

**CONCENTRIC WAFER BUTTERFLY VALVE PERFORMANCE RANGE DUCTILE IRON BODY  
BRONZE-ALUMINIUM DISC AND NBR SEAT**

Wafer butterfly valve performance range for closing or setting networks of cold water, hot water and sea water.  
Ductile iron EN GJS-400-15 body, Bronze Aluminium C958 disc and NBR seat.  
Between flanges 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.

**Certificate**

**3.1**



**Size :** DN32 to DN600  
**Connection :** Between flanges PN10/16, Class 150(PN20) or JIS10K\*  
**Min Temperature :** -10°C  
**Max Temperature :** +90°C  
**Max Pressure :** 16 Bars up to DN300 (10 bars over)  
**Specifications :** Long neck for isolation  
Bronze-alu C958 disc  
Full crossing stem (up to DN65)  
ISO 5211 mounting pad

**Materials :** Ductile iron EN GJS 400-15 body, NBR seat

\*according to DN



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**SPECIFICATIONS :**

- Long neck for isolation
- ISO 5211 mounting pad
- Wafer type
- Between flanges PN10/16 from DN32 to 600, Class 150 (PN20) from DN40 to 600 and JIS10K from DN40 to DN300
- Full crossing stem (up to DN65)
- Removable NBR seat
- 9 positions lever up to DN150 and 12 positions lever from DN200 to 300, with locking device
- Bronze-alu C958 disc
- Epoxy RAL 5015 or RAL 5005 electrostatic painting coated body, 250 $\mu$  thickness

**USE :**

- Cold and hot water, sea water
- Min and max Temperature Ts : - 10°C to + 90°C
- Max Pressure Ps : 16 bars up to DN300, 10 bars over

**RANGE :**

- With lever from DN 32-40 to DN 300
- With gearbox from DN350 to 600
- Possible with gearbox **Ref. 1192** from DN 32-40 to DN 300

**ENDS :**

- Between flanges PN10/16 from DN32 to 600, Class 150 (PN20) from DN40 to 600 and JIS10K from DN40 to DN300

**TORQUE VALUE ( Nm, without safety coefficient ) at 16 Bars :**

DN	32-40	50	65	80	100	125	150	200	250	300
Torque ( Nm )	11	15.1	17.2	23.1	39.8	61.9	102	192	323	490

**TORQUE VALUE ( Nm, without safety coefficient ) at 10 Bars :**

DN	32-40	50	65	80	100	125	150	200	250	300
Torque ( Nm )	10.5	14.3	16.3	22	37.8	58.8	96.9	182.4	306.9	465.5

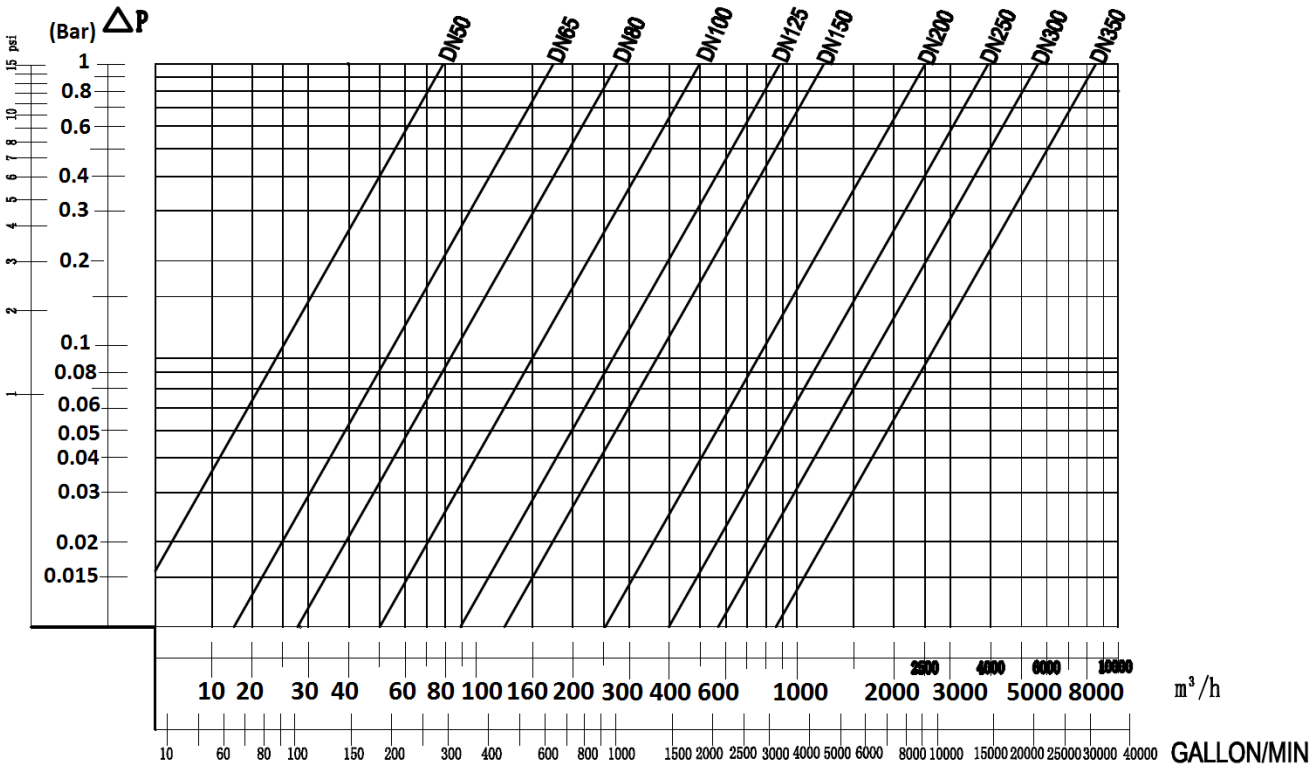
DN	350	400	450	500	600
Torque ( Nm )	550	755	1012	1350	2111

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**FLOW COEFFICIENTS Kv ( m<sup>3</sup> / h ) :**

Kv	OPENING ANGLE								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	0,05	2,6	6,0	13	23	38	60	90	99
65	0,09	5	10	21	39	64	102	153	168
80	0,17	8	15	33	60	99	157	236	259
100	0,26	15	31	67	119	197	312	468	514
125	0,43	25	52	114	203	336	531	797	876
150	0,69	39	81	176	314	518	821	1231	1353
200	1,7	76	161	350	623	1030	1631	2446	2687
250	2,6	129	274	595	1060	1754	2776	4164	4576
300	3	201	424	919	1638	2710	4289	6433	7069
350	5	290	613	1327	2366	3914	6195	9292	10212
400	7	398	842	1825	3254	5383	8519	12779	14043
450	9	527	1116	2418	4308	7129	11284	16925	18599
500	12	678	1411	3109	5540	9167	14508	21762	23914
600	19	1047	2217	4803	8560	14163	22414	33621	36946

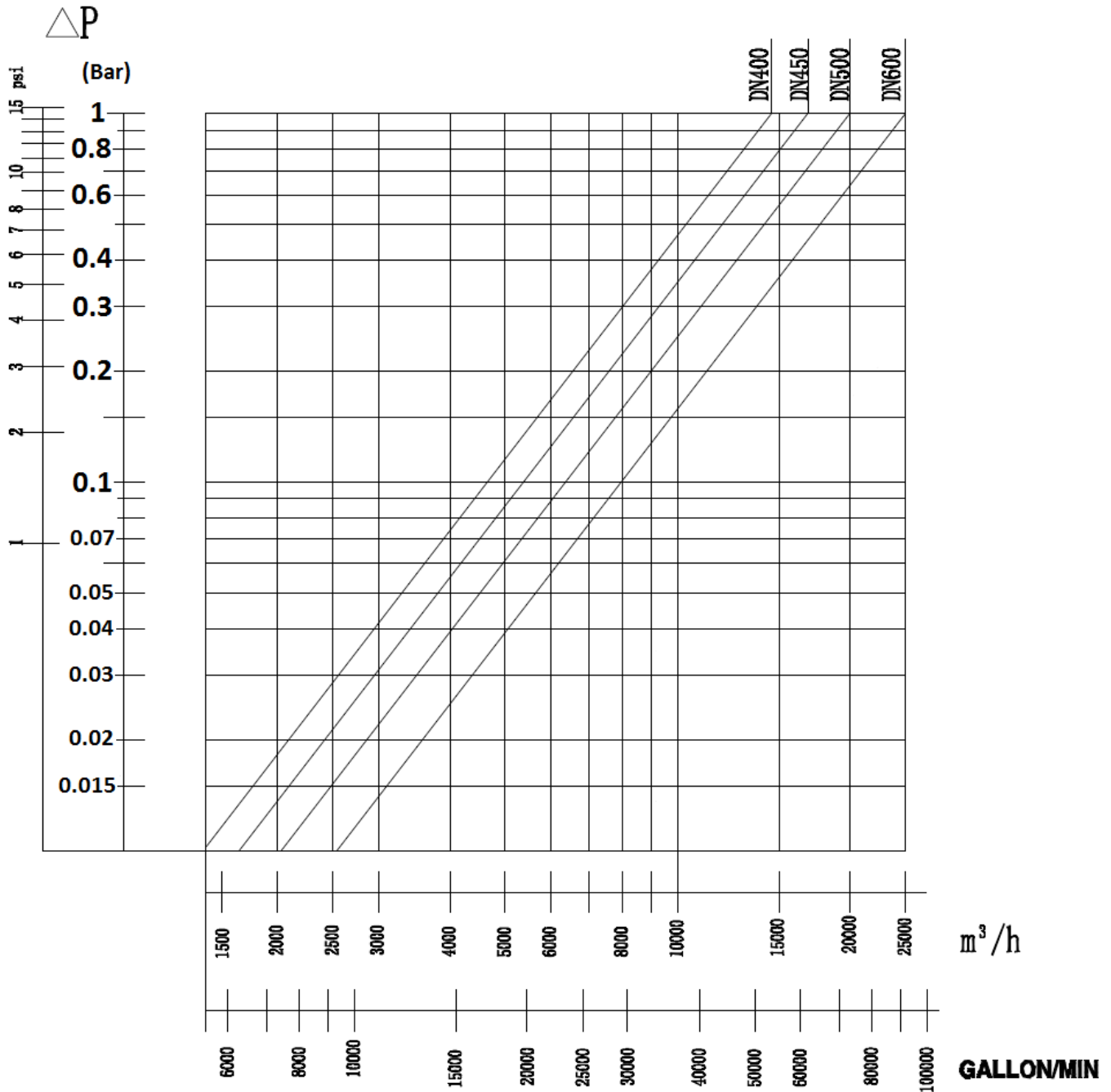
**HEAD LOSS GRAPH DN50-350 :**





**CONCENTRIC WAFER BUTTERFLY VALVE PERFORMANCE RANGE DUCTILE IRON BODY  
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HEAD LOSS GRAPH DN400-600 :

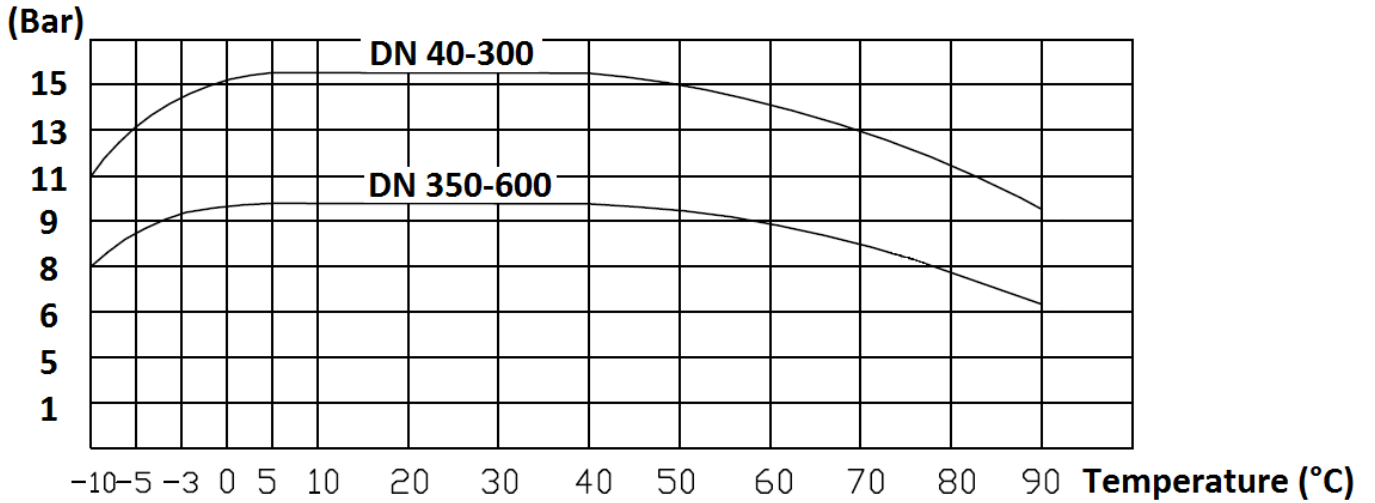




**CONCENTRIC WAFER BUTTERFLY VALVE PERFORMANCE RANGE DUCTILE IRON BODY  
BRONZE-ALUMINIUM DISC AND NBR SEAT**

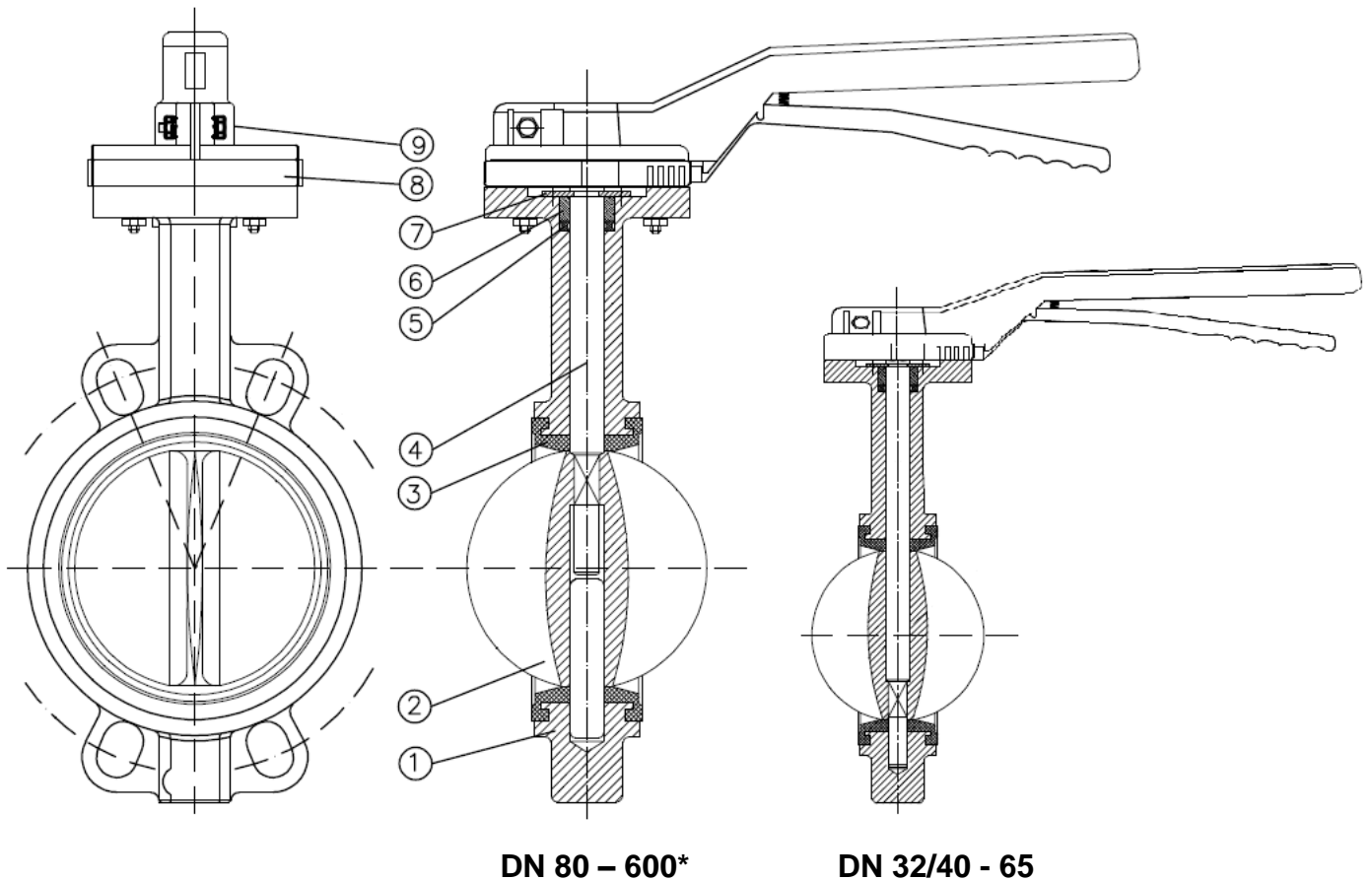
PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :

Pressure



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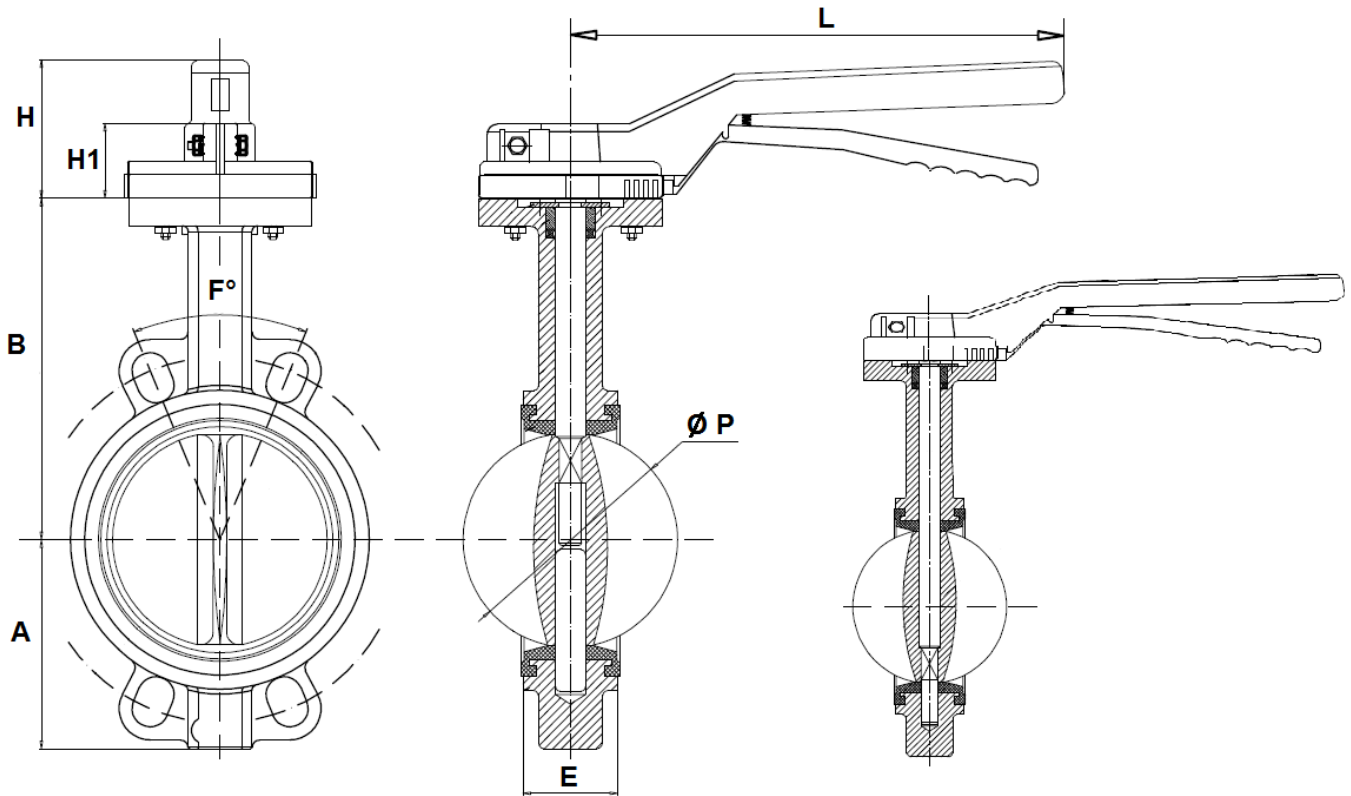
**MATERIALS :**



Item	Designation	Materials
1	Body	Ductile iron EN GJS-400-15
2	Disc	Bronze-alu C958
3	Seat	NBR
4	Stem	AISI 416
5	Gasket	NBR
6	Bushing	PTFE
7	Circlips	Steel
8	Plate	Aluminium
9 (* up to DN300)	Lever	Aluminium

**CONCENTRIC WAFER BUTTERFLY VALVE PERFORMANCE RANGE DUCTILE IRON BODY  
BRONZE-ALUMINIUM DISC AND NBR SEAT**

**VALVE SIZE ( in mm ) DN32/40-300 :**



(\* : body with 8 flanges holes for DN80)

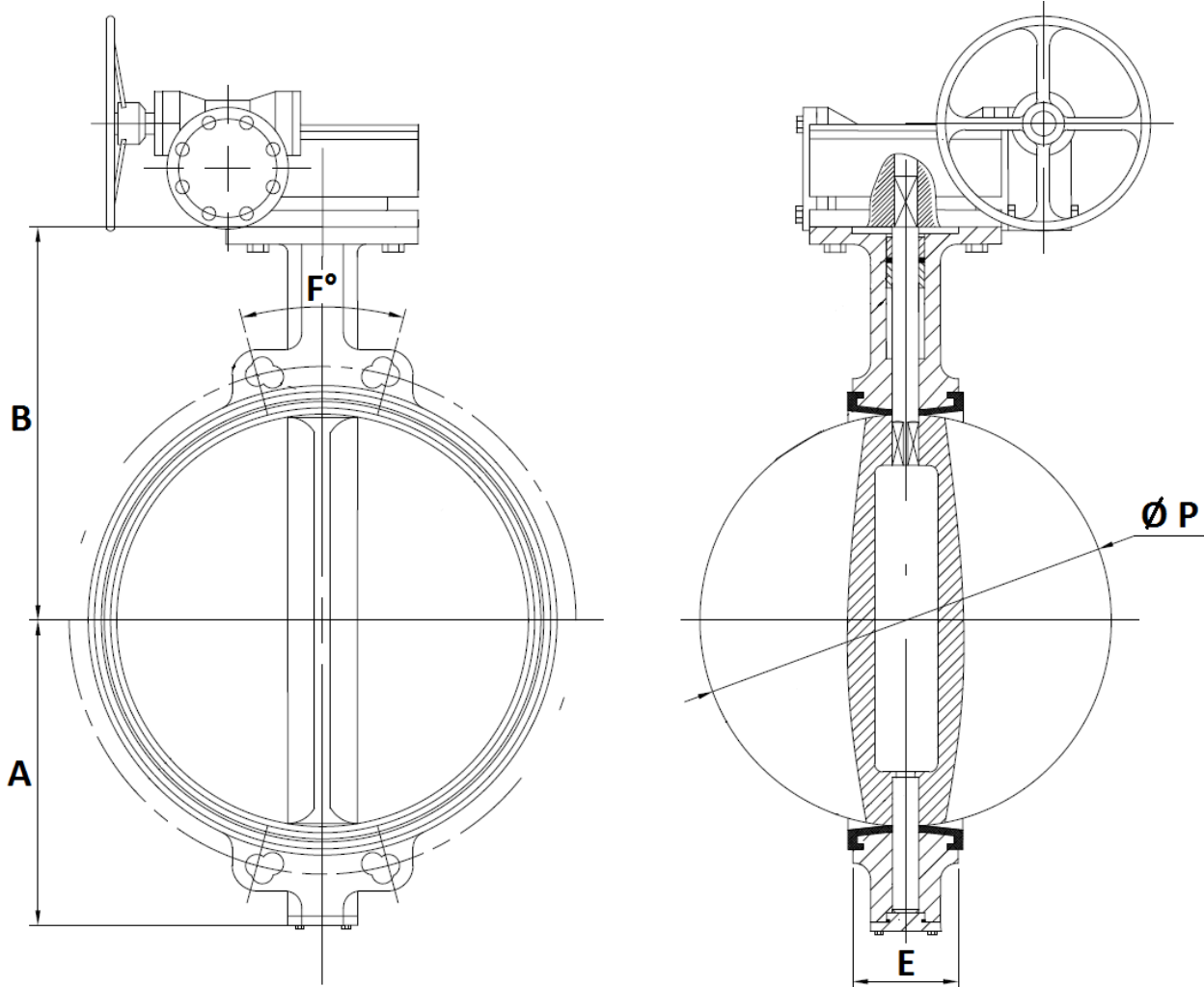
**DN 80 – 300**

**DN 32/40 – 65**

DN	32-40	50	65	80	100	125	150	200	250	300
Ø P	42.9	52.7	64.4	78.9	104.1	123.4	155.7	202.5	250.5	301.5
L	200	200	200	200	200	325	325	400	400	400
E	33	43	46	46	52	56	56	60	68	78
H1	43	43	43	43	43	43	43	46	46	46
H	74	74	74	74	74	75	75	75	75	75
B	120	140	150	158	176	190	211	235	265	305
A	57	65	75	93	108	125	135	170	205	238
F°	90°	90°	90°	45°	45°	45°	45°	30°	30°	30°
Weight (Kg)	2.3	2.7	3.4	4.2	5.4	7.3	8.7	14.6	21.3	28.6
Ref.	1174040	1174050	1174065	1174080	1174100	1174125	1174150	1174200	1174250	1174300

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BRONZE-ALUMINIUM DISC AND NBR SEAT**

**VALVE SIZE ( in mm ) DN350-600 :**



DN	350	400	450	500	600
Ø P	333.9	380.2	433.3	491.8	571.5
E	78	102	114	127	154
B	368	400	422	480	562
A	267	309	328	361	459
F°	22.5	22.5	18	18	18
Weight (Kg)	52	89	107	156	236
Ref.	1174350	1174400	1174450	1174500	1174600

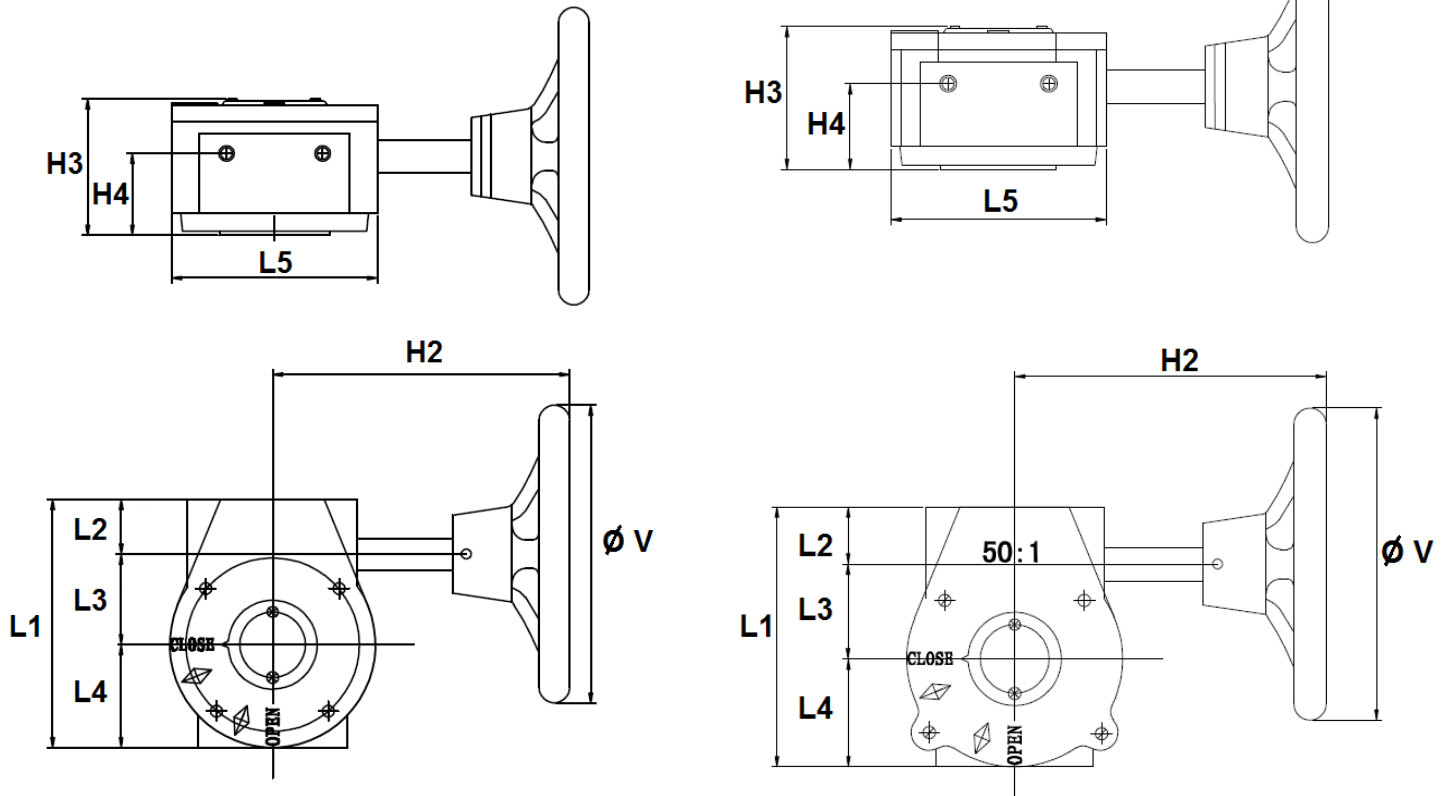


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**GEARBOX SIZE REF.1192 ( in mm ) DN32/40-350 :**

**DN 32/40 – 250**

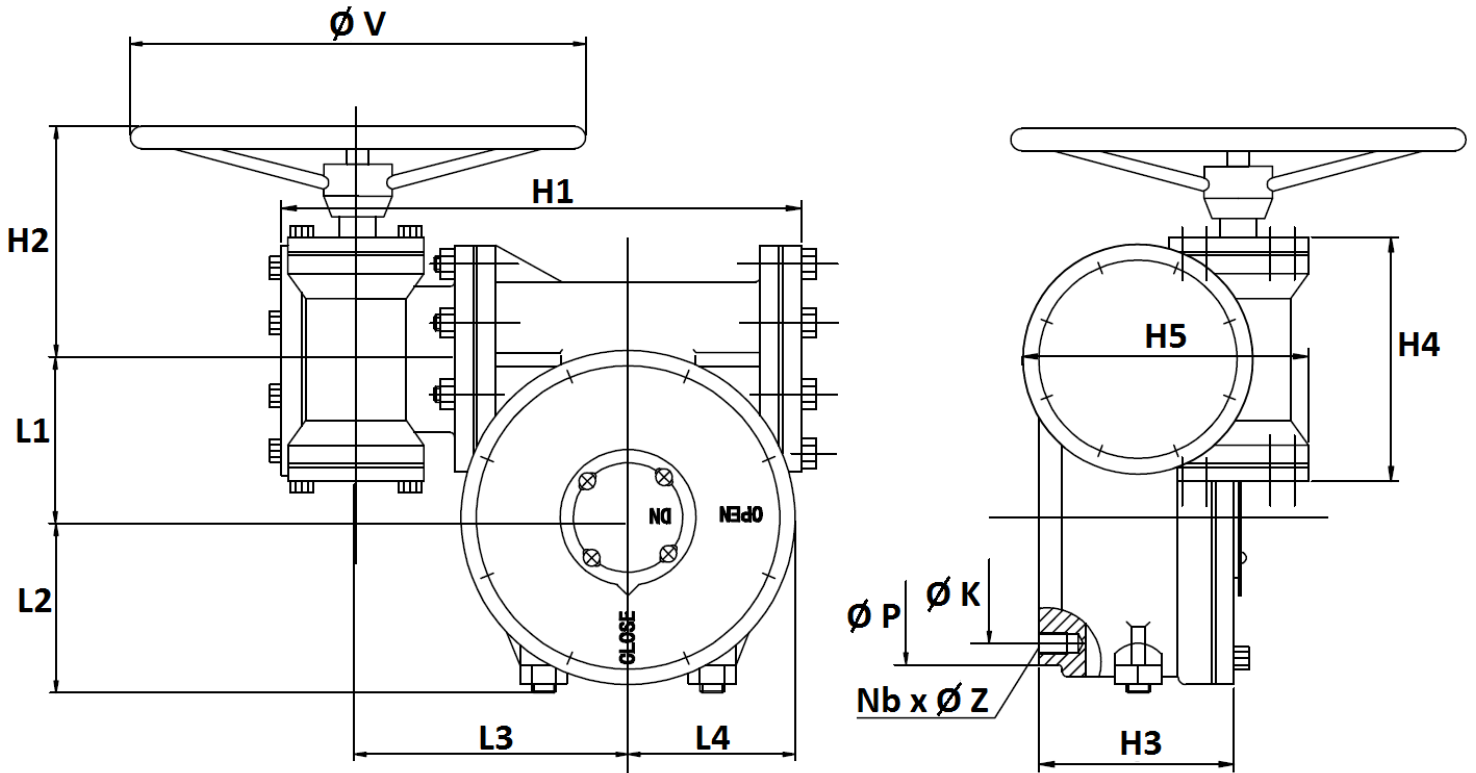
**DN 300-350**



DN	32/40 – 80	100	125 – 150	200	250	300	350
Ø V	150	150	150	300	300	300	300
H2	156	156	156	220	220	225	225
H3	72	72	72	85	85	82	82
H4	43	43	43	45	45	45	45
L1	125	125	125	170	170	185	185
L2	30	30	30	33	33	32.5	32.5
L3	45	45	45	66	66	77.5	77.5
L4	50	50	50	71	71	75	75
L5	104	104	104	146	146	155	155
Weight (Kg)	3.8	3.8	3.8	8.1	8.1	9.8	9.8
Ref.	1192001	1192002	1192003	1192004	1192005	1192006	-

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**GEARBOX SIZE DN400-600 ( in mm ):**



DN	400-500	600
$\varnothing V$	300	390
H1	320	386
H2	165	165
H3	135	140
H4	170	170
H5	185	185
L1	104	130
L2	110	135
L3	175	197
L4	100	145
$\varnothing K$ (ISO)	140 (F14)	165 (F16)
Nb x $\varnothing Z$	4 x M16	4 x M20
$\varnothing P$	175	210
Weight (Kg)	31	48



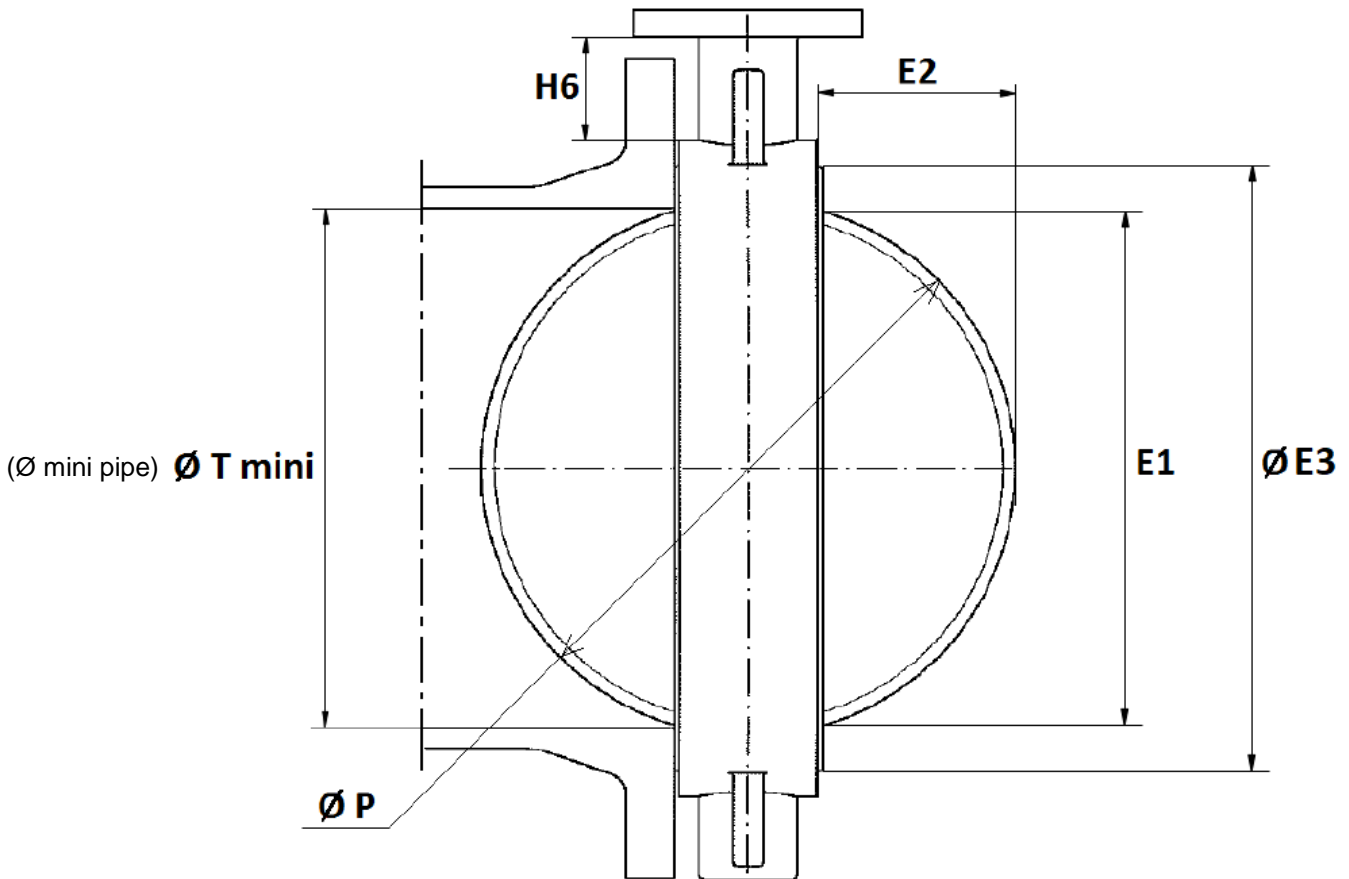
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BRONZE-ALUMINIUM DISC AND NBR SEAT**

**GEARBOX SPECIFICATIONS REF.1192:**

DN	32/40 – 80	100	125 – 150	200	250	300	400-500	600
Ref.	1192001	1192002	1192003	1192004	1192005	1192006	-	-
Ratio factor	24 :1	24 :1	24 :1	32 :1	32 :1	50 :1	532 :1	640 :1
Number of turns for closing/opening	6	6	6	8	8	12.5	133	160
Output torque ( Nm )	170	170	170	500	500	1200	2500	4000

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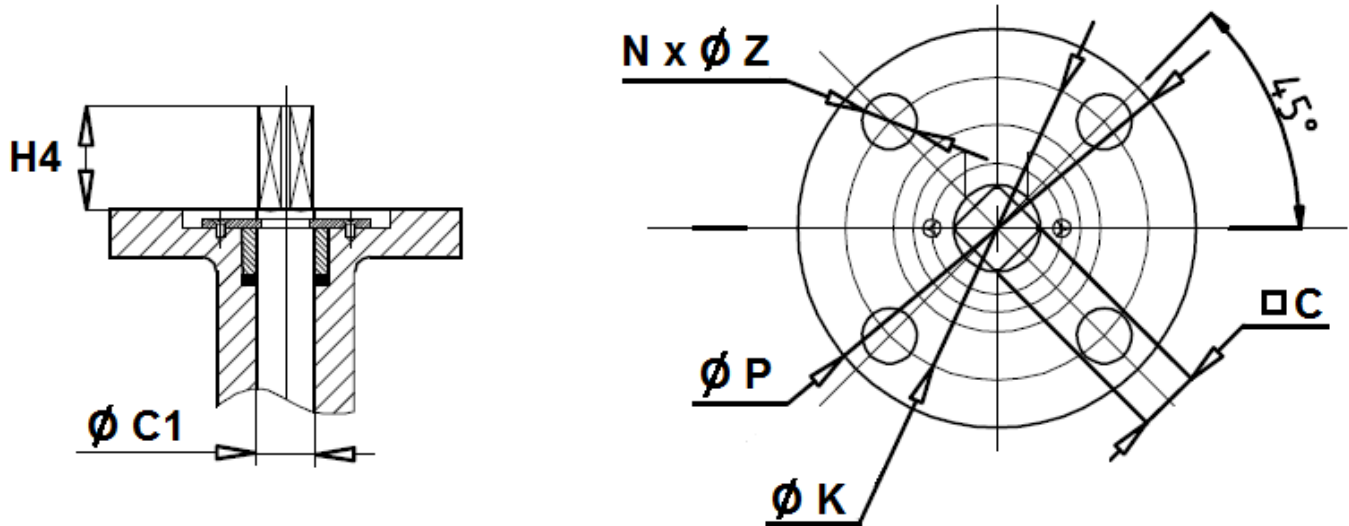
***DISC AND NECK SIZE ( in mm ) :***



DN	32-40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
E1	38.2	46.6	59.5	75.4	98.2	117.1	147.8	195.3	242.6	292.2	329	377.1	427.7	484.3	562.6
E2	4.95	4.85	9.2	16.45	26.05	33.7	49.85	71.25	91.25	111.75	127.95	139.1	159.65	182.4	208.75
Ø E3 ±2	72	81	98	118	143	162	200	246	308	352	386	444	492	558	656
H6 ±2	68	82.5	78.8	81.5	85.5	88	90.5	89	99	103	140	143	138	162	189
Ø P	42.9	52.7	64.4	78.9	104.1	123.4	155.7	202.5	250.5	301.5	333.9	380.2	433.3	491.8	571.5
Ø T mini	43	53	65	79.5	104.5	124	155.5	202.5	250.5	302	334	390	441	492	585

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**ISO MOUNTING PAD SIZE ( in mm ) :**

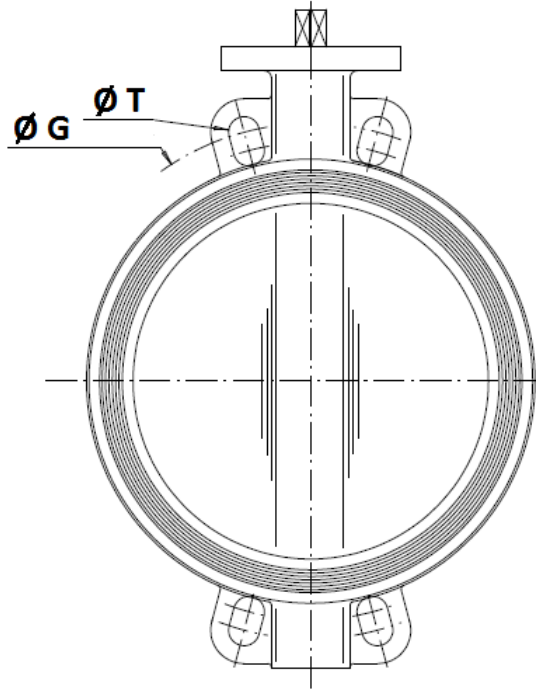


DN	32-40	50	65	80	100	125	150	200	250	300
H4	43	43	43	43	43	43	43	46	46	46
Ø C1	12.6	12.6	12.6	12.6	15.77	18.92	18.92	22.1	28.45	31.6
C	9	9	9	9	11	14	14	17	22	22
Ø P	90	90	90	90	90	90	90	125	125	125
Ø K	70	70	70	70	70	70	70	102	102	102
ISO	F07	F07	F07	F07	F07	F07	F07	F10	F10	F10
N x Ø Z	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 10	4 x 12	4 x 12	4 x 12

DN	350	400	450	500	600
H4	40	50	50	65	65
Ø C1	31.6	37.95	42.86	45.72	53.98
C	22	27	27	36	36
Ø P	125	175	175	175	210
Ø K	102	140	140	140	165
ISO	F10	F14	F14	F14	F16
N x Ø Z	4 x 12	4 x 18	4 x 18	4 x 18	4 x 23

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



(body with 8 flanges holes for DN80)

	DN (mm)	32	40	50	65	80	100	125	150	200	250	300	350	400
	NPS (")	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"	10"	12"	14"	16"
PN10	Ø G	100	110	125	145	160	180	210	240	295	350	400	460	515
	Ø T	18	18	18	18	18	18	18	22	22	22	22	23	28
PN16	Ø G	100	110	125	145	160	180	210	240	295	355	410	470	525
	Ø T	18	18	18	18	18	18	18	22	22	26	26	28	31
Class 150	Ø G		98.5	120.6	139.7	152.4	190.5	215.9	241.3	298.5	362	431.8	476.3	539.8
	Ø T		16	19	19	19	19	22.4	22.4	22.4	25.4	25.4	28.4	28.4
JIS 10K	Ø G		105	120	140	150	175	210	240	290	355	400		
	Ø T		19	19	19	19	19	23	23	23	25	25		

	DN (mm)	450	500	600
	NPS (")	18"	20"	24"
PN10	Ø G	565	620	725
	Ø T	28	28	31
PN16	Ø G	585	650	770
	Ø T	31	34	37
Class 150	Ø G	577.9	635	749.3
	Ø T	31.8	31.8	35.1



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**STANDARDS :**

- Manufacturer certified ISO 9001:2015
- Designing according to BS 5155
- DIRECTIVE 2014/68/UE : CE N° 0035  
Risk category III module H
- Certificate 3.1 on request
- Pressure tests according to EN 12266-1, Rate A
- Between flanges according to EN 1092-1 PN10/16
- ISO 5211 mounting pad
- Length according to ISO 5752 short series 20, EN 558 series 20 ( NF 29305 ),BS 5155 Wafer short/medium, DIN 3202 part 3, series K1

**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.