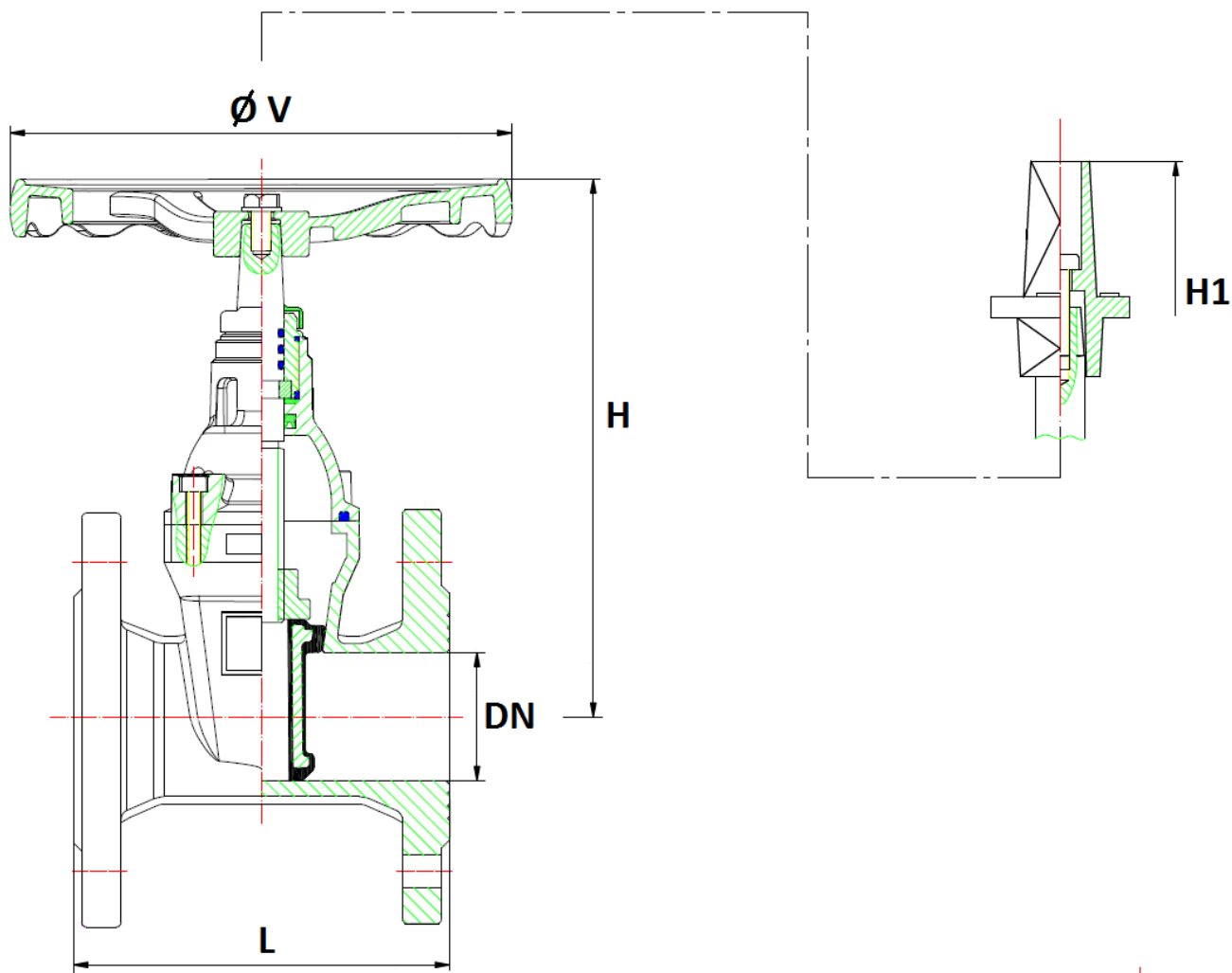
**MATERIALS DN600-1000 :**



| Item | Designation   | Materials DN600-1000             |
|------|---------------|----------------------------------|
| 1    | Body          | Ductile iron EN GJS-500-7        |
| 2    | Wedge         | Ductile iron EN GJS-500-7 + EPDM |
| 3    | Stem nut      | Brass CuZn39Pb2                  |
| 4    | Bonnet gasket | NBR                              |
| 5    | Stem          | SS 420                           |
| 6    | Bonnet        | Ductile iron EN GJS-500-7        |
| 7    | Holding ring  | Brass CuZn39Pb2                  |
| 8    | O ring        | NBR                              |
| 9    | Screw         | Steel Rst 37-2                   |
| 10   | Wheel         |                                  |
| 11   | Gland         | Ductile iron EN GJS-500-7        |
| 12   | O ring        | NBR                              |
| 13   | Ring          | Nylon 66                         |
| 14   | O ring        | NBR                              |
| 15   | Bolt bonnet   | Steel C35                        |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

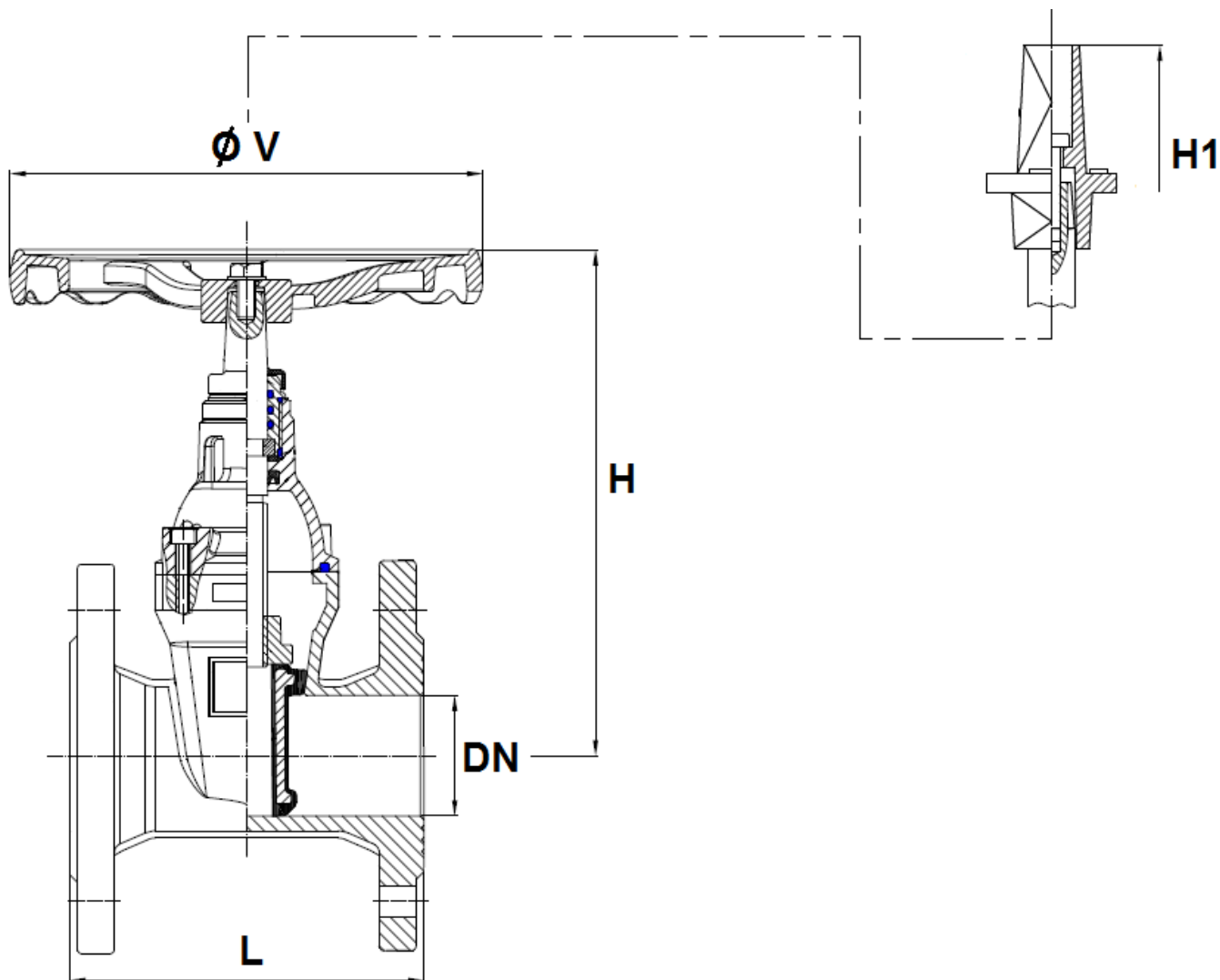
**HANDWHEEL VALVE SIZE DN 40 - 65 ( in mm ) :**



| DN             | 40     | 50     | 60/65  |
|----------------|--------|--------|--------|
| L              | 140    | 150    | 170    |
| H              | 190    | 215    | 235    |
| H1             | 260    | 285    | 300    |
| Ø V            | 200    | 200    | 200    |
| Weight (in Kg) | 7.37   | 8.56   | 12     |
| Ref.           | 180040 | 180050 | 180066 |

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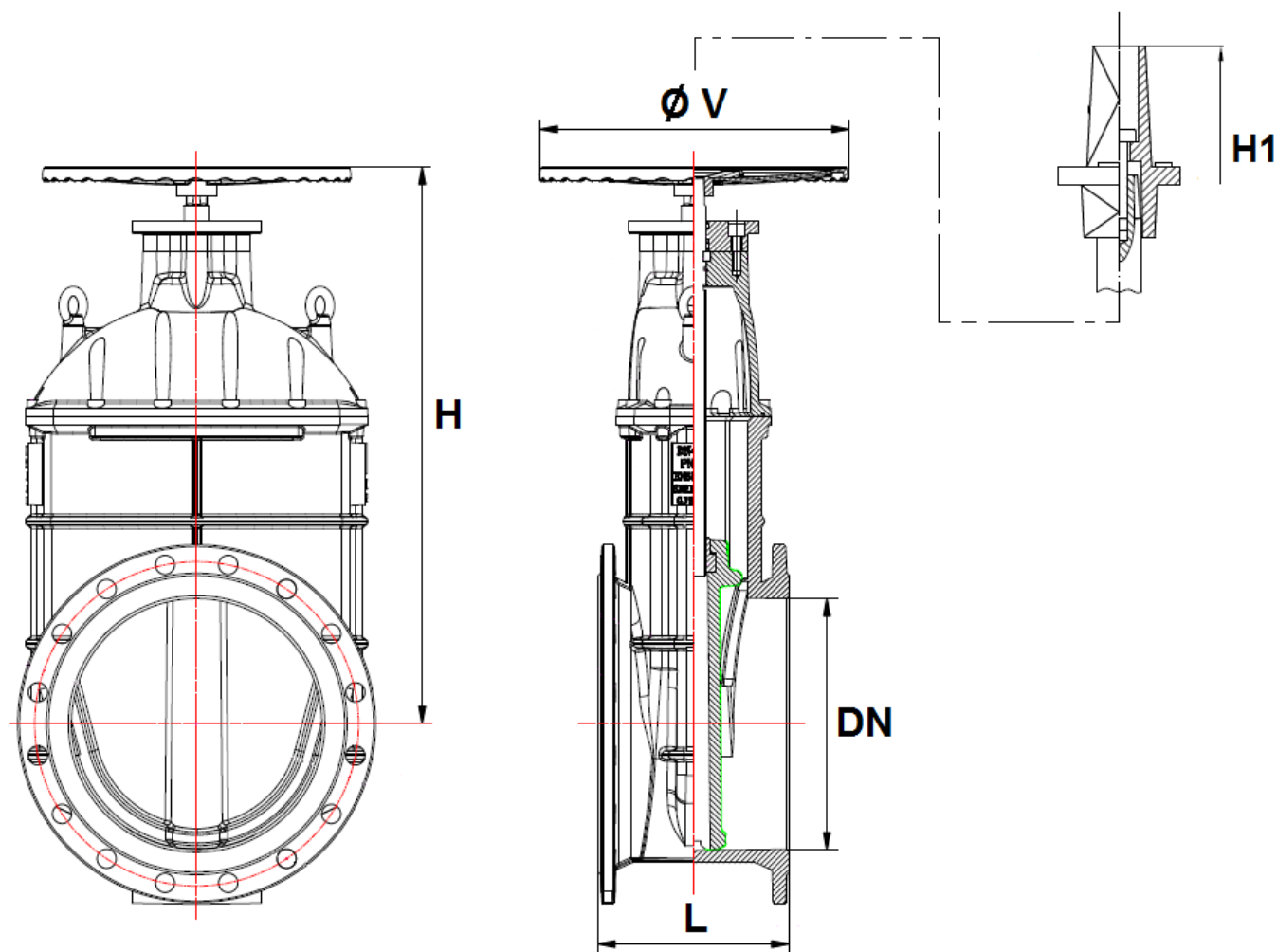
**HANDWHEEL VALVE SIZE DN 80 - 300 ( in mm ) :**



| DN          | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|-------------|--------|--------|--------|--------|--------|--------|--------|
| L           | 180    | 190    | 200    | 210    | 230    | 250    | 270    |
| H           | 265    | 315    | 350    | 385    | 485    | 600    | 680    |
| H1          | 320    | 390    | 430    | 470    | 560    | 680    | 770    |
| Ø V         | 254    | 254    | 315    | 315    | 315    | 406    | 406    |
| Weight (Kg) | 14     | 19.90  | 24.20  | 31.80  | 49.40  | 84.70  | 106    |
| Ref.        | 180080 | 180100 | 180125 | 180150 | 180200 | 180250 | 180300 |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

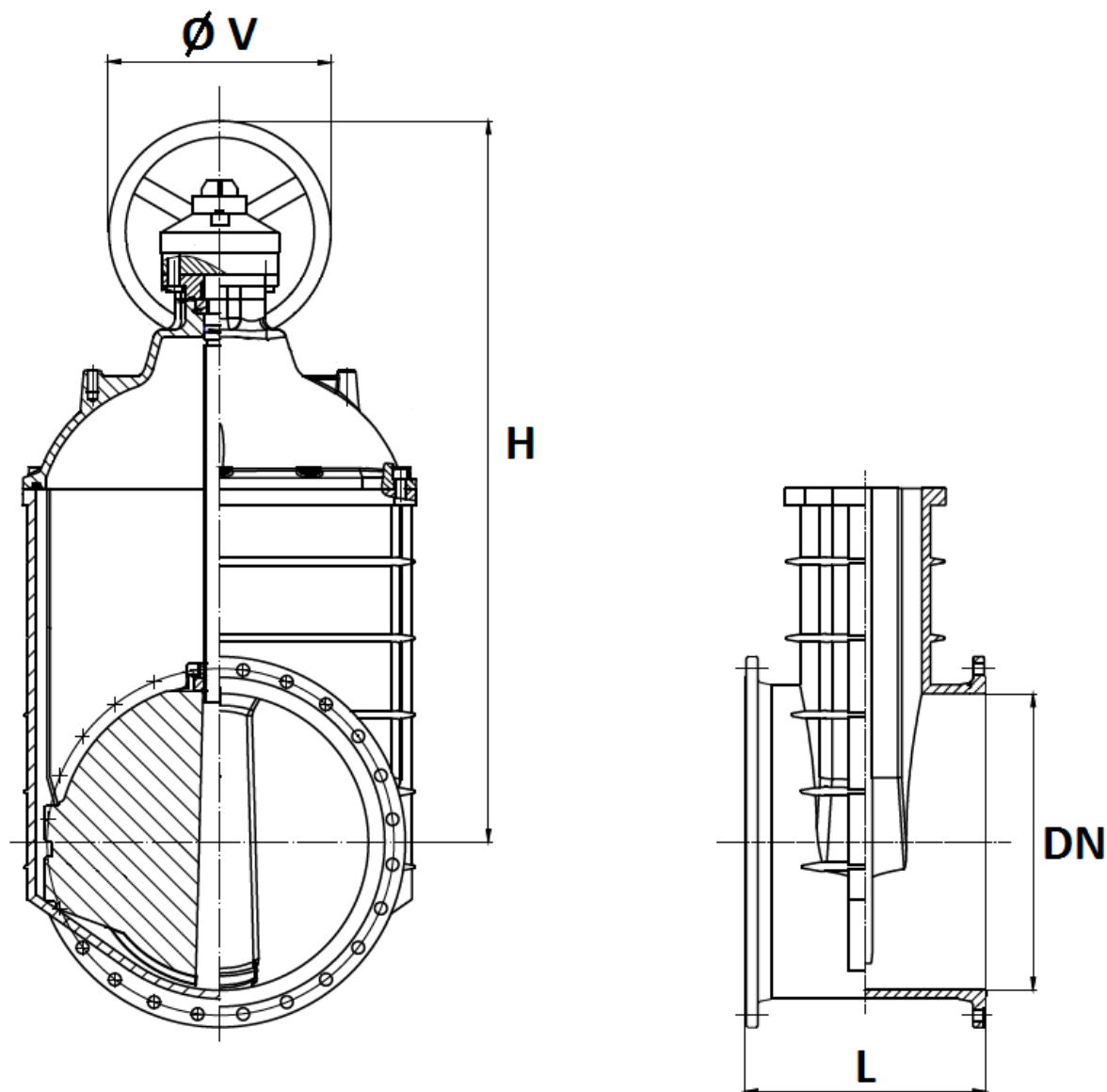
**HANDWHEEL VALVE SIZE DN 350 - 500 ( in mm ) :**



| DN             | 350    | 400    | 450    | 500    |
|----------------|--------|--------|--------|--------|
| L              | 290    | 310    | 330    | 350    |
| H              | 810    | 890    | 1050   | 1230   |
| H1             | 900    | 1000   | 1150   | 1330   |
| $\Phi V$       | 500    | 500    | 500    | 650    |
| Weight (in Kg) | 185    | 228    | 360    | 419    |
| Ref.           | 180350 | 180400 | 180450 | 180500 |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

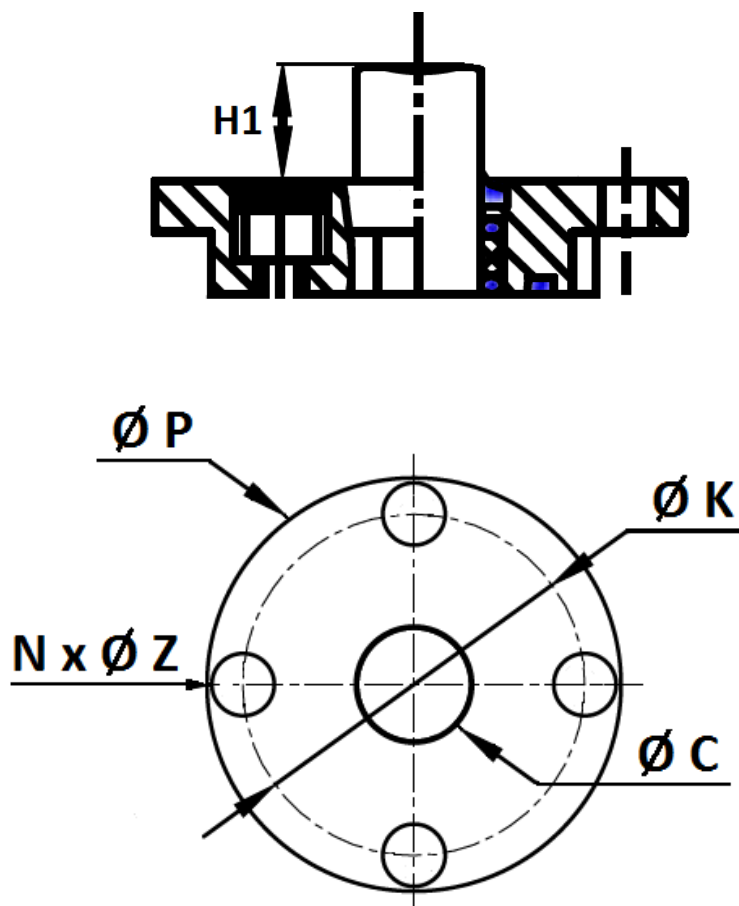
**GEARBOX VALVE SIZE DN 600 - 1000 ( in mm ) :**



| DN             | 600    | 700    | 800    | 1000    |
|----------------|--------|--------|--------|---------|
| L              | 390    | 430    | 470    | 550     |
| H              | 1470   | 1640   | 1780   | 2350    |
| Ø V            | 500    | 500    | 500    | 600     |
| Weight (in Kg) | 655    | 862    | 1024   | 2141    |
| Ref.           | 180600 | 180700 | 180800 | 1801000 |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**STEM AND ISO MOUNTING PAD SIZE DN350-1000 ( in mm ) :**

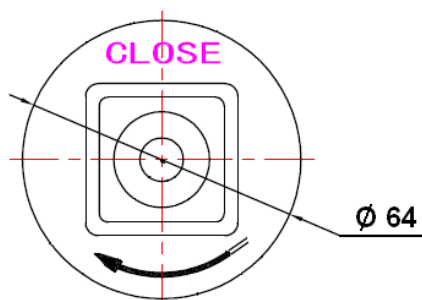
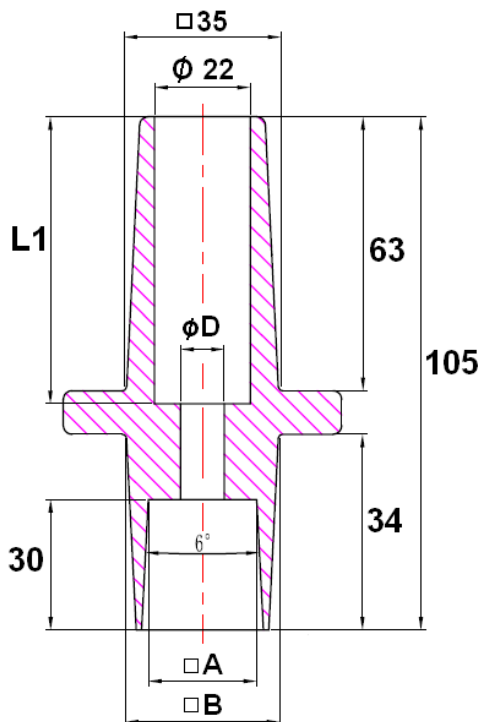


| DN      | 350    | 400    | 450    | 500    | 600    | 700    | 800    | 1000   |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| H1      | 60     | 60     | 80     | 80     | 80     | 80     | 80     | 100    |
| Ø C     | 40     | 40     | 55     | 55     | 55     | 65     | 65     | 75     |
| Ø P     | 210    | 210    | 210    | 300    | 300    | 300    | 300    | 350    |
| Ø K     | 165    | 165    | 165    | 254    | 254    | 254    | 254    | 298    |
| ISO     | F16    | F16    | F25    | F25    | F25    | F25    | F25    | F30    |
| N x Ø Z | 4 x 23 | 4 x 23 | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 23 |

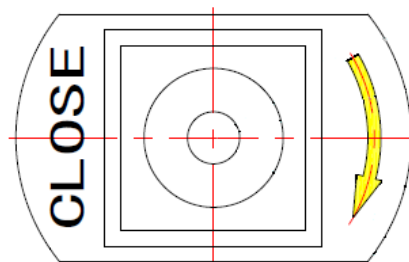
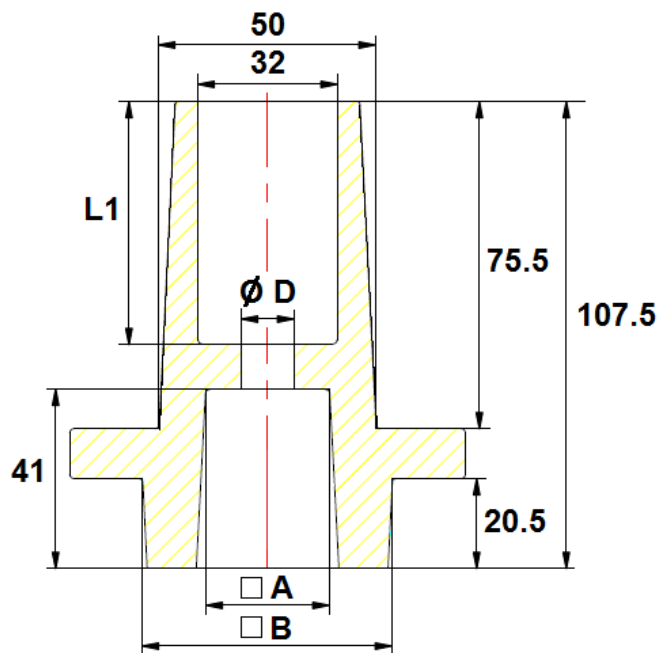
**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**SQUARE DRIVE NUT SIZE ( in mm ) :**

**DN 40 – 300**



**DN 350 - 400**

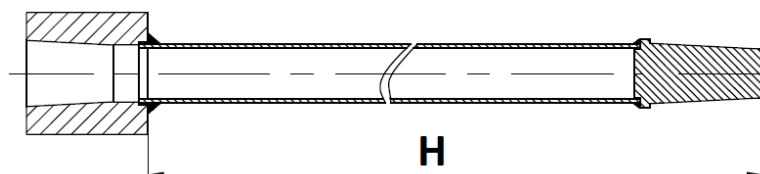


| DN            | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A             | 14      | 14      | 14      | 17      | 17      | 19      | 19      | 19      | 24      | 24      | 28.5    | 28.5    |
| B             | 34      | 34      | 34      | 34      | 34      | 36      | 36      | 36      | 42.5    | 42.5    | 57.5    | 57.5    |
| L1            | 66      | 66      | 66      | 63      | 63      | 63      | 63      | 63      | 63      | 63      | 56      | 56      |
| Ø D           | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 12      | 12      | 12      | 12      |
| Weight ( Kg ) | 0.7     | 0.7     | 0.7     | 0.6     | 0.6     | 0.6     | 0.6     | 0.6     | 0.7     | 0.7     | 0.96    | 0.96    |
| Ref.          | 9801831 | 9801831 | 9801831 | 9801832 | 9801832 | 9801833 | 9801833 | 9801833 | 9801834 | 9801834 | 9801838 | 9801838 |

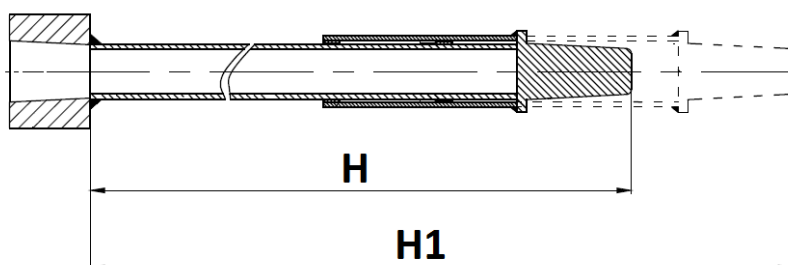
**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**STEM EXTENSION SIZE DN50-400 ( in mm ) :**

**FIXED TYPE**



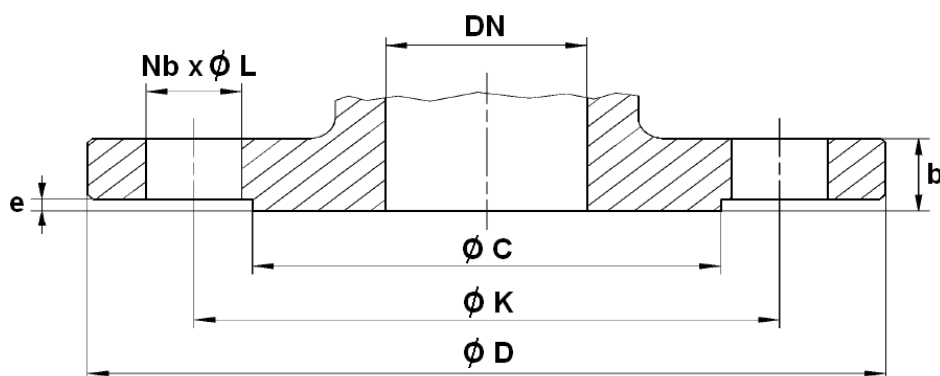
**TELESCOPIC TYPE**



| Ref.    | DN      | H    | H1   | Weight (Kg) |
|---------|---------|------|------|-------------|
| 9802020 | 50-300  | 1000 | -    | 3.7         |
| 9802031 | 50-300  | 1250 | -    | 4.2         |
| 9802042 | 50-300  | 1500 | -    | 4.5         |
| 9802060 | 50-200  | 1300 | 1800 | 9.6         |
| 9802070 | 50-200  | 2000 | 2500 | 11.8        |
| 9802029 | 350-400 | 1000 | -    | 5.7         |
| 9802040 | 350-400 | 1250 | -    | 6.5         |
| 9802051 | 350-400 | 1500 | -    | 7.4         |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**FLANGES PN10 SIZE ( in mm ) :**



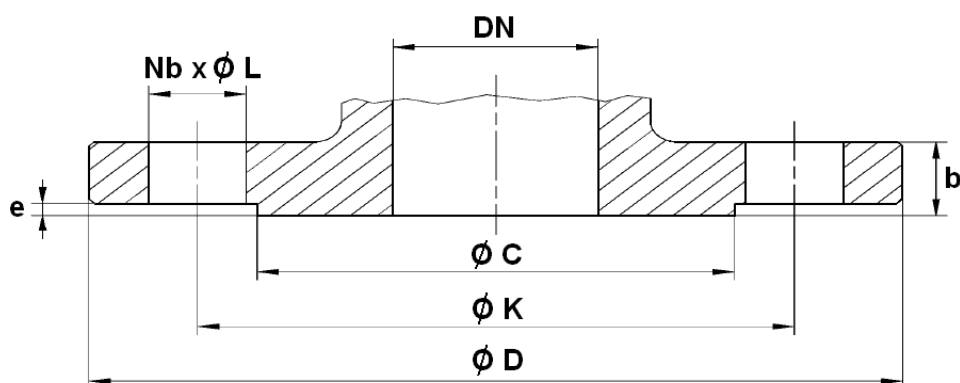
\* DN60/65 double holes

| PN       | PN10/16 |        |         |        |        |        |        |        | PN10   |         |         |
|----------|---------|--------|---------|--------|--------|--------|--------|--------|--------|---------|---------|
| DN       | 40      | 50     | 60/65*  | 65     | 80     | 100    | 125    | 150    | 200    | 250     | 300     |
| Ø C      | 84      | 99     | 114     | 118    | 132    | 156    | 184    | 211    | 266    | 319     | 370     |
| Ø D      | 150     | 165    | 185     | 185    | 200    | 220    | 250    | 285    | 340    | 405     | 460     |
| Ø K      | 110     | 125    | 135/145 | 145    | 160    | 180    | 210    | 240    | 295    | 350     | 400     |
| Nb x Ø L | 4 x 19  | 4 x 19 | 4 x 19  | 4 x 19 | 8 x 19 | 8 x 19 | 8 x 19 | 8 x 23 | 8 x 23 | 12 x 23 | 12 x 23 |
| b        | 19      | 19     | 19      | 19     | 19     | 19     | 19     | 19     | 20     | 22      | 24.5    |
| e        | 3       | 3      | 3       | 3      | 3      | 3      | 3      | 3      | 3      | 3       | 4       |
| Ref.     | 180040  | 180050 | 180066  | 180065 | 180080 | 180100 | 180125 | 180150 | 180200 | 180250  | 180300  |

| PN       | PN10    |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| DN       | 350     | 400     | 450     | 500     | 600     | 700     | 800     | 1000    |
| Ø C      | 429     | 480     | 530     | 582     | 682     | 794     | 901     | 1112    |
| Ø D      | 520     | 580     | 640     | 715     | 840     | 910     | 1025    | 1255    |
| Ø K      | 460     | 515     | 565     | 620     | 725     | 840     | 950     | 1160    |
| Nb x Ø L | 16 x 23 | 16 x 28 | 20 x 28 | 20 x 28 | 20 x 31 | 24 x 31 | 24 x 33 | 28 x 37 |
| b        | 26.5    | 28      | 30      | 31.5    | 36      | 39.5    | 43      | 50      |
| e        | 4       | 4       | 4       | 4       | 5       | 5       | 5       | 5       |
| Ref.     | 180350  | 180400  | 180450  | 180500  | 180600  | 180700  | 180800  | 1801000 |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

**FLANGES PN16 SIZE ( in mm ) :**



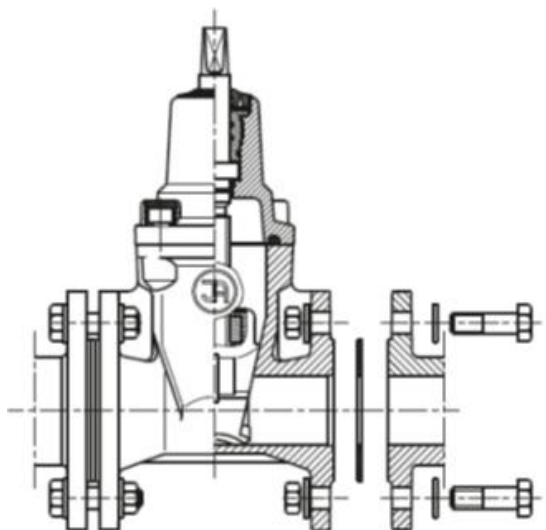
| PN       | PN16    |         |         |         |         |
|----------|---------|---------|---------|---------|---------|
| DN       | 200     | 250     | 300     | 350     | 400     |
| Ø C      | 266     | 319     | 370     | 429     | 480     |
| Ø D      | 340     | 405     | 460     | 520     | 580     |
| Ø K      | 295     | 355     | 410     | 470     | 525     |
| Nb x Ø L | 12 x 23 | 12 x 28 | 12 x 28 | 16 x 28 | 16 x 31 |
| b        | 20      | 22      | 24.5    | 26.5    | 28      |
| e        | 3       | 3       | 4       | 4       | 4       |
| Ref.     | 180201  | 180251  | 180301  | 180351  | 180401  |

**RESILIENT SEAT GATE VALVE PN10/16 SHORT PATTERN DIN 3202-F4 CTC EPDM**

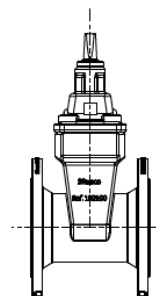
**STANDARDS :**

- Manufacturer certified ISO 9001 :2015 and ISO 14001 : 2015
- DIRECTIVE 2014/68/EU : For liquids of Group 2
  - Products excluded (article 1, § 2b)
- Certificate 3.1 on request
- Designing according to DIN EN 1171
- Pressure tests according to EN 12266-1, Rate A
- Length according to EN 558 series 14 ( DIN 3202 F4 )
- Flanges according to EN 1092-2 PN10/16
- **GSK** Certified Epoxy Powder Coating

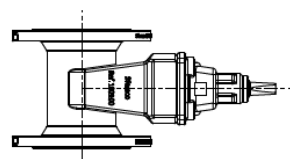
**INSTALLATION POSITIONS :**



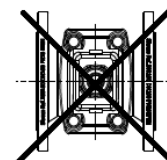
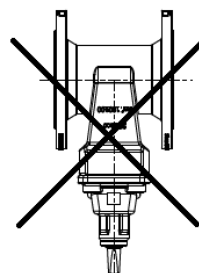
**Recommended :**



**Acceptable :**



**Non acceptable :**



**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.

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