



## PRODUCT FEATURES

- Body: EN GJL-250 Cast Iron
- Disc: Stainless Steel 304
- Stem: Stainless Steel 420
- Epoxy Powder Coating (Min 250microns)
- Seat Options: EPDM by default (Viton and NBR are optional)
- Easy gasket replacing
- 2 O-rings on the stem for better stem sealing
- Easy to install
- Can be operated with Pneumatic or Electrical actuators
- FAF3500 refers to wafer type FAF3600 refers to lug type butterfly valves

## APPLICATIONS

FAF 3500 & FAF 3600 Butterfly Valves are generally used within potable water and heating (cold and hot water) systems. The valves are also suitable for food, chemical, petrochemical industry. The seats are not suitable for mediums having abrasive property (acidity or alkaline property).

### EPDM

-20°C to +130°C

#### General Properties:

Resistance to sunlight, weathering and ozone. Poor resistance to petroleum oils and fuel. Good heat and compression set resistance.

#### Suitable for:

Less than 10% acids, inorganic and organic alcohols, alkaline salts and solutions, dry bulk, hot-cold water, steam Not suitable for Hydrocarbons

### NBR

-20°C to +90°C

#### General Properties:

Good resistance to petroleum, hydrocarbons, fuels. Widely used with most oils, hydraulic fluids, alcohol. Poor resistance to sunlight, weathering and ozone.

#### Suitable for:

General Applications, Hydrocarbon Service, less than 40% Aromatics, Food&Beverage Applications.

### VITON

-20°C to +200°C

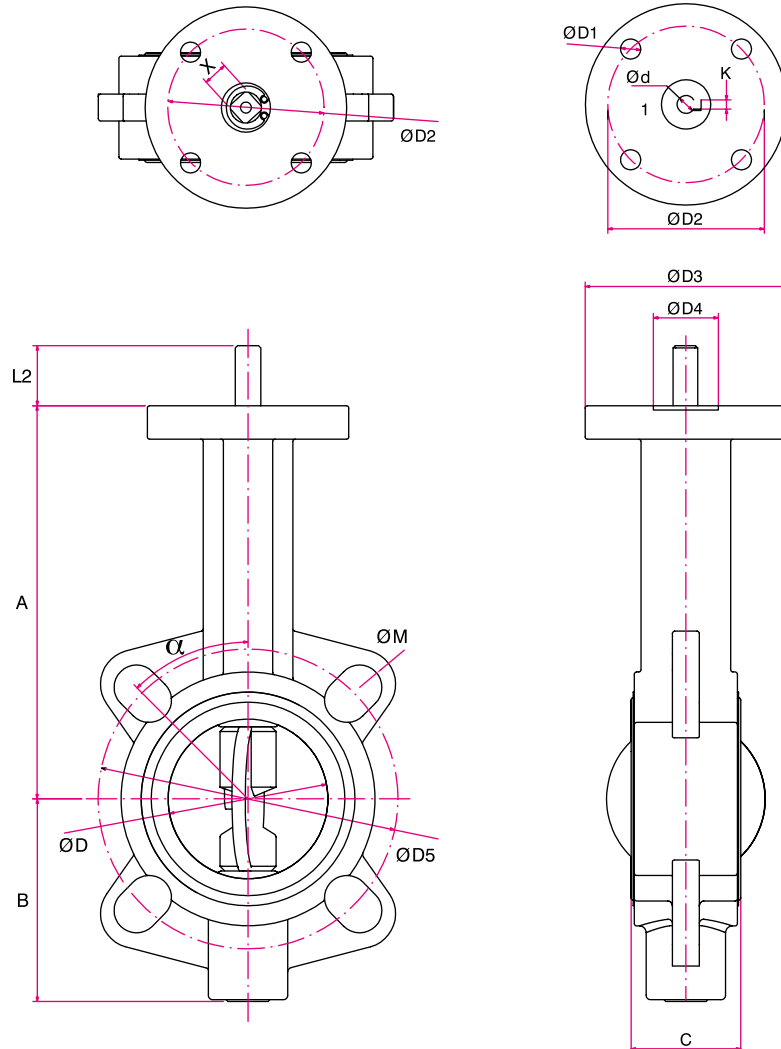
#### General Properties:

Excellent temperature and chemical resistance. Excellent mechanical and physical properties, low compression set and low gas permeability.

#### Suitable For:

All Aromatic, Aliphatic and Halogenated Hydrocarbons  
Not for Ketones, Ester or in combination with Hot Water and Oil.

## DIMENSIONS AND PRODUCT DATA



### PN 10 / 16 LUG TYPE BUTTERFLY VALVE

DN	A	B	C	ØD	n-ØD1	ØD2	ØD3	ØD4	ØD5	ØM	X	L2	Ød1	K	α	Weight
40	138	75	33	45	4-9	50/70	90	22	110	19	11x11	30	-	-	45°	3,6
50	161	80	43	55	4-9	50/70	90	22	125	19	11x11	30	-	-	45°	4,5
65	175	91	46	70	4-9	50/70	90	22	145	19	11x11	30	-	-	45°	5,4
80	181	95	46	80	4-9	50/70	90	22	160	19	11x11	30	-	-	22,5°	5,6
100	200	115	52	101	4-9	70	90	24,5	180	19	14x14	30	-	-	22,5°	6,9
125	215	134	56	126	4-9	70	90	29,5	210	19	14x14	30	-	-	22,5°	10
150	225	138	56	151	4-9	70	90	29,5	240	23	17x17	30	-	-	22,5°	12
200	241	174	60	200,5	4-11	102	125	35,5	295	23	17x17	30	-	-	15°	14,5
250	296	198	68	250	4-11	102	125	39,5	355	28	22x22	30	-	-	15°	32,3
300	336	234	78	300,5	4-11	102	125	41	410	28	22x22	30	-	-	15°	44,6
350	370	284	78	340	4-13	125	150	72	470	28	22x22	46	-	-	11,25°	66
400	400	310	88	400	4-18	140	175	73	525	31	27x27	46	-	-	11,25°	104
450	422	328	104,6	440	4-18	140	175	102	565	-	-	52	39	10	11,25°	140
500	490	390	127	500	4-22	165	210	135	650	34	-	48	48	14	9°	157
600	575	456	154	600	4-22	165	210	135	770	37	-	48	48	14	9°	222

### ITEMS AND MATERIALS

- 1 Body: EN-GJL 250 Cast Iron
- 2 Stem: Stainless Steel 420
- 3 Disc: Stainless Steel 304
- 4 Bottom Screw Gland: Stainless Steel 420
- 5 O-Rings: EPDM
- 6 Seat: EPDM (NBR and VITON are optional)
- 7 Limiting Plate: St37 Steel
- 8 Bolts: Galvanized Steel
- 9 Nuts: Galvanized Steel



## OPENING TORQUE VALUES

Nm	1.6MPa	
	Wet	Dry
DN 40	19	21
DN 50	25	27
DN 65	41	49
DN 80	55	65
DN 100	63	79
DN 125	75	103
DN 150	92	111
DN 200	155	192
DN 250	215	278
DN 300	380	517
DN 350	670	1040
DN 400	1110	1715
DN 450	1152	1821
DN 500	1330	2145
DN 600	2152	3471

Average Number of Open-Close Cycles

PN	10	16
40		
50		
65	5100	4250
80		
100		
125	3950	3500
150		
200		
250	3450	3000
300		
400	3000	2500
450	2500	1900
500	1800	1500
600	1500	1400

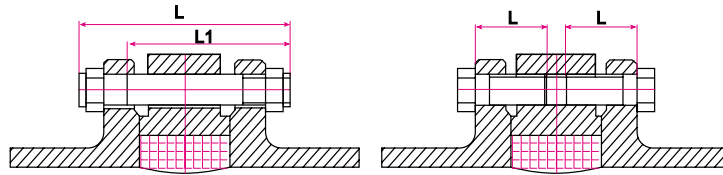
Guaranteed Number of Open-Close Cycles

PN	10	16
40		
50		
65	1800	1500
80		
100		
125	1400	1250
150		
200		
250	1200	1000
300		
400	875	900
450	900	700
500	700	600
600	600	550

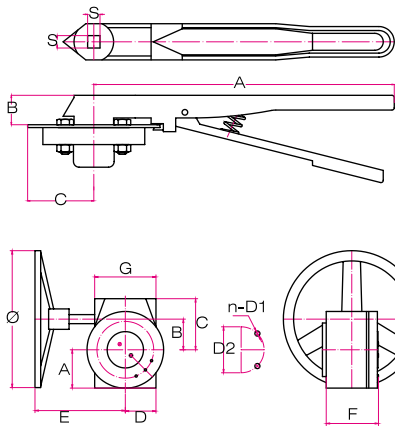
PRESSURE / TEMPERATURE RATINGS FOR CAST IRON (GG 25) FLANGES  
(REFERENCE ISO 7005-2 TABLE 16)

Pressure ISO PN	TEMPERATURE °C					
	-10 to 120	150	200	250	300	350
	Maximum operating pressure (bar)					
10	10	9,5	9	8	7	5,5
16	16	15,2	14,4	12,8	11,2	8,8
20	15,5	14,8	13,9	12,1	10,2	8,6
25	25	23,8	22,5	20	17,5	13,8
40	40	38	36	32	28	22
50	40,2	39	36	35	33	31

# PN 10 / 16 WAFER / LUG TYPE BUTTERFLY VALVE (FAF 3500 & 3600)

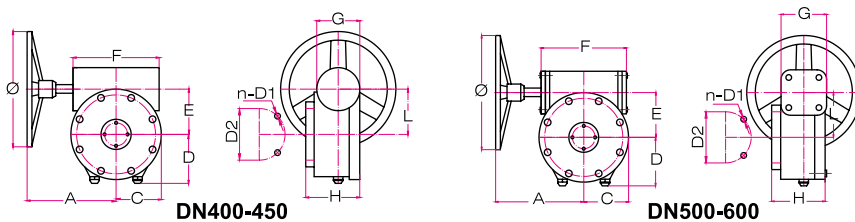


DN	DIAMETER	WAFER TYPE			LUG TYPE	
		NUMBER OF STUDS	STUD DIAMETER x L1	STUD LENGTH	NUMBER OF BOLTS	BOLT DIAMETER x L
40	M 16	4	M 16 x 100	120	4x2	M 16 x 30
50	M 16	4	M 16 x 110	130	4x2	M 16 x 40
65	M 16	4	M 16 x 120	140	4x2	M 16 x 45
80	M 16	4	M 16 x 120	140	8x2	M 16 x 45
100	M 16	4	M 16 x 130	150	8x2	M 16 x 50
125	M 16	4	M 16 x 130	150	8x2	M 16 x 50
150	M 20	4	M 20 x 140	165	8x2	M 20 x 50
200	M 20	4	M 20 x 150	175	12x2	M 20 x 55
250	M 24	4	M 24 x 160	185	12x2	M 24 x 60
300	M 24	4	M 24 x 170	200	12x2	M 24 x 65
350	M 24	4	M 24 x 170	200	16x2	M 24 x 65
400	M 27	4	M 27 x 200	230	16x2	M 27 x 75
450	M 27	4	M 27 x 220	254	20x2	M 27 x 80
500	M 30	4	M 30 x 260	294	20x2	M 30 x 90
600	M 33	4	M 33 x 290	334	20x2	M 33 x 100



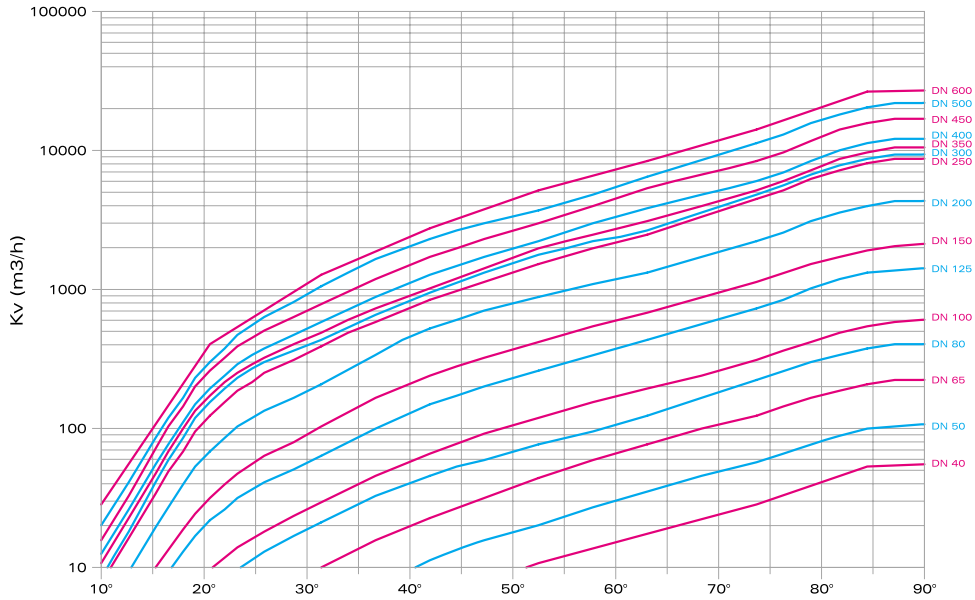
DN mm	A	B	C	S	Weight
40-80	263	26	55	11x11	1,08
100-125	263	26	55	14x14	1,27
150	263	26	55	17x17	1,25
200	326	26	70	17x17	1,70
250-300	326	26	70	22x22	1,70

DN mm	A	B	C	D	E	F	G	Ø	D2	n-D1	Weight
250	76	76	102	76	205	82	121	298	102	4-M10	8,07
300	80	82	115	60	200	95	138	298	102	4-M10	11,9
350	80	82	115	60	200	95	138	298	125	4-M12	11,9



DN mm	A	C	D	E	F	G	H	L	Ø	D2	n-D1	Weight
400-450	245	125	100	125	200	72	122	132,5	385	140	4-M16	24,67
500-600	211	132,5	112,5	132,5	230	83	122	132,5	385	165	4-M20	33,6

# Kv Graph



DN	KV									
	10°	20°	30°	40°	50°	60°	70°	80°	90°	
40	0,06	1,39	2,93	5,63	10,73	17	27	51	56	
50	0,07	1,85	4,38	10,98	20,01	34	55	99	105	
65	0,14	3,57	9,95	22,27	42,77	76	122	207	226	
80	0,92	6,75	20,43	44,49	74,35	124	223	365	417	
100	1	9	29	66	118	191	310	538	617	
125	2	22	64	148	256	429	723	1334	1424	
150	3	31	102	241	417	665	1116	1905	2212	
200	4	68	207	528	878	1318	2202	4011	4391	
250	8	122	387	849	1507	2417	4485	8149	9001	
300	8	151	430	930	1750	2607	4831	8718	9756	
350	11	169	484	1011	1973	3118	5219	9788	10421	
400	12	192	577	1257	2203	3773	5948	11397	12146	
450	15	259	789	1707	2931	5389	8272	15570	16863	
500	20	302	1064	2301	3757	6524	11201	20123	22795	
600	28	406	1263	2721	5105	8484	13842	26775	27502	

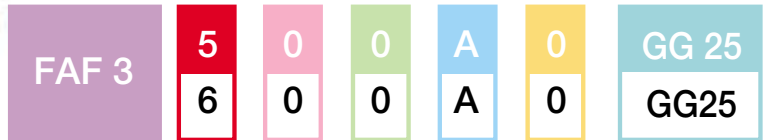
KV -The rate of flow of water in cubic meter per hour that will generate a pressure drop of 1 bar across the valve.

$$KV = \frac{Q \sqrt{G}}{\sqrt{\Delta P}}$$

- Q : flow rate m<sup>3</sup>/ h
- G : specific gravity of liquid
- ΔP : pressure drop
- C<sub>v</sub> : 1.17 KV

# PN 10 / 16 WAFER / LUG TYPE BUTTERFLY VALVE (FAF 3500 & 3600)

## CODIFICATION



**BUTTERFLY VALVE**

TYPE	
WAFER TYPE	5
LUG TYPE	6

SLEEVE MATERIAL	
EPDM	0
NBR	1
Viton®	2

OPERATION	
HANDLE	0
BARE SHAFT	1
GEARBOX	2
SINGLE EFFECT ACTUATOR	3
DOUBLE EFFECT ACTUATOR	4
ELECTRICAL ACTUATOR	5

DISC MATERIAL	
STAINLESS STEEL 304	A

NOMINAL PRESSURE	
16 BAR	0

BODY MATERIAL	
CAST IRON	GG25