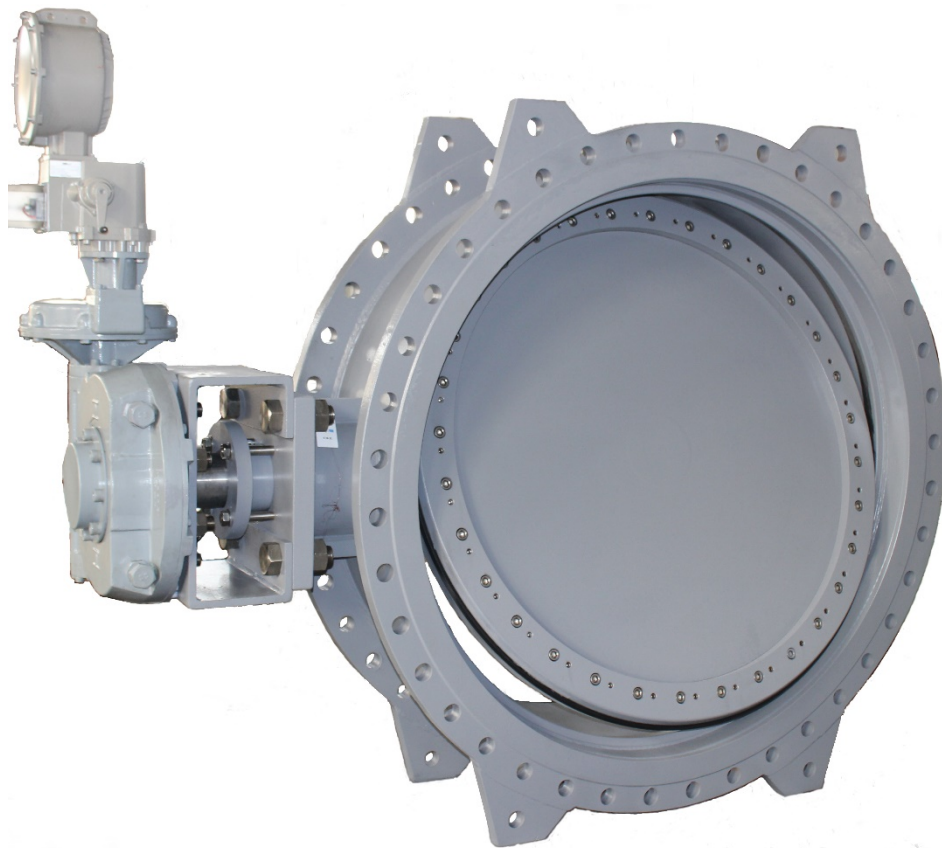




DOUBLE-ECCENTRIC BUTTERFLY VALVES

Product ref: BV42F



Standards and Specifications:

1. Design standard conform to: EN 593
2. Connection flange: EN1092-2, ISO7005-2
3. Top flange conform to: ISO 5211
4. Face to face conform to: EN 558 Series 14 or 13
5. Test standard conform to: EN12266-1
6. Nominal working pressure : PN10/PN16/PN25/PN40

Performance and Specifications:

Nominal diameter: PN10 DN200~3000
PN16 DN200~2600
PN25 DN200~2000
PN40 DN200~1200

Body Test Pressure: 1.5 times rated pressure

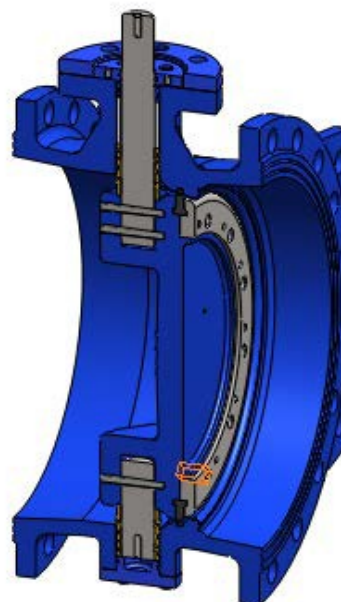
Seat Test Pressure: 1.1 times rated pressure

Working temperature: -10 °C ~+130 °C

Actuator: Gear, Pneumatic, Electric, Hydraulic

Design Features and Advantages:

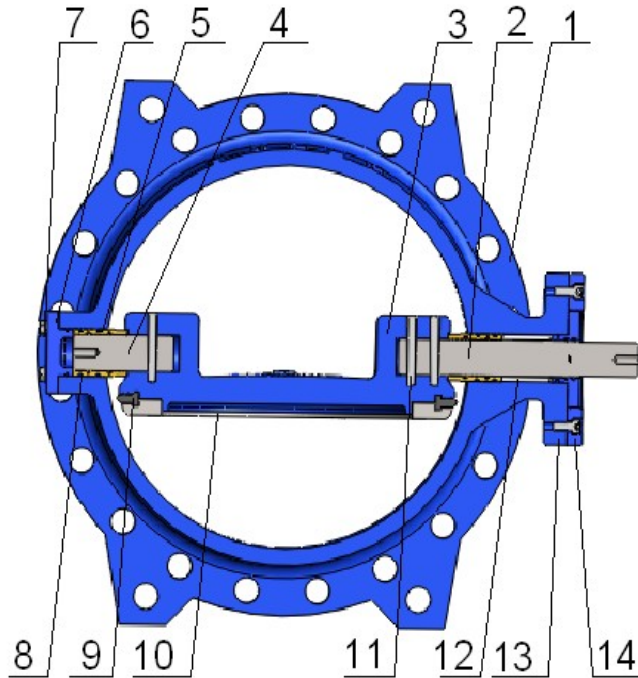
1. Based on EN593, taking into account AWWA C504 standard to increase the safety and service life of the products.
2. The aeronautic internal design lowers the resistance of the fluids.
3. The sealing shaft design well protects the shaft from medium and increases the concentricity to reduce the torque, extending the service life of the shaft.
4. The shaft doesn't pass through the sealing rings, so the sealing rings can be replaced while the valve is open.
5. Strong shaft bushings support the disc in its center position; the valves can be installed horizontally or vertically.
6. The optimized double-eccentric design realizes the minimal torque to close/open the valve while keeping sealing. And the minimum interference prolongs the service life of the valves.
7. The stainless steel seat is integrally produced, embedded into the body to fit closely, forming a corrosion-proof and wear resistance seal surface that can efficiently prolong the service life of the valves.
8. The tightness is achieved by T-type resilience sealing ring which is inlaid between disc and disc gland ring. When the disc is closed, sealing ring will be extruded by disc gland ring to form two-way sealing. Sealing ring can be replaced without disassembling the disc. Self-reinforce seal function can be achieved when valve is closed and the pressure of fluid from different directions can enhance this effect.
9. Akzo Nobel epoxy resin powder coating ensures excellent painting adhesion and anti-corrosion capacity.
10. Adjusting screws on the top and the bottom to make sure the position of the disc can be fine-tuned to keep tightness.



Application Ranges:

1. Medium: water, seawater, sewage, hot water, gases.
2. Application: water treatment factory, cold water circulation system, chemical plant, hydraulic pump station, thermal gas exhaust, etc.

Materials List*



	PART	MATERIAL	OPTIONAL
1	Body	EN GJS-400-15	EN GJL-250
2	Upper shaft	SS420	SS316, SS304
3	Disc	EN GJS-400-15	WCB, Bronze
4	Lower shaft	SS420	SS316, SS304
5	Bushing	Brass	Stainless Steel
6	Bottom cover	EN GJS-400-15	EN GJL-250
7	Hex bolt	Stainless Steel	Carbon Steel
8	O ring	EPDM	NBR
9	Disc seal ring	EPDM	NBR, Hypalon, FPM
10	Disc gland ring	Stainless Steel	Carbon Steel
11	Cylindrical pin	SS420	SS316, SS304
12	Spacer bush	Stainless Steel	Carbon Steel
13	Hex bolt	Stainless Steel	Carbon Steel
14	Translation plate	EN GJS-400-15	Carbon Steel

*Note: Other materials can be used according to customers' special requirements.

Torque Valves*

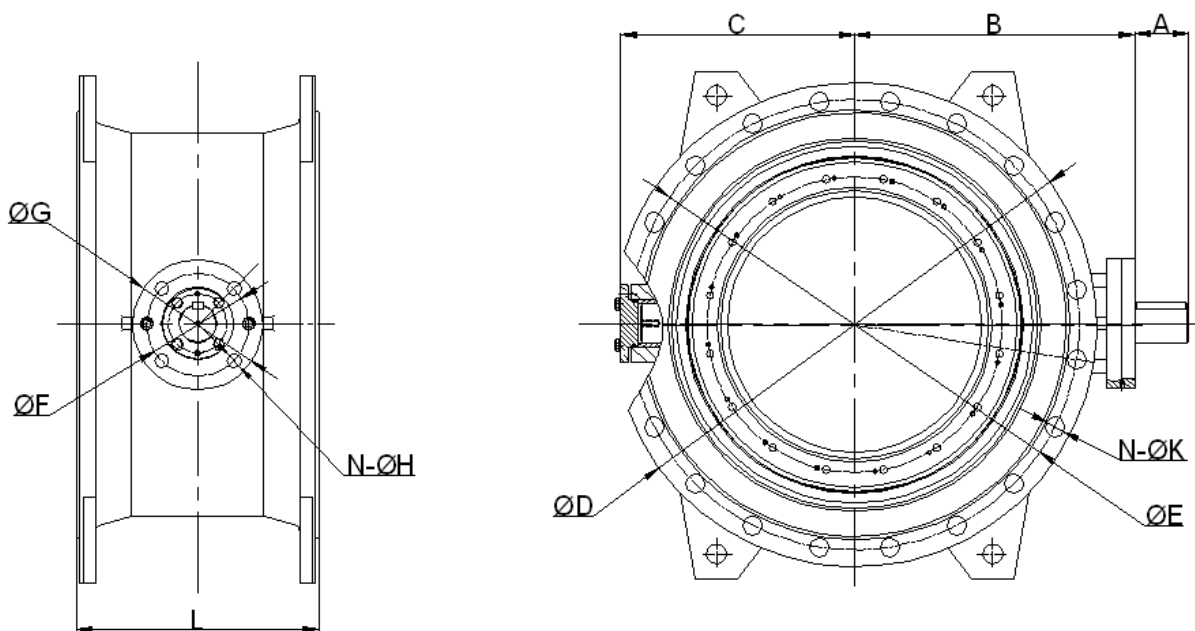
Unit: Nm

DN	200	250	300	350	400	450	500	600	700	800	900
PN10	150	200	320	390	650	960	1200	1600	3540	3600	5440
PN16	200	312	384	680	860	1280	1840	2800	5200	6800	10000
PN25	570	912	1152	1404	2736	3456	4416	6300	8700	14400	20160
PN40	950	1520	1920	2340	4560	5760	7360	10500	14500	24000	33600

DN	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
PN10	6960	13000	23100	33750	46800	63600	77400	91800	114000	164500	192500
PN16	16960	22560	43000	61000	87500	98000	119000	171500	212800	—	—
PN25	28800	41400	62400	86400	108000	—	—	—	—	—	—
PN40	48000	69000	—	—	—	—	—	—	—	—	—

*Note: The above torque values are without safety factor.

Main Dimensions:



Main Dimensions Table (PN10)

Unit: mm

DN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
200	40	217	164	340	295	102	125	4-Ø12	230	43
250	55	260	172	400	350	125	150	4-Ø12	250	56
300	55	295	251	455	400	125	150	4-Ø12	270	80
350	70	357	303	505	460	125	150	4-Ø14	290	120
400	90	396	339	565	515	165	210	4-Ø18	310	132
450	90	443	379	615	565	165	210	4-Ø18	330	189
500	90	469	404	670	620	165	210	4-Ø18	350	238
600	90	545	486	780	725	165	210	4-Ø23	390	330
700	100	590	537	895	840	254	300	8-Ø18	430	480
800	120	655	606	1015	950	254	300	8-Ø18	470	625
900	120	711	699	1115	1050	298	350	8-Ø23	510	800
1000	125	791	776	1230	1160	298	350	8-Ø23	550	1062
1200	160	921	874	1455	1380	358	415	8-Ø33	630	1738
1400	180	1038	1034	1675	1590	406	475	8-Ø39	710	2550
1600	200	1188	1175	1915	1820	406	475	8-Ø39	790	3992
1800	250	1260	1150	2115	2020	483	560	12-Ø39	870	4860
2000	250	1435	1350	2325	2230	483	560	12-Ø39	950	7820
2200	300	1665	1500	2550	2440	483	560	12-Ø39	1030	11540
2400	300	1730	1590	2780	2650	603	686	20-Ø39	1110	13221
2600	320	1820	1700	2960	2850	603	686	20-Ø39	1190	14680
2800	345	1950	1800	3180	3070	603	686	20-Ø39	1270	19760
3000	360	2010	1850	3405	3290	603	686	20-Ø39	1350	20020

Main Dimensions Table (PN16)

Unit: mm

DN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
200	40	217	164	340	295	102	125	4-Ø12	230	44
250	55	260	172	405	355	125	150	4-Ø12	250	60
300	55	295	251	460	410	125	150	4-Ø12	270	85
350	70	357	303	520	470	125	150	4-Ø14	290	116
400	90	396	339	580	525	165	210	4-Ø18	310	155
450	90	443	379	640	585	165	210	4-Ø18	330	237
500	90	469	404	715	650	165	210	4-Ø18	350	300
600	90	545	486	840	770	165	210	4-Ø23	390	460
700	100	590	537	910	840	254	300	8-Ø18	430	670
800	120	655	606	1025	950	254	300	8-Ø18	470	775
900	120	711	699	1125	1050	298	350	8-Ø23	510	970
1000	125	791	776	1255	1170	298	350	8-Ø23	550	1320
1200	160	921	874	1485	1390	358	415	8-Ø33	630	2090
1400	180	1038	1034	1685	1590	406	475	8-Ø39	710	2945
1600	200	1188	1175	1930	1820	406	475	8-Ø39	790	4450
1800	250	1260	1150	2130	2020	483	560	12-Ø39	870	5320
2000	250	1435	1350	2345	2230	483	560	12-Ø39	950	8300
2200	300	1665	1500	2550	2440	483	560	12-Ø39	1000	12030
2400	300	1840	1590	2780	2650	603	686	20-Ø39	1110	13760
2600	320	1980	1750	2960	2850	603	686	20-Ø39	1200	22600

Main Dimensions Table (PN25)

Unit: mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
200	25	40	217	164	360	310	102	125	4-Ø12	230	55
250	25	55	260	172	425	370	125	150	4-Ø12	250	70
300	25	55	295	251	485	430	125	150	4-Ø12	270	105
350	25	70	357	303	555	490	125	150	4-Ø14	290	130
400	25	90	396	339	620	550	165	210	4-Ø18	310	175
450	25	90	443	379	670	600	165	210	4-Ø18	330	286
500	25	90	469	404	730	660	165	210	4-Ø18	350	375
600	25	90	545	486	845	770	165	210	4-Ø23	390	492
700	25	100	590	537	960	875	254	300	8-Ø18	430	790
800	25	120	655	606	1085	990	254	300	8-Ø18	470	810
900	25	120	711	699	1185	1090	298	350	8-Ø23	510	1260
1000	25	125	791	776	1320	1210	298	350	8-Ø23	550	1690
1200	25	160	921	874	1530	1420	358	415	8-Ø33	630	2500
1400	25	180	1038	1034	1755	1640	406	475	8-Ø39	710	3550
1600	25	200	1188	1175	1975	1860	406	475	8-Ø39	790	5213
1800	25	250	1260	1150	2195	2070	483	560	12-Ø39	870	6165

Main Dimensions Table (PN40)

Unit: mm mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
200	40	40	217	164	375	320	102	125	4-Ø12	230	65
250	40	55	260	172	450	385	125	150	4-Ø12	250	89
300	40	55	295	251	515	450	125	150	4-Ø12	270	140
350	40	70	357	303	585	510	125	150	4-Ø14	290	190
400	40	90	396	339	660	585	165	210	4-Ø18	310	280
450	40	90	443	379	685	610	165	210	4-Ø18	330	396
500	40	90	469	404	755	670	165	210	4-Ø18	350	452
600	40	90	545	486	890	795	165	210	4-Ø23	390	660
700	40	100	590	537	995	900	254	300	8-Ø18	430	925
800	40	120	655	606	1140	1030	254	300	8-Ø18	470	1160
900	40	120	711	699	1250	1140	298	350	8-Ø23	510	1835
1000	40	125	791	776	1360	1250	298	350	8-Ø23	550	2260
1200	40	160	921	874	1575	1460	358	415	8-Ø33	630	2850

Actuators Selection List

DN	100	150	200	250	300	350	400	450	500	600	700	800
Model	ACT0140				ACT0250		ACT0270		ACT02270		ACT02540	

DN	900	1000	1200	1400	1600	1800	2000	2200	2400	2600
Model	ACT02810	ACT021350	ACT021400	ACT021550	—	—	—	—	—	—

Kv values in function of opening angle

Opening angle	10	20	30	40	50	60	70	80	90
DN100	11	24	43	65	98	135	175	200	215
DN125	23	50	88	140	200	275	340	400	415
DN150	33	68	123	190	280	375	480	520	570
DN200	63	125	205	310	430	575	700	850	915
DN250	105	200	330	490	700	1000	1250	1500	1655
DN300	148	300	490	750	1150	1550	2000	2400	3025
DN350	250	500	850	1375	2000	2900	3800	4500	5665
DN400	345	660	1100	1750	2600	4000	5000	5950	7995
DN500	525	1050	1800	2900	4500	6800	8500	9500	13250
DN600	810	1600	2700	4500	6800	10000	12500	14000	17300
DN700	1050	2000	3800	5500	8500	12000	15000	18000	20560
DN800	1600	3200	5100	8000	12500	17500	23000	27500	41060
DN900	2050	3250	7000	12000	17500	24000	30000	35000	45125
DN1000	2490	4850	8000	12500	18000	28700	37500	45000	55480
DN1200	3750	7500	12500	19700	30000	45000	57000	68000	81427



200 rue Léon Blum

69100 Villeurbanne

info@ivaltec.fr

www.ivaltec.fr