

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O'GATE**



ISO 9001 : 2008



**Size :** DN 40 to DN 1000  
**Ends :** ISO PN10/16 flanges  
**Min Temperature :** - 10°C  
**Max Temperature :** + 110°C with EPDM wedge  
**Max Pressure :** 16 Bars up to DN400, 10 bars over  
**Specifications :** Non rising stem  
Clockwise to close  
Full and total bore

**Materials :** Ductile iron body

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>3</sup>GATE**

**SPECIFICATIONS :**

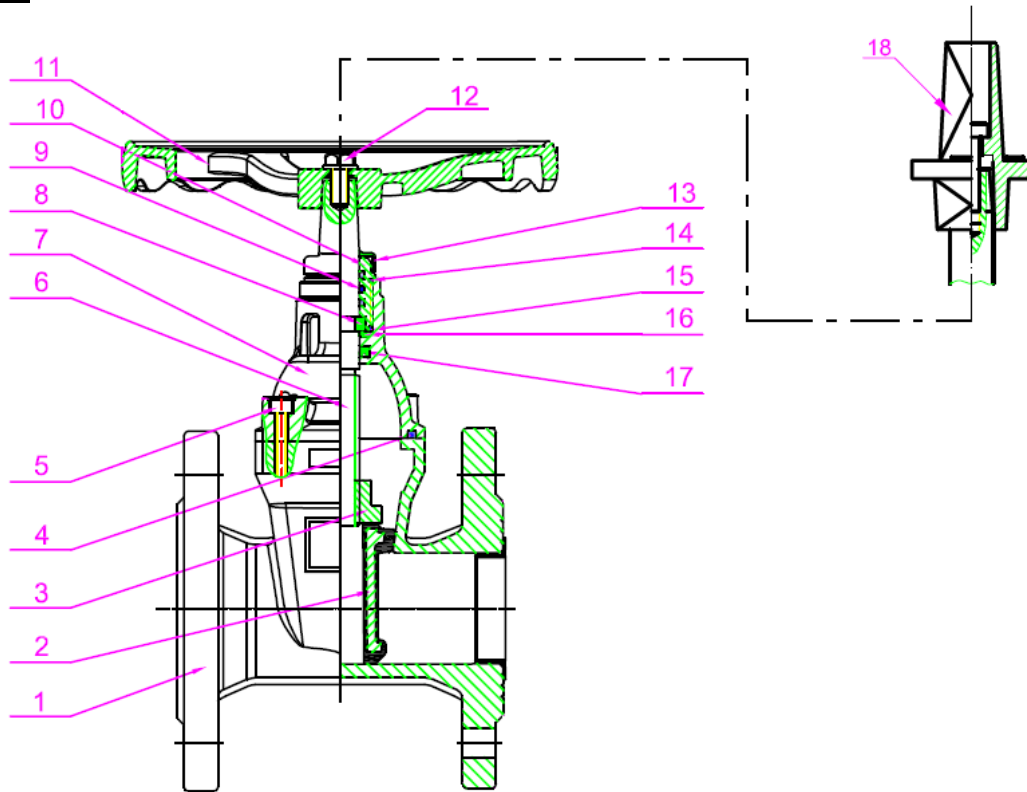
- Full and total bore
- Stainless steel non rising stem
- Clockwise to close
- Sliding pad ( to facilitating the wedge movement ) up to DN200
- Ductile iron wedge EPDM or NBR coated
- No retention area
- Heel positioning
- NBR bonnet gasket
- Screws bonnet protected
- 3 NBR O ring on stem
- Possibility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

**USE :**

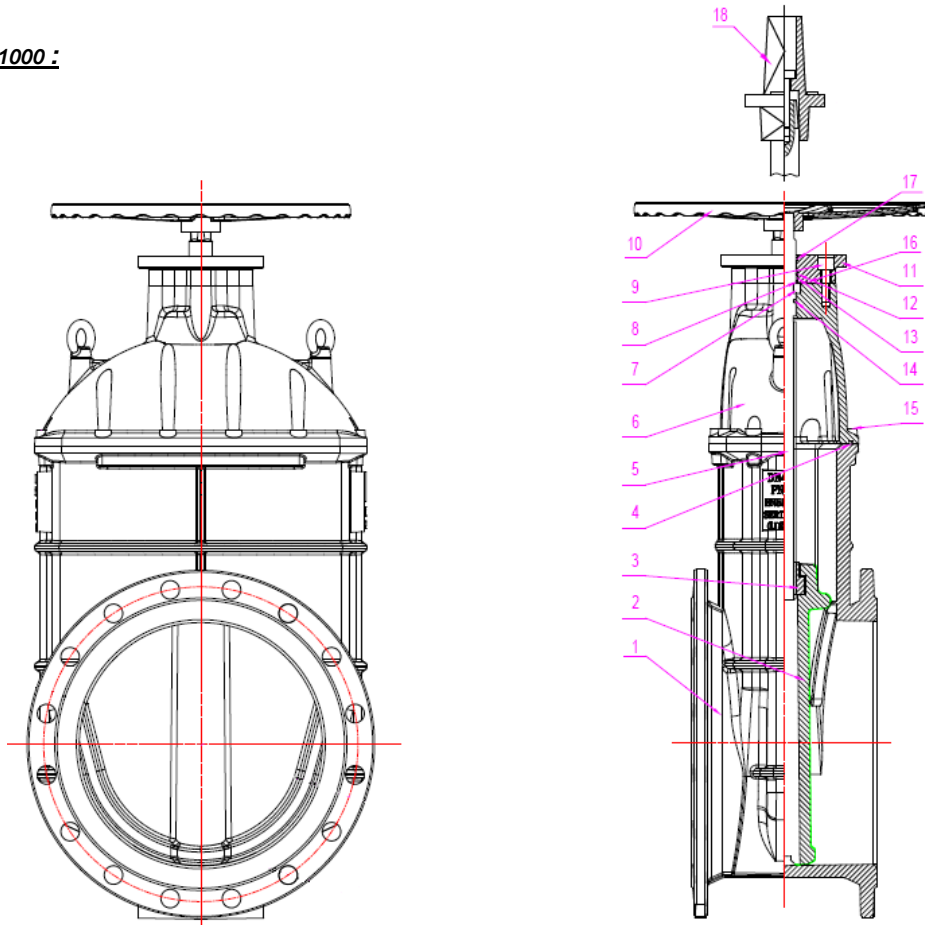
- For water distribution
- Min and max Temperature Ts : - 10°C to + 110°C for ductile iron wedge EPDM coated **Ref. 180**
- Min and max Temperature Ts : - 10°C to + 110°C for ductile iron wedge EPDM coated with French water agreement ACS **Ref. 181**
- Min and max Temperature Ts : - 10°C to + 70°C for ductile iron wedge NBR coated **Ref. 182**
- Max pressure Ps : 16 bars for ISO PN16 flanged valves up to DN400
- Max pressure Ps : 10 bars for ISO PN10 flanged valves from DN200 to 1000

**RANGE :**

- Ductile iron body with ISO PN10/16 flanges R.F. and handwheel with EPDM wedge **Ref. 180** from DN 40 to DN 400
- Ductile iron body with ISO PN10 flanges R.F. and handwheel with EPDM wedge **Ref. 180** from DN 450 to DN 1000
- Ductile iron body with ISO PN10/16 flanges R.F. and handwheel with EPDM wedge and French water agreement ACS **Ref. 181** from DN 40 to DN 400
- Ductile iron body with ISO PN10 flanges R.F. and handwheel with EPDM wedge and French water agreement ACS **Ref. 181** from DN 450 to DN 1000
- Ductile iron body with ISO PN10/16 flanges R.F. and handwheel with NBR wedge **Ref. 182** from DN 40 to DN 300
- 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. 9802020-9802030** from DN50 to DN400
- Stem extension 1,25 meter long **Ref. 9802031-9802041** from DN50 to DN400
- Stem extension 1,5 meter long **Ref. 9802042-9802052** from DN50 to DN400
- Stem extension 1,3 to 1,8 meter long **Ref. 9802060-9802068** from DN50 to DN300
- Stem extension 2 to 2,5 meter long **Ref. 9802070-9802078** from DN50 to DN300
- Tee key 1 meter long **Ref.9802080-9802082** from DN50 to DN400

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>o</sup>GATE**
**MATERIALS DN40-300 :**


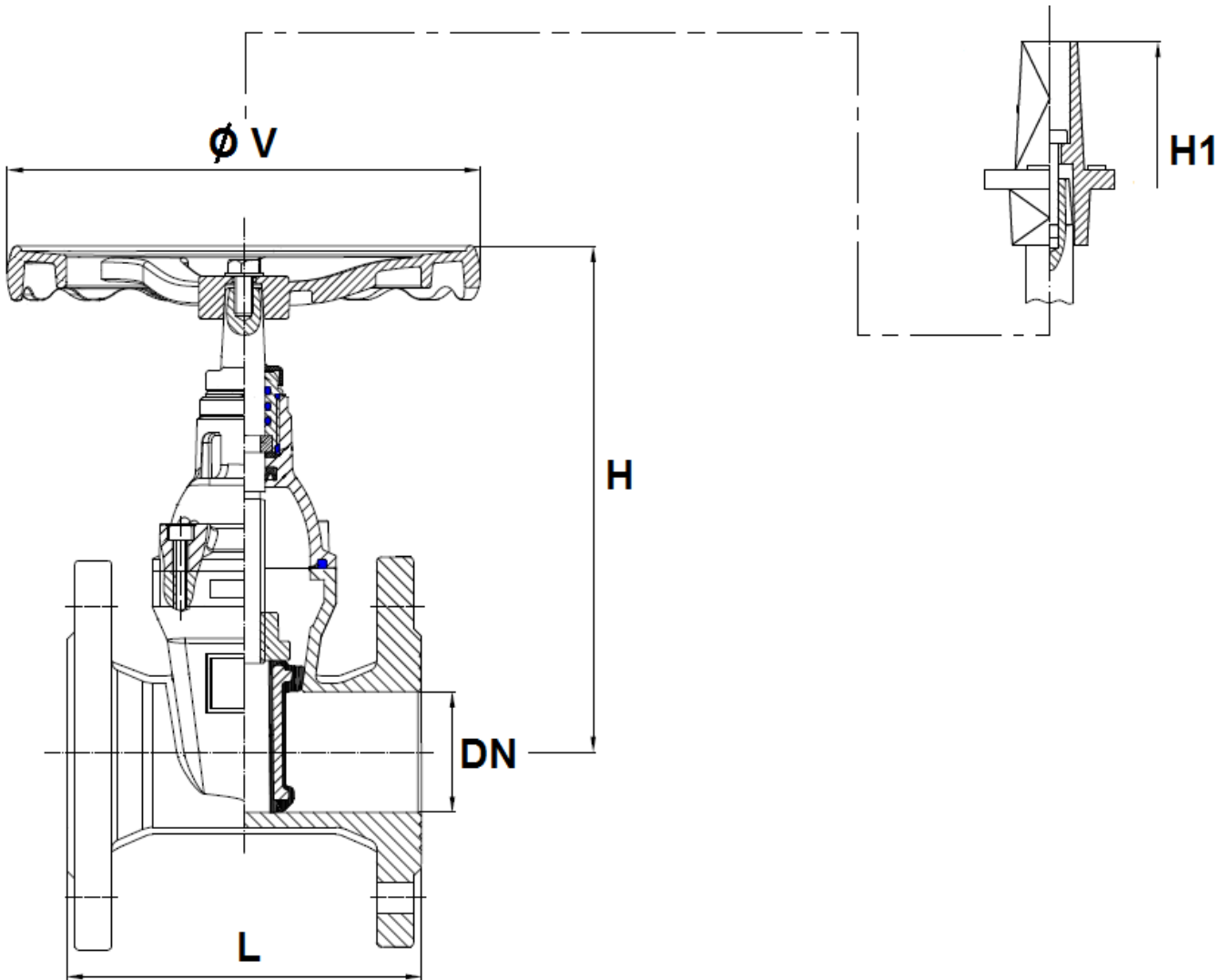
Item	Designation	Materials Ref.180	Materials Ref.181	Materials Ref.182
1	Body	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
2	Wedge	Ductile iron EN GJS-500-7 + EPDM	Ductile iron EN GJS-500-7 + EPDM	Ductile iron EN GJS-500-7 + NBR
3	Stem nut	Brass CuZn40Pb3	Brass CuZn40Pb3	Brass CuZn40Pb3
4	Gasket bonnet	NBR	NBR	NBR
5	Bonnet screw	Steel C35	SS 304	Steel C35
6	Stem	SS 420	SS 304	SS 420
7	Bonnet	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
8	Holding ring	Brass CuZn39Pb2	Brass CuZn39Pb2	Brass CuZn39Pb2
9	O ring	NBR	NBR	NBR
10	Pusher nut	Brass CuZn39Pb2	Brass CuZn39Pb2	Brass CuZn39Pb2
11	Handwheel	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
12	Handwheel screw	Steel Rst 37-2	Steel Rst 37-2	Steel Rst 37-2
13	Dust-coat	NBR	NBR	NBR
14	O ring	NBR	NBR	NBR
15	O ring	NBR	NBR	NBR
16	Ring	Nylon 66	Nylon 66	Nylon 66
17	Auto sealing ring	NBR	NBR	NBR
18	Square drive nut	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>o</sup>GATE**
**MATERIALS DN350-1000 :**


Item	Designation	Materials Ref.180 DN350-1000	Materials Ref.181 DN350-1000
1	Body	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
2	Wedge	Ductile iron EN GJS-500-7 + EPDM	Ductile iron EN GJS-500-7 + EPDM
3	Stem nut	Brass CuZn39Pb2	Brass CuZn39Pb2
4	Bonnet gasket	NBR	NBR
5	Stem	SS 420	SS 304
6	Bonnet	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
7	Holding ring	Brass CuZn39Pb2	Brass CuZn39Pb2
8	O ring	NBR	NBR
9	Screw	Steel Rst 37-2	SS 304
10	Handwheel	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
11	Gland	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7
12	O ring	NBR	NBR
13	Ring	Nylon 66	Nylon 66
14	O ring	NBR	NBR
15	Bonnet bolt	Steel C35	SS 304
16	O ring	NBR	NBR
17	Dust-coat	NBR	NBR
18	Square drive nut	Ductile iron EN GJS-500-7	Ductile iron EN GJS-500-7

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 OGATE**

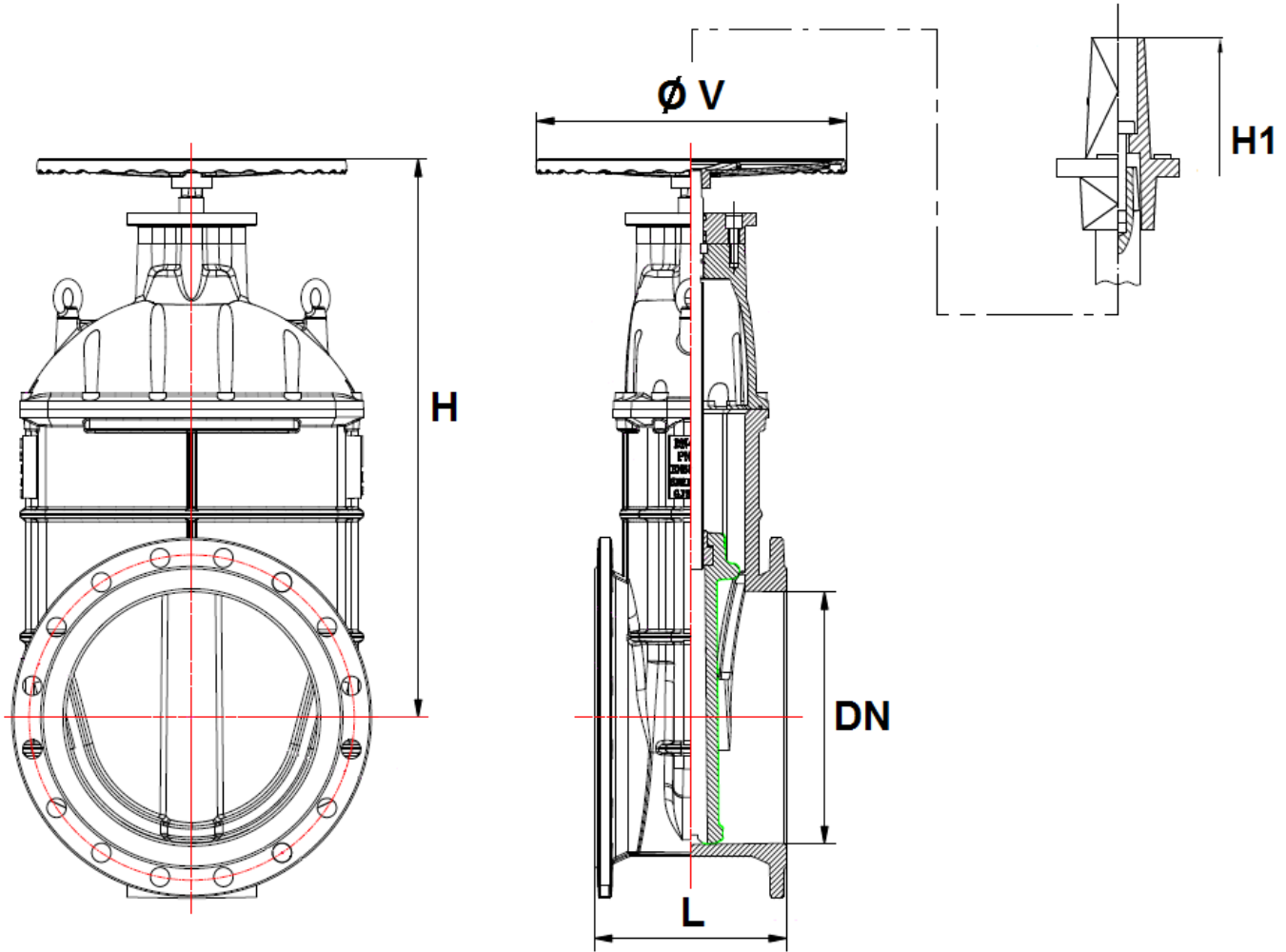
HANDWHEEL VALVE SIZE DN 40 - 300 ( in mm ) :



Ref.	DN	40	50	65	80	100	125	150	200	250	300
<b>180/181/182</b>	L	140	150	170	180	190	200	210	230	250	270
	H	190	215	235	265	315	350	385	485	600	680
	H1	280	285	300	320	390	430	470	560	680	770
	Ø V	200	200	200	254	254	315	315	315	406	406
	Weight ( Kg )	7.37	8.56	11.30	14	19.90	24.20	31.80	49.40	84.70	106

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O°GATE**

**HANDWHEEL VALVE SIZE DN 350 - 1000 ( in mm ) :**

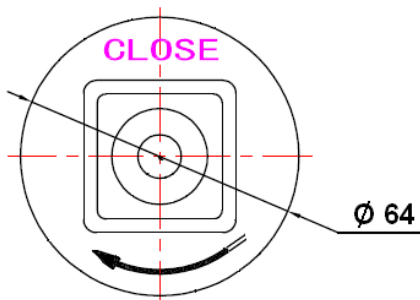
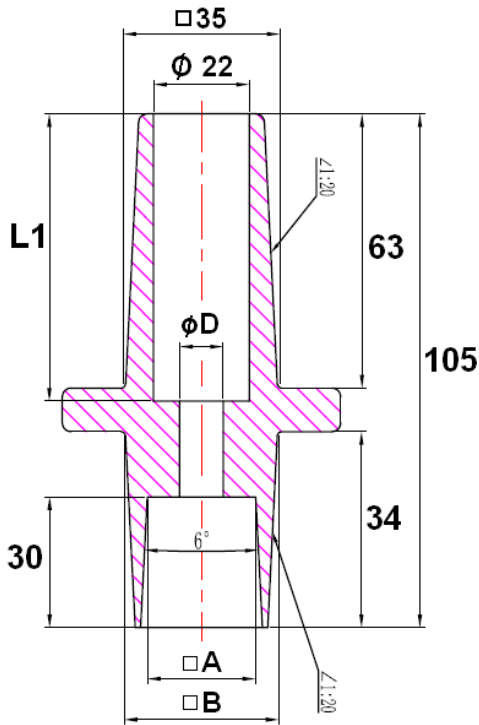


Ref.	DN	350	400	450	500	600	700	800	1000
<b>180/181</b>	L	290	310	330	350	390	430	470	550
	H	810	890	1050	1230	1260	1430	1570	2150
	H1	900	1000	-	-	-	-	-	-
	Ø V	500	500	500	650	650	720	800	1000
	Weight (Kg)	184	210	361	419	625	862	1024	2000

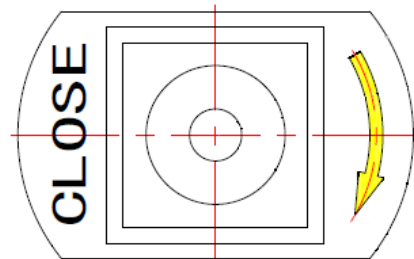
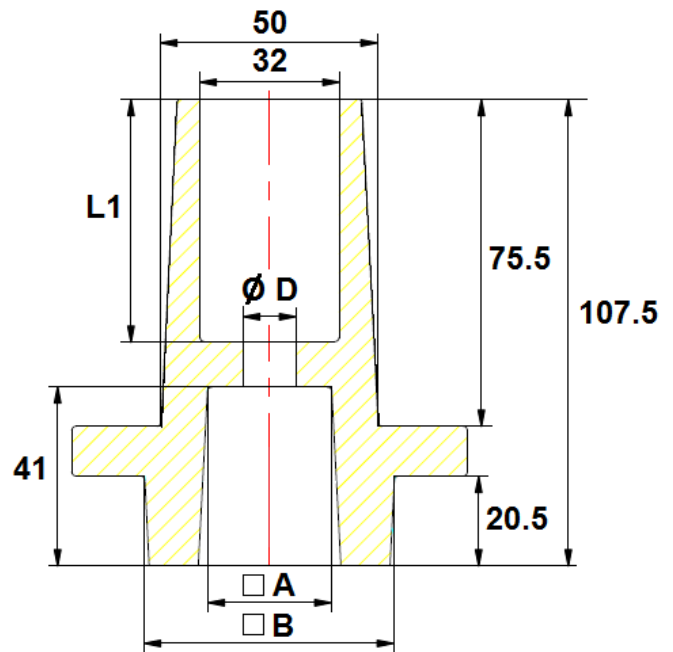
**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 OGATE**

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

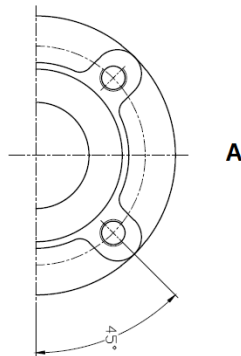
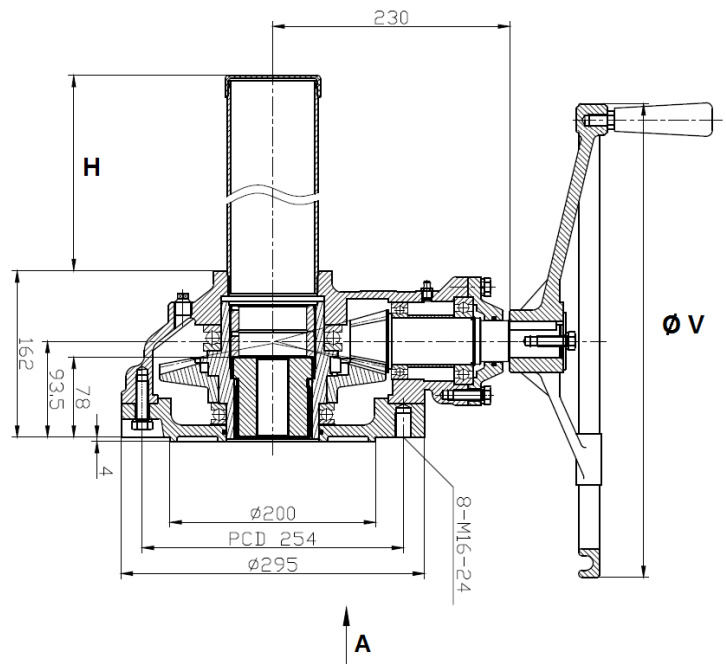
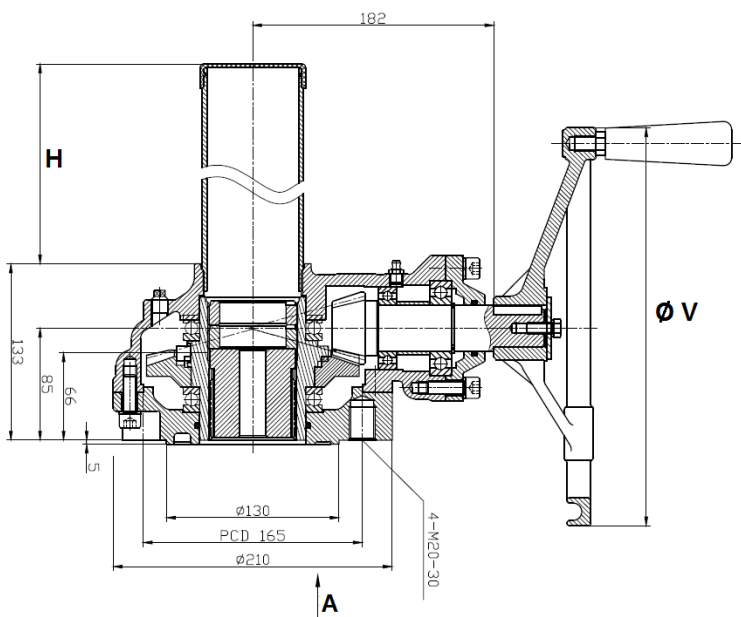
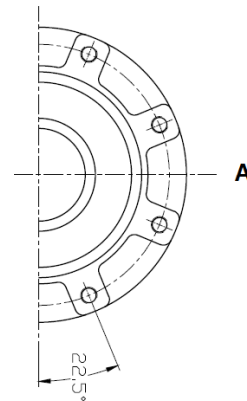
**DN 40 – 300**



**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	0.8	0.8
Ref.	9801831	9801831	9801831	9801832	9801832	9801833	9801833	9801833	9801834	9801834	9801838	9801838

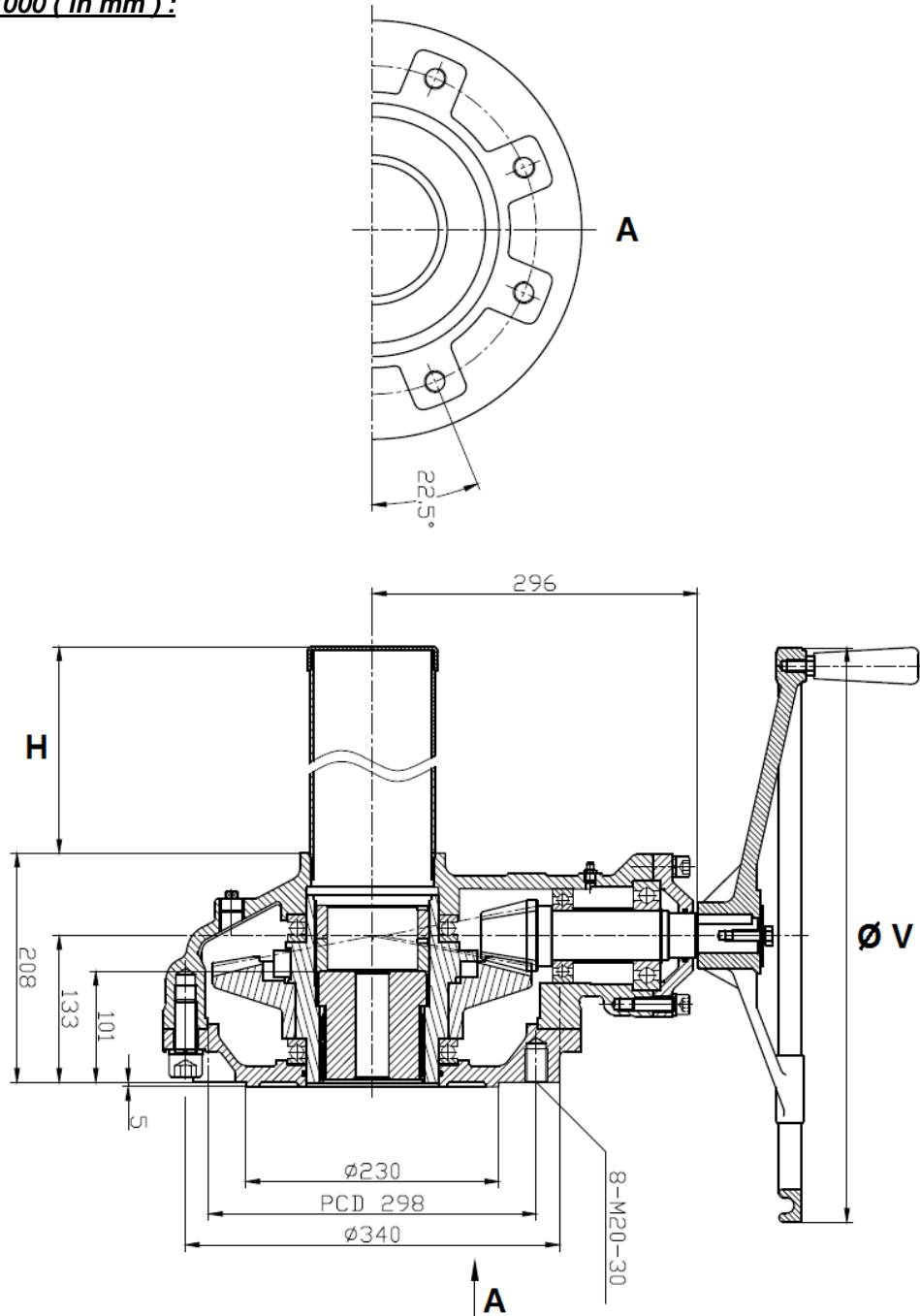
**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>2</sup>GATE**
**GEARBOX SIZE ( in mm ) :**
**DN500**

**DN600 - 800**


DN	500	600	700	800
H	450	500	500	500
Ø V	300	460	460	460
Weight ( Kg )	25	55	55	55
Ref.	9801600	9801601	9801602	9801603

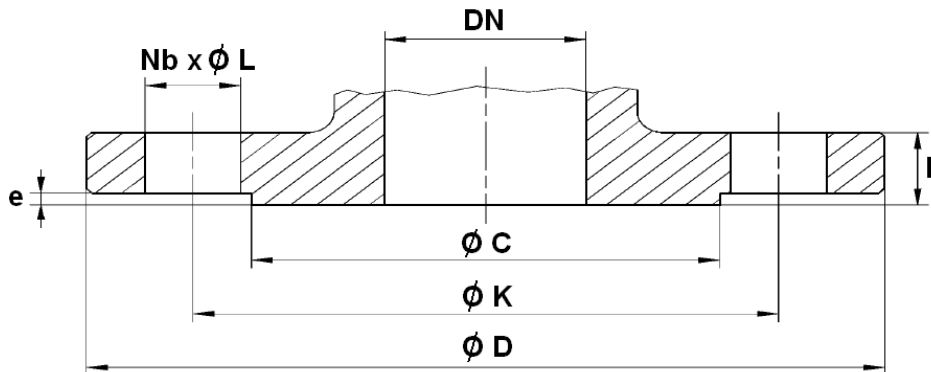


**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>o</sup>GATE**

GEARBOX SIZE DN1000 ( in mm ):



DN	1000
H	600
Ø V	520
Weight ( Kg )	95

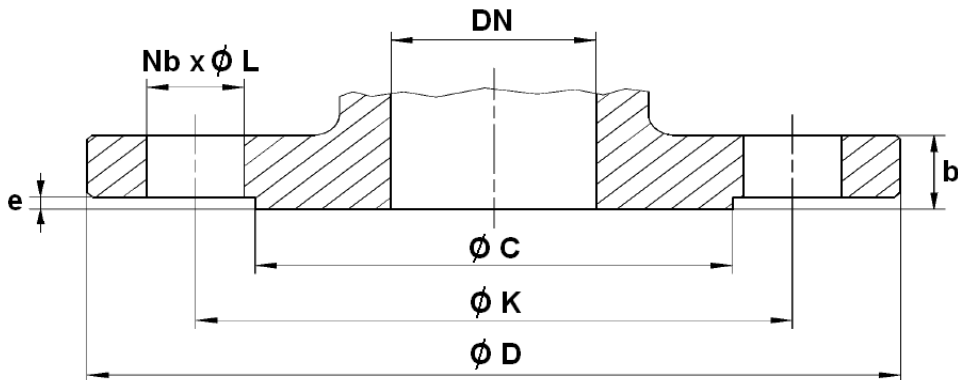
**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 **
**FLANGES ISO PN10 SIZE ( in mm ) :**


DN	40	50	65	80	100	125	150	200	250	300
Ø C	84	99	118	132	156	184	211	266	319	370
Ø D	150	165	185	200	220	250	285	340	405	460
Ø K	110	125	145	160	180	210	240	295	350	400
Nb x Ø L	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	20	22	24.5
e	3	3	3	3	3	3	3	3	3	4
Ref. 180	180040	180050	180065	180080	180100	180125	180150	180200	180250	180300
Ref. 181	181040	181050	181065	181080	181100	181125	181150	181200	181250	181300
Ref. 182	182040	182050	182065	182080	182100	182125	182150	182200	182250	182300

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. 180	180350	180400	180450	180500	180600	180700	180800	1801000
Ref. 181	181350	181400	181450	181500	181600	181700	181800	1811000

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O°GATE**

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



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. 180	180201	180251	180301	180351	180401
Ref. 181	181201	181251	181301	181351	181401
Ref. 182	182201	182251	182301	-	-

**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 **
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

STANDARDS :

- Fabrication according to ISO 9001 :2008
- Designing according to DIN 3352.4
- Tests according to EN 12266-1, Range A
- DIRECTIVE 97/23/CE : Concerned by article 3, § 3 up to DN300  
Risk category I Module A from DN350 to 600
- Length according to EN 558 series 14 ( DIN 3202 F4 )
- Flanges according to EN 1092-2 PN10/16
- English water agreement WRAS N° 1009062 for the wedge EPDM coated from DN50 to 500
- French water agreement **A.C.S. N° 14 ACC LY 028** for Ref.181 with wedge EPDM coated
- Approval certificate Russian **GOST-R**

**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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**RESILIENT SEAT GATE VALVE ISO PN10-16 F4 O<sup>o</sup>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.**
- Tighten the bolts in cross.
- It's recommended to operate the valve ( open and close ) 1 to 2 times per year