

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

Wafer butterfly valve initial range for non aromatic hydrocarbon, fuel, water, natural gas, grease, oil, compressed air, glycol. Cast iron EN GJL-250 or ductile iron EN-GJS-400-15 body, stainless steel disc and NBR seat. Between flanges PN6, PN10, PN16, Class 150 or JIS10K according to DN. 5 years warranty. Handling possible with gearbox. Thanks to the ISO 5211 plate, an actuator can be installed on the valve.



*Painting color is actually changing for RAL5005*



*New painting*



*Old painting*

- Size :** DN32/40 to DN500
- Connection :** Between flanges PN6, PN10/16, Class 150 and JIS10K\*
- Min Temperature :** -10°C
- Max Temperature :** +80°C
- Max Pressure :** 16 Bars up to DN300
- Specifications :** Long neck for isolation  
Stainless steel disc  
NBR vulcanized seat  
ISO 5211 mounting pad

**Materials :** Cast iron body EN GJL-250 or EN GJS-400-15

\*according to DN

the installation defects and wear defects are not covered by the guarantee

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

**SPECIFICATIONS :**

- Long neck for isolation
- ISO 5211 mounting pad
- Wafer type
- Between flanges PN6 from DN40 to 150, PN10/16 from DN32 to 500, Class 150 (PN20) from DN40 to 350 and from DN450 to 500
- Between flanges JIS10K from DN40 to DN300
- Full crossing stem
- With 10 positions lever and locking device up to DN150
- Double PTFE gasket on stem
- Stainless steel disc
- Epoxy painting RAL003 80 microns thickness, **painting color is actually changing for RAL5005**
- **Modification in progress for body material for ductile iron EN GJS-400-15 (EN-JS1030)**
- Vulcanized NBR seat

**USE :**

- No aromatic hydrocarbon, fuel, water, natural gas, grease, oil, compressed air, glycol
- Min and max Temperature Ts : - 10°C to + 80°C
- 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	
<b>Opening Angle</b>	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
	20°	2	3	5	8	15	25	38	76	129	200	288	396	525	675
	30°	5	6	10	15	31	52	81	160	273	422	610	839	1101	1428
	40°	10	13	21	33	67	113	175	348	592	914	1321	1817	2407	3095
	50°	18	23	38	60	119	202	312	620	1055	1630	2355	3239	4289	5515
	60°	30	38	64	99	196	334	516	1025	1746	2697	3897	5359	7097	9125
	70°	48	60	102	156	310	529	817	1623	2764	4269	6167	8481	11232	14442
	80°	72	90	152	235	466	793	1226	2434	4145	6403	9250	12720	16848	21662
	90°	78	98	167	258	512	872	1347	2675	4555	7037	10165	13799	18514	23805

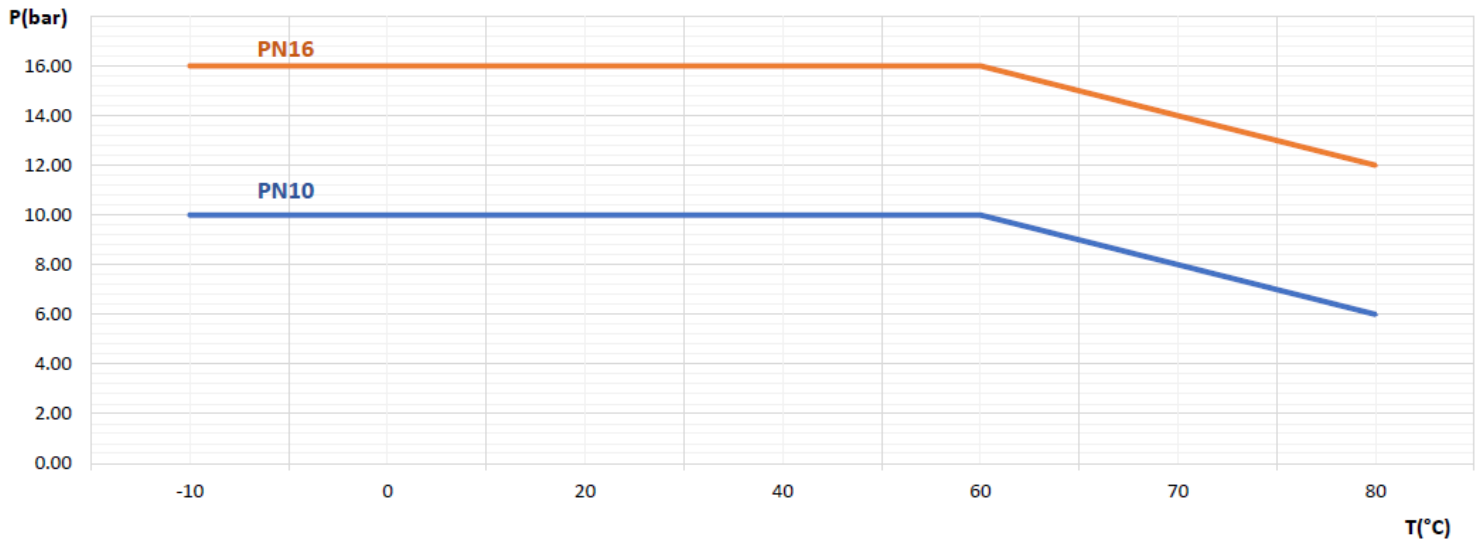
**TORQUE VALUE ( Nm, without safety coefficient ) :**

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
PN10	9	12	19	25	38	58	85	159	253	369	428	671	1001	1220
PN16	10	13	21	26	42	65	95	175	277	536	-	-	-	-

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

**PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :**



**RANGE :**

- Wafer butterfly valve with lever from DN32/40 to DN300
- Wafer butterfly valve with gearbox IP54 from DN350 to DN500
- Gearbox IP54 possible from DN32/40 to DN400 **Ref.1198001 to 1198007**
- Gearbox IP67 possible from DN32/40 to DN500 **Ref.1198301 to 1198310**
- Chain gearbox IP54 possible from DN32/40 to DN300 **Ref.1198201 to 1198206 (without chain)**
- Galvanized carbon steel chain for chain gearbox initial range **Ref.1198200 (per meter)**

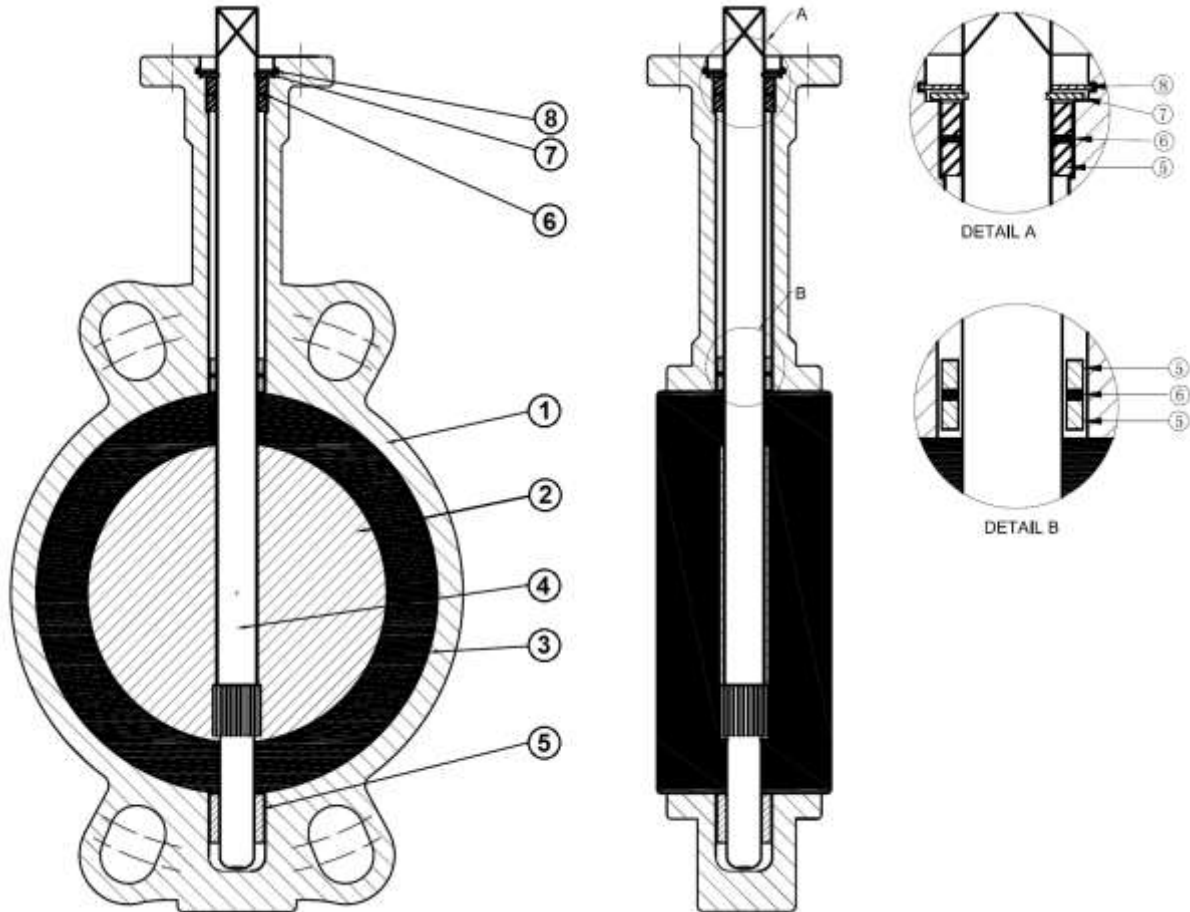


**CONNECTION :**

- Between flanges PN6 from DN40 to DN150
- Between flanges PN10/16 from DN32 to 500
- Between flanges Class 150 (PN20) from DN40 to DN350 and from DN450 to DN500
- Between flanges JIS10K from DN40 to DN300

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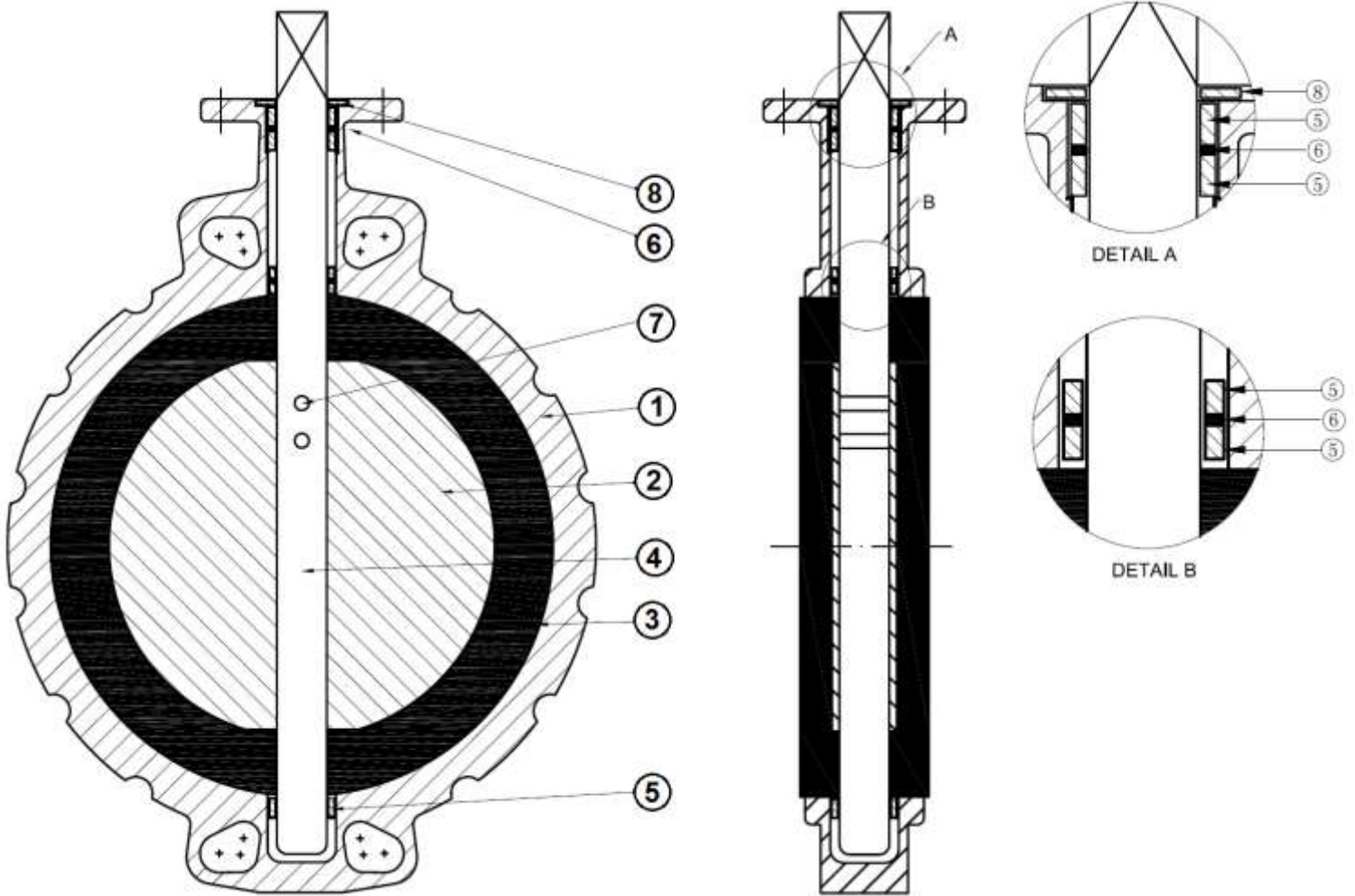
MATERIALS DN32/40-300 :



Item	Designation	Materials
1	Body	Cast iron EN GJL-250 or ductile iron EN-JS1030 (EN GJS-400-15)
2	Disc	ASTM A351 CF8M
3	Seat	NBR
4	Stem	AISI 420
5	Bushing	PTFE
6	O ring	NBR
7	Circlip	Steel
8	Circlip	Steel
	Lever	Aluminium

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

**MATERIALS DN 350 :**

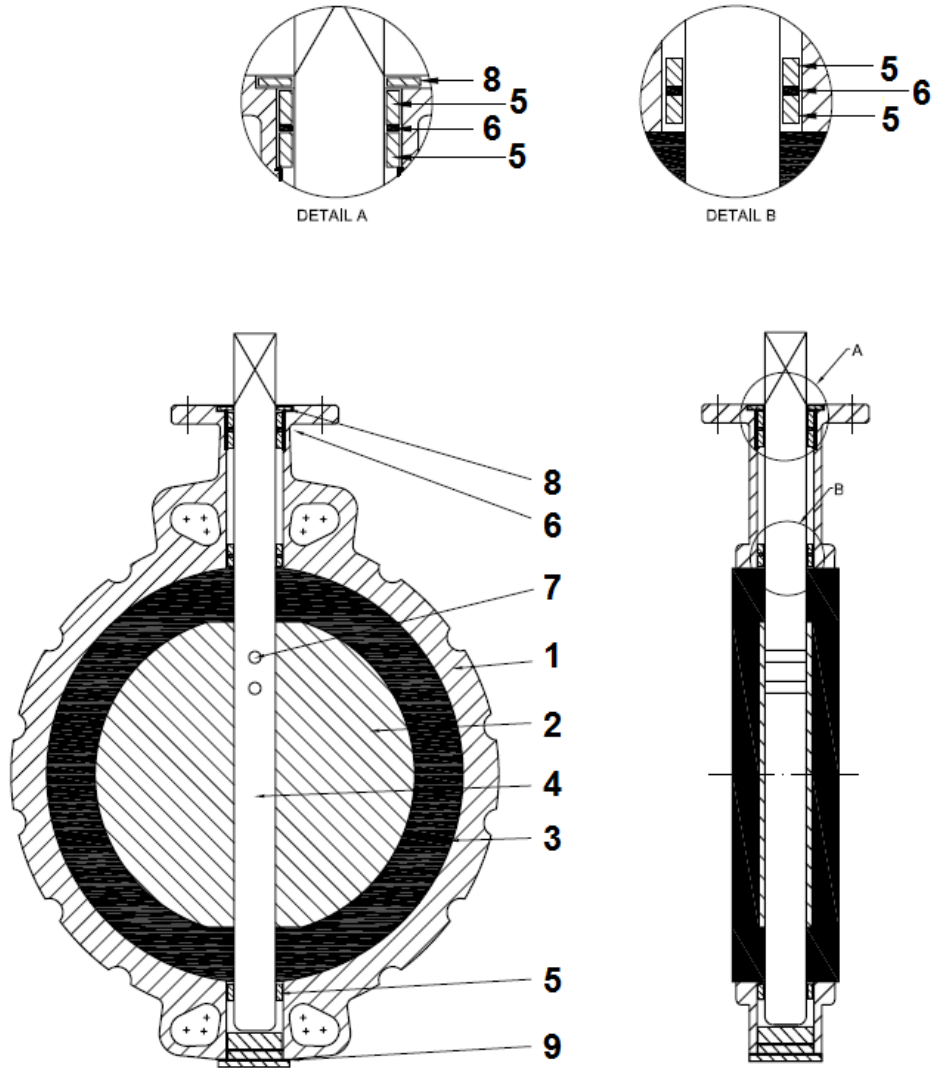


Item	Designation	Materials
1	Body	Cast iron EN GJL-250 or ductile iron EN-JS1030 (EN GJS-400-15)
2	Disc	ASTM A351 CF8M
3	Seat	NBR
4	Stem	AISI 431
5	Bushing	PTFE
6	O ring	NBR
7	Pin	AISI 316
8	Gasket	NBR



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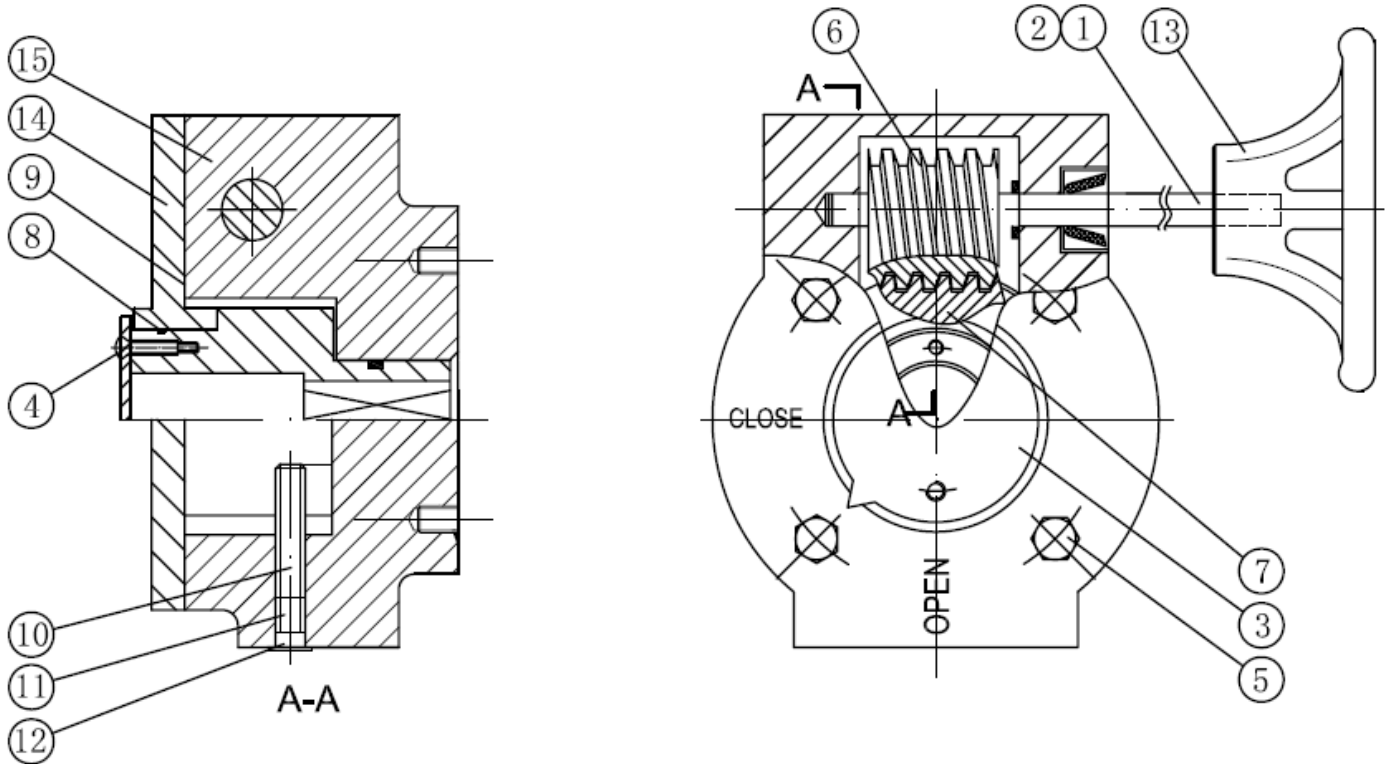
**MATERIALS DN 400-500 :**



Item	Designation	Materials
1	Body	Cast iron EN GJL-250 or ductile iron EN-JS1030 (EN GJS-400-15)
2	Disc	ASTM A351 CF8M
3	Seat	NBR
4	Stem	AISI 431
5	Bushing	PTFE
6	O ring	NBR
7	Pin	AISI 316
8	Gasket	NBR
9	Gasket	NBR

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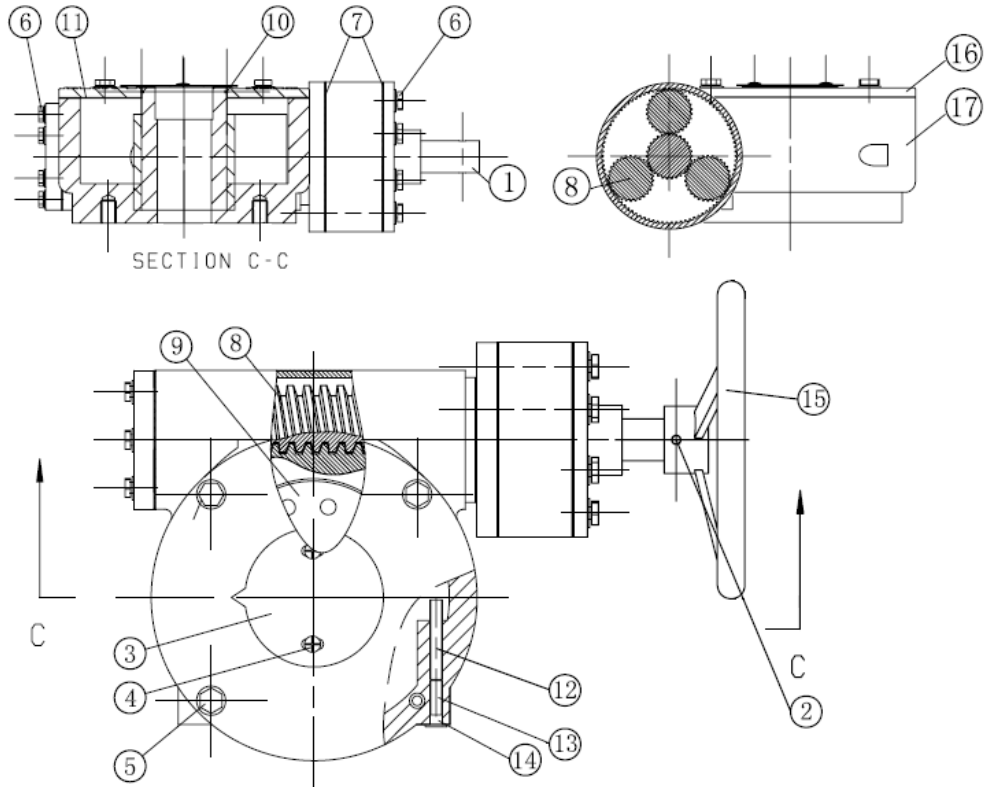
**MATERIALS GEARBOX DN40-450 :**



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

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

**MATERIALS GEARBOX DN500 :**



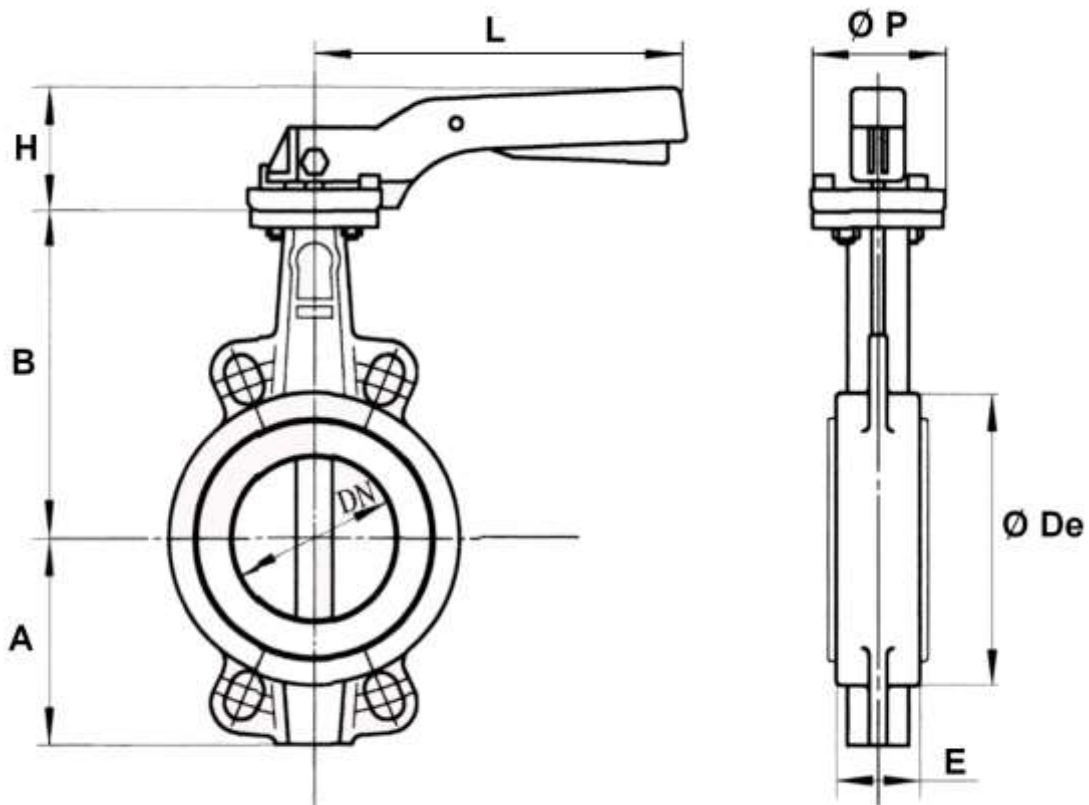
Item	Designation	Materials
1	Stem	Chromed carbon steel
2	Pin	AISI 316
3	Indicator plate	Aluminium with NBR gasket
4	Indicator bolting	AISI 316
5	Bonnet bolting	AISI 316
6	Bolting	AISI 316
7	Body gasket	NBR
8	Worm gear	Steel
9	Gear	Ductile iron EN GJS-400-15
10	O ring	NBR
11	Bonnet gasket	NBR
12	Internal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



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

VALVES SIZE ( in mm ) :

- VALVES WITH LEVER DN 32/40 - 300 :

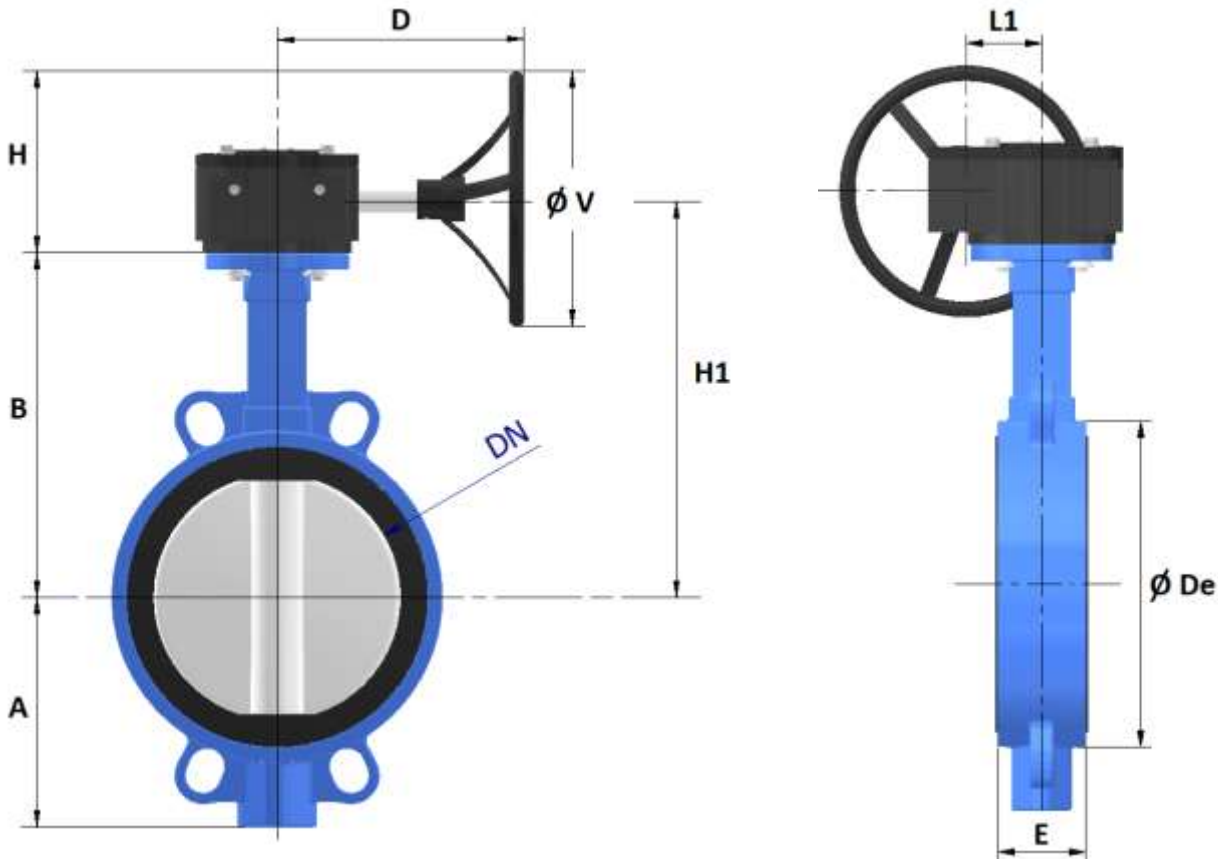


DN	32/40	50	65	80	100	125	150	200	250	300
A	61	77	87,5	95	107	121,5	144	171	205	235
B	130	136,5	142	158	180	192	215	242	280	310
Ø De	82	95	109	121	152	180	207	260	315	370
E	33	43	46	46	52	56	56	60	68	78
H	70	70	70	70	70	71	71	40	44	44
L	195	195	195	195	195	278	278	355	507	507
Ø P	65	65	65	65	65	90	90	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.	1121040	1121050	1121065	1121080	1121100	1121125	1121150	1121200	1121250	1121300

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

**VALVES SIZE ( in mm ) :**

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

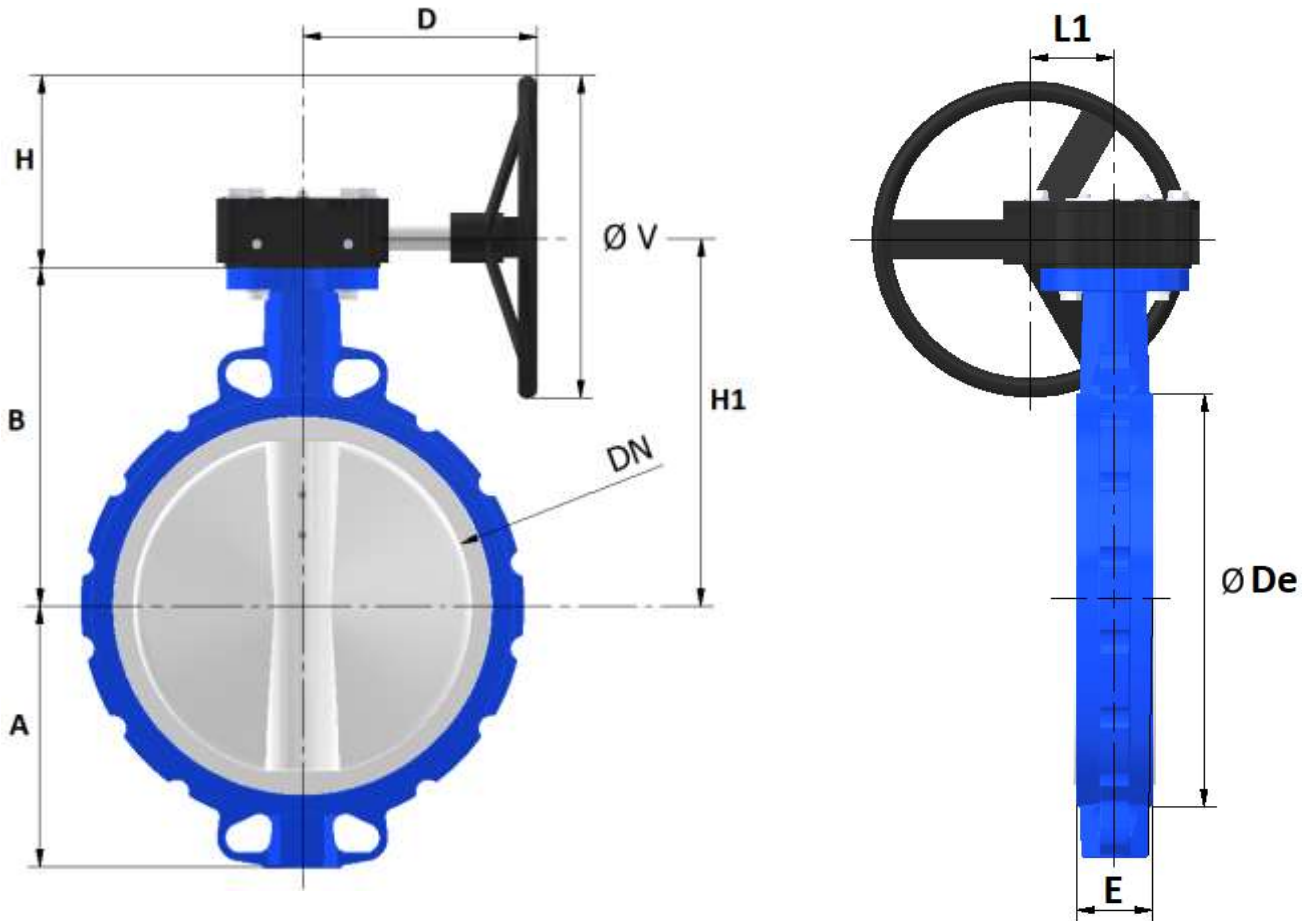


DN	32/40	50	65	80	100	125	150	200	250	300
A	61	77	88	95	107	122	144	171	205	235
B	130	137	142	158	180	192	215	242	280	310
D	162							224		223
Ø De	82	95	109	121	152	180	207	260	315	370
E	33	43	46	46	52	56	56	60	68	78
H	112					162		191		192
H1	167	174	179	195	217	229	252	283	321	352
L1	44							66		77
Ø V	150					250		300		
Weig. (Kg)	5.36	6.04	6.37	6.67	8.43	10.2	11.19	21.66	30.82	43.4

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

**VALVES SIZE ( in mm ) :**

- **VALVES WITH GEARBOX DN 350 :**

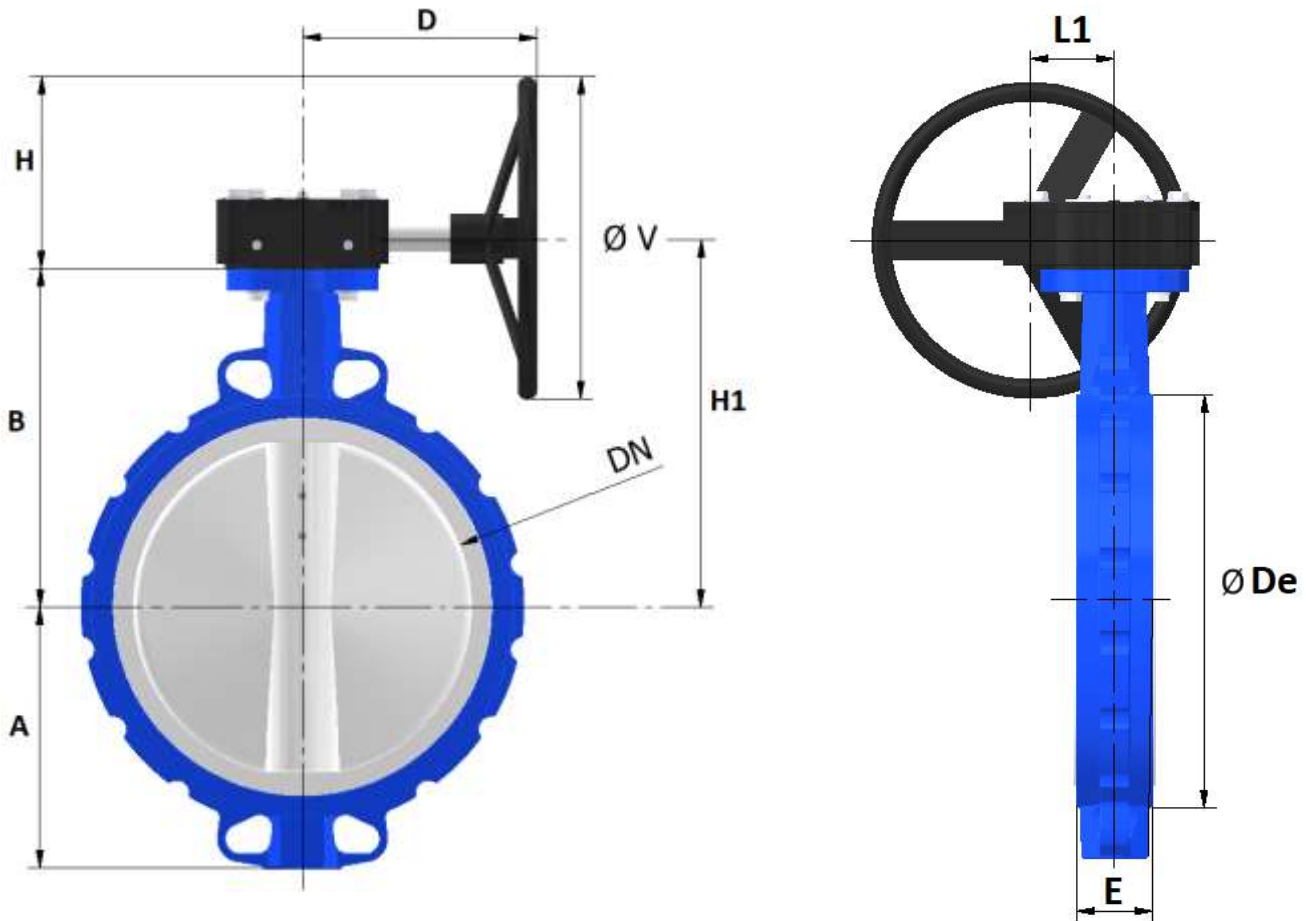


DN	350
A	260
B	334
D	223
Ø De	418
E	78
H	190
H1	379
L1	78
Ø V	300
Weight (Kg)	54.5
Ref.	1121350

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

**VALVES SIZE ( in mm ) :**

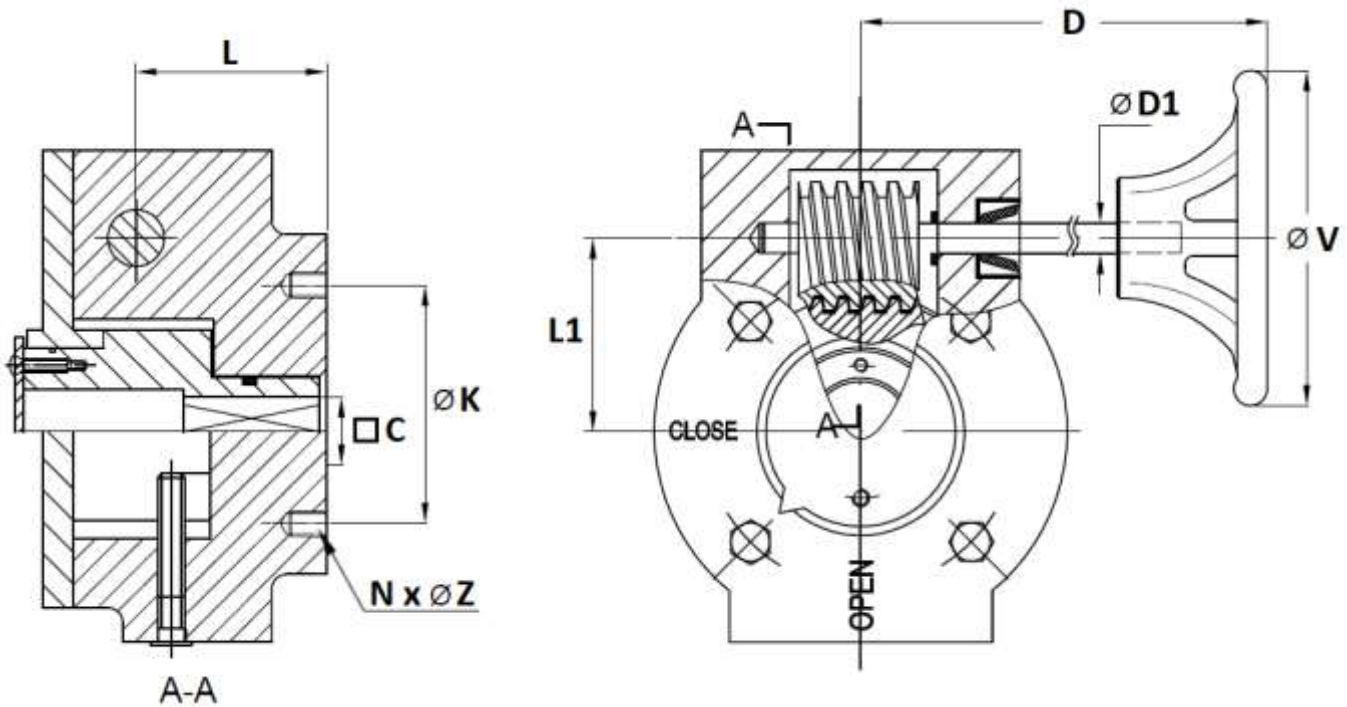
- **VALVES WITH GEARBOX DN 400 - 500 :**



DN	400	450	500
A	307	339	368
B	361	401	480
D	270	270	339
Ø De	470	525	570
E	102	114	127
H	208	258	222
H1	423	463	545
L1	120	120	120
Ø V	400	400	300
Weight (Kg)	89.85	107.4	155.8
Ref.	1121400	1121450	1121500

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

**GEAR BOX SIZE ( in mm ) :**

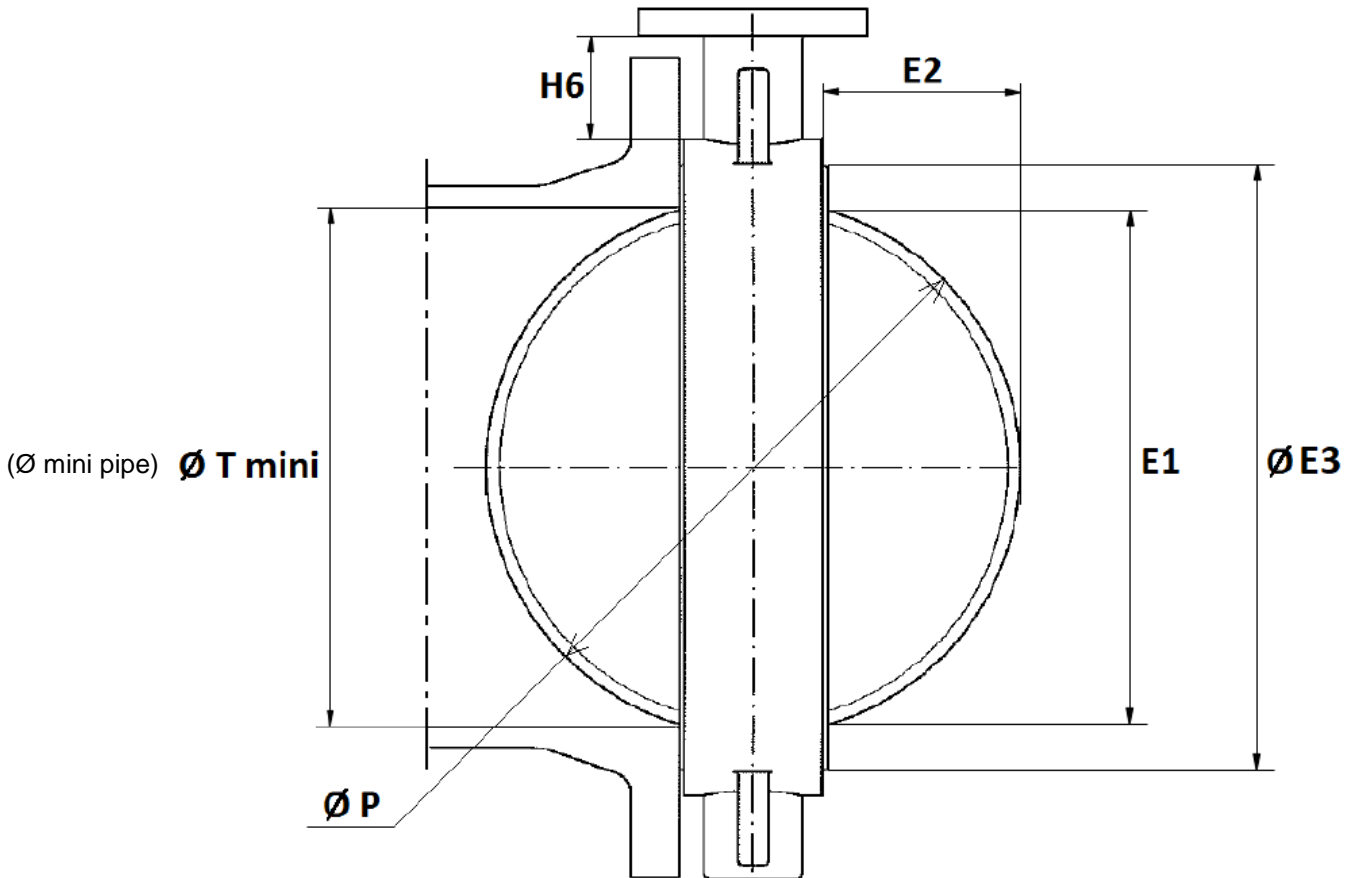


DN	32/80	100	125/150	200	250	300-350
C	9	11	14	17	22	27
Ø K	50	50	70	102	125	125
ISO	F05	F05	F07	F10	F12	F12
N x ØZ	4 x M6	4 x M6	4 x M8	4 x M10	4 x M12	4 x M12
L	37			41		42
D	162			224		223
L1	44			66		77
Ø D1	16			19		
Ø V	150		250	300		
Weight (kg)	3.51	4.22	3.53	6.99	7.42	9.6
Ref.	1198001	1198002	1198003	1198004	1198005	1198006



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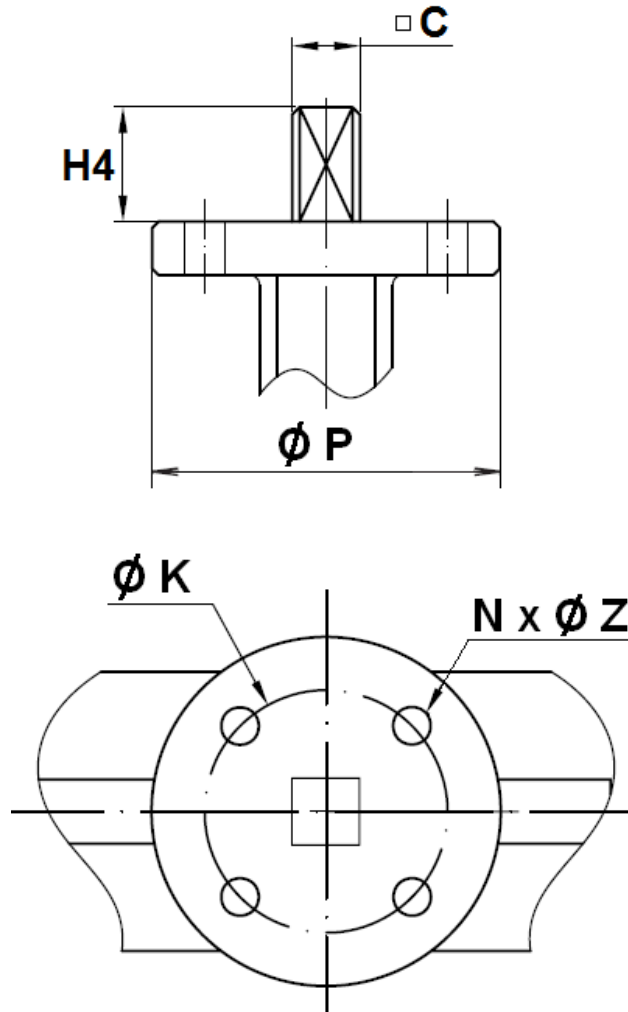
**DISC AND NECK SIZE ( in mm ) :**



DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500
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
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
Ø E3 ±2	70	76	90	104	135	159	188	238	292	344	375	439	490	535
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
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
Ø T mini	43	53	65	79.5	104.5	124	155.5	202.5	250.5	302	334	390	441	492

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

ISO MOUNTING PAD SIZE ( in mm ) :



DN	32/40	50	65	80	100	125	150	200	250	300	350	400	450	500
C	9	9	9	9	11	14	14	17	22	27	27	27	30	36
Ø K	50	50	50	50	50	70	70	102	125	125	125	125	165	165
ISO	F05	F05	F05	F05	F05	F07	F07	F10	F12	F12	F12	F12	F16	F16
Nx ØZ	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
H4	32	32	32	32	32	42	42	36	38	38	45	50	50	65
Ø P	65	65	65	65	65	90	90	125	150	150	150	150	210	210

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

**GEARBOX SPECIFICATIONS :**

DN	32/80	100	125/150	200	250	300-350	400	450	500
Ratio factor	24 :1	24 :1	24 :1	30 :1	30 :1	50 :1	80 :1	80 :1	260 :1
Input torque (Nm)	6	6	6	7.5	7.5	12.5	20	20	65
Output torque (Nm)	170	170	170	700	700	1200	2500	2500	2500

**STANDARDS :**

- Manufacturer certified ISO 9001 : 2015 and ISO 14001 : 2015
- Designing according to API 609
- DIRECTIVE 2014/68/EU: For liquids and gas of Group 1
  - DN32-50: Risk Category I, CE marking
  - DN65-200: Risk Category II, CE0035 marking
  - DN250-300: Risk Category III, CE0035 marking
  - DN350: Risk Category II, CE0035 marking
  - DN400-500: Risk Category III, CE0035 marking
- 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 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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