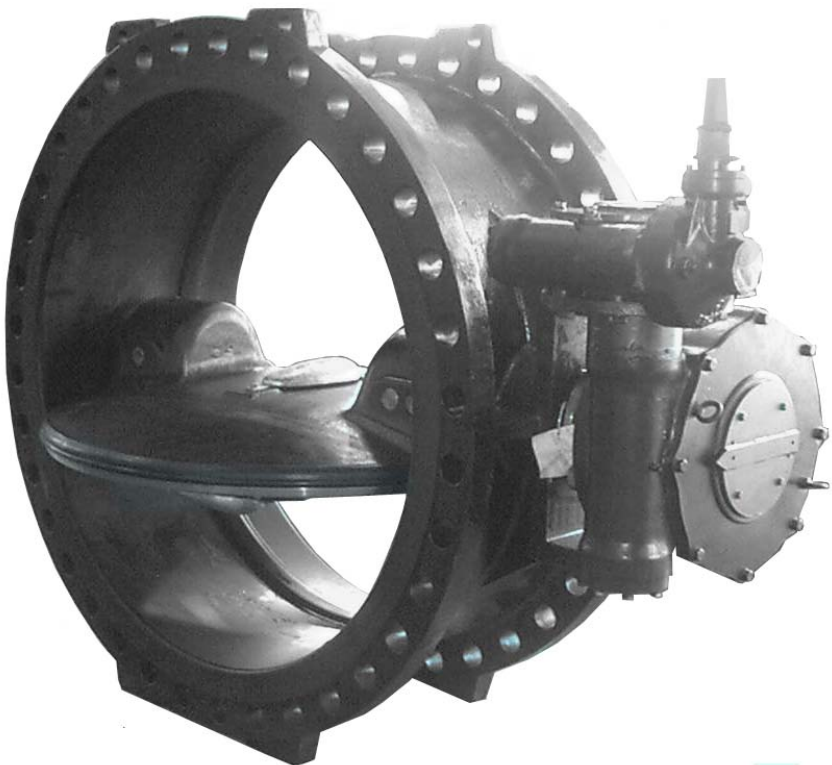


Wafer and Double Flanged Type

CE



Description Product Group 700 Butterfly Valves

The Single or Double eccentric disc seated butterfly valve is capable of bi-directional flow and bubble tight shut-off at full rated pressure.

AVAILABLE SERIES

Series 710 Disc Seated Eccentric WAFER type Butterfly valves.
Series 750 Disc Seated Eccentric FLANGE type Butterfly valves.

STANDARD COMPLIANCE

Face to face dimensions in accordance with KS/JIS, BS, AWWA or other STANDARDS are available upon request.
Rubber lined valve body & disc available on request

PRODUCTION RANGE

SIZE: 80mm (3inch) ~ 4000mm (160inch)
WORKING PRESSURE: 0 bar ~ 40 bar
WORKING TEMPERATURE: -20 ~ +200 Degrees Celsius

APPLICABLE FLANGE

KS/JIS 10K, 16K, 20K
ANSI B 16.1 Class 125LB
ANSI B 16.5 Class 150LB, 300LB
BS 4504 PN6, PN10, PN16, PN25, PN40
ISO 2084 PN6, PN10, PN16, PN25, PN40
AWWA C207 Class D, E



The Single Eccentric Design Principle

Applicable for butterfly valve with interchangeable soft seat.

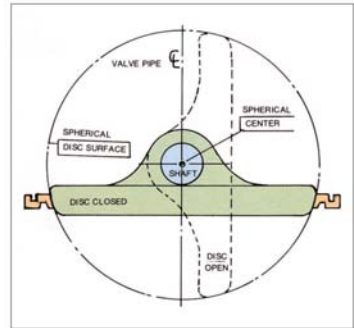
- Circular unbroken seats on disc and in body.
- Simple maintenance.
- Change of seat ring by dismantling of the retaining ring only.
- Wide variety of seat materials available.

Suitable for installation in Medium Range Pressure System (<30 kg/cm²)

No limitation on corrosiveness of medium when proper seat material chosen.

- Flow characteristics and pressure-drop less favorable than 'concentric design'
- Operating torque is higher than concentric design but substantially lower than double eccentric design
- The valve seat will be remained off position when the disc is fully opened position.

Not suitable for FIRE SAFE.



Classification by Connection type

Appearance	Type	General Characteristics
------------	------	-------------------------



Series 710
(WAFER)

General Applications
 - Water works, power plants, heating and ventilation, Chemical plants, Shipbuilding etc.
 Valve to be installed between flanges.
 Easy handling and light weight.
 Easy installation.



Series 750
(FLANGED)

General Applications
 - General piping, water works, power plants, large diameter piping.
 Both ends flanged.
 Suitable to general pipe flange.
 Suitable for large diameter piping.

Major Properties

Basic Design : AWWA C-504 or BS 5155

Application : pipeline for power plants, water works, desalination plants, etc.

The valve is capable of bi-directional sealing

Valves are constructed with rugged shaft, self lubricating bearings, and operate with low torque.

Wide variety of body materials available.

Operations

The following operation of the valve is available, the choice depending upon the valve location and the type of work and service for which the valve is used.

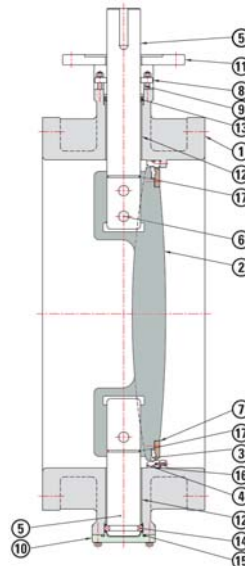
Manual gear Operation

Single or double acting pneumatic Operation

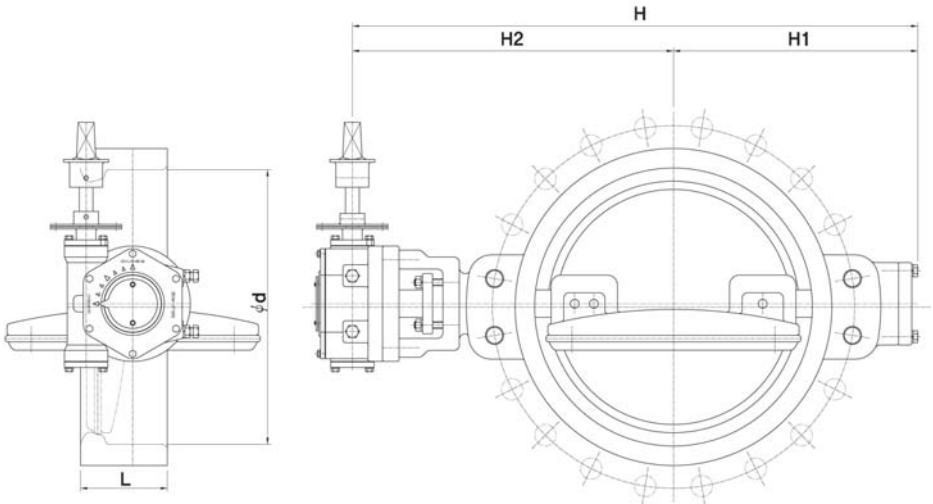
Single or double acting hydraulic actuator Operation

Electric actuator Operation

No	PART NAME	MATERIAL
1	BODY	Ductile iron / Cast steel Stainless steel / NI-AL Bronze
2	DISC	Stainless steel / Ductile iron / NI-AL Bronze
3	SEAT	NBR, EPDM, VITON
4	BODY SEAT	Stainless steel / NI-AL Bronze
5	STEM	Stainless steel (304, 316, 316L, 630 (17-4PH), Super duplex, monel)
6	DISC PIN	Stainless steel
7	RETAINER	Stainless steel / NI-AL Bronze / Carbon steel
8	PACKING GLAND	Ductile iron / Cast steel Stainless steel / NI-AL Bronze
9	GLAND RING	Bronze / Stainless steel
10	BOTTOM COVER	Ductile iron / Cast steel Stainless steel / NI-AL Bronze
11	STAND	Carbon steel / Cast steel Ductile iron / Stainless steel
12	STEM BEATING	Stainless steel, Bronze, Oilless Bearing
13	V-PACKING	NBR, EPDM, VITON
14	THRUST PLATE	Bronze / Stainless steel
15	BOTTOM O-RING	NBR, EPDM, VITON
16	BODY SEAT O-RING	NBR, EPDM, VITON
17	STEM O-RING	NBR, EPDM, VITON



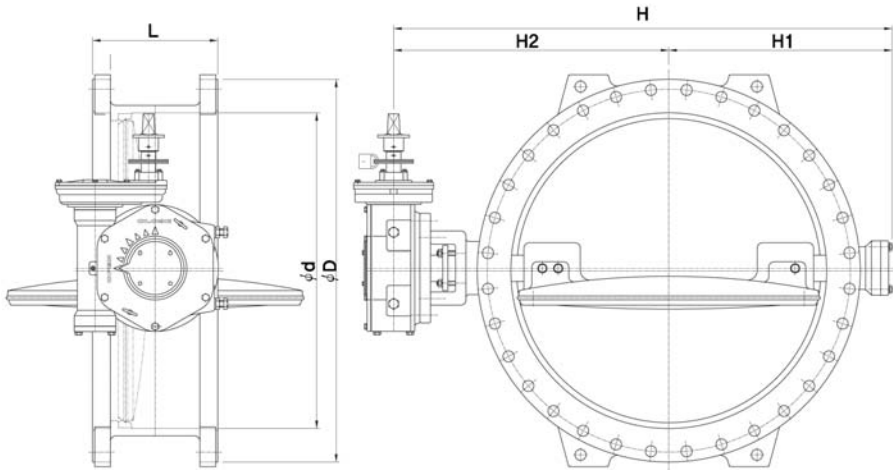
Dimensions Series 710 Wafer



VALVE DIMENSIONS

SIZE		ϕd	L	H	H1	H2	APPROX WEIGHT(kg)
mm	inch						
80	3"	80	64	375	150	225	12
100	4"	100	64	392	160	232	15
125	5"	125	70	445	175	270	18
150	6"	150	76	473	185	288	25
200	8"	200	89	584	235	349	36
250	10"	250	114	622	255	367	56
300	12"	300	114	733	305	428	68
350	14"	350	127	779	330	449	93
400	16"	400	140	829	350	479	121
450	18"	450	152	934	410	524	144
500	20"	500	152	1045	445	600	160
550	22"	550	152	1130	490	640	228
600	24"	600	178	1245	545	700	284
650	26"	650	178	1290	565	725	327
700	28"	700	229	1330	590	740	388
750	30"	750	229	1365	615	750	430
800	32"	800	241	1410	640	770	550
900	36"	900	241	1545	680	865	680
1000	40"	1000	300	1715	770	945	810
1100	44"	1100	300	1860	820	1040	940
1200	48"	1200	350	1945	875	1070	1225
1300	52"	1300	350	2080	925	1155	1315
1350	54"	1350	350	2120	950	1170	1430
1400	56"	1400	390	2205	1015	1190	1560
1500	60"	1500	390	2390	1075	1315	1650
1600	64"	1600	440	2550	1160	1390	1770
1650	66"	1650	440	2615	1190	1425	1980
1800	72"	1800	490	2795	1230	1565	2200
2000	80"	2000	540	2970	1355	1615	2330
2100	84"	2100	540	3110	1430	1680	2470
2400	96"	2400	650	4085	1970	2115	2790
2800	112"	2800	650	4230	2050	2180	3050
3000	120"	3000	760	4310	2100	2210	3380
3500	140"	3500	800	5460	2700	2760	3790
4000	160"	4000	900	6210	3200	3010	4500

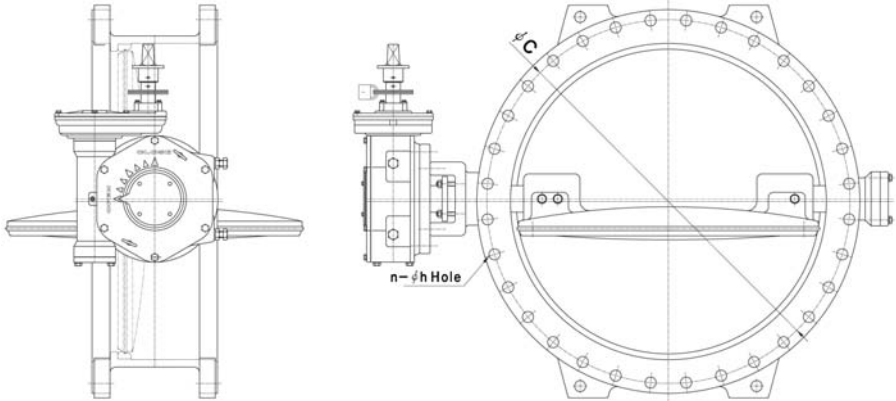
Dimensions Series 750 Double Flanged (AWWA, BS)



VALVE DIMENSIONS

SIZE		d	L			H	H1	H2	APPROX WEIGHT(kg)
mm	inch		AWWA C504	BS5155(Short)	BS5155(Long)				
80	3"	80	127	114	180	375	150	225	19
100	4"	100	127	127	190	392	160	232	25
125	5"	125	127	140	200	445	175	270	35
150	6"	150	127	140	210	473	185	288	52
200	8"	200	152	152	230	584	235	349	70
250	10"	250	203	165	250	622	255	367	84
300	12"	300	203	178	270	733	305	428	117
350	14"	350	203	190	290	779	330	449	148
400	16"	400	203	216	310	829	350	479	203
450	18"	450	203	222	330	934	410	524	265
500	20"	500	203	229	350	1045	445	600	391
550	22"	550	203	229	350	1130	490	640	487
600	24"	600	203	227	390	1245	545	700	620
650	26"	650	203	267	390	1290	565	725	685
700	28"	700	305	292	430	1330	590	740	813
750	30"	750	305	292	430	1365	615	750	897
800	32"	800	305	318	470	1410	640	770	1140
900	36"	900	305	330	510	1545	680	865	1302
1000	40"	1000	305	410	550	1715	770	945	1540
1100	44"	1100	305	410	550	1860	820	1040	1720
1200	48"	1200	381	470	630	1945	875	1070	2100
1300	52"	1300	381	470	630	2080	925	1155	2400
1350	54"	1350	381	470	630	2120	950	1170	2850
1400	56"	1400	381	530	710	2205	1015	1190	3350
1500	60"	1500	381	530	710	2390	1075	1315	3746
1600	64"	1600	381	600	790	2550	1160	1390	5200
1650	66"	1650	457	600	790	2615	1190	1425	5900
1800	72"	1800	457	670	870	2795	1230	1565	6700
2000	80"	2000	457	760	950	2970	1355	1615	7800
2100	84"	2100	457	760	950	3110	1430	1680	8900
2400	96"	2400	650	760	950	4085	1970	2115	14800
2800	112"	2800	650	760	950	4230	2050	2180	24000
3000	120"	3000	760	760	950	4310	2100	2210	31000
3500	140"	3500	760	800	1350	5460	2700	2760	40100
4000	160"	4000	900	900	1350	6210	3200	3010	48500

Dimensions Series 750 Double Flanged (ASME, JIS, DIN)



FLANGE DIMENSION

SIZE	150LB				300LB				JIS 10K				JIS 16K				PN6				PN10				PN16				PN25			
	mm	inch	øC	n	h	øC	n	h	øD	øC	n	h	øD	øC	n	h	øC	n	h	øC	n	h	øC	n	h	øC	n	h	øC	n	h	
80	3"	152.4	4	5/8"	168.1	8	3/4"	185	150	8	M16	200	160	8	M20	150	4	M16	160	8	M16	160	8	M16	160	8	M16	160	8	M16		
100	4"	190.5	8	5/8"	200.2	8	3/4"	210	175	8	M16	225	185	8	M20	170	4	M16	180	8	M16	180	8	M16	180	8	M16	190	8	M20		
125	5"	215.9	8	3/4"	235	8	3/4"	250	210	8	M20	270	225	8	M22	200	8	M16	210	8	M16	210	8	M16	220	8	M16	220	8	M24		
150	6"	241.3	8	3/4"	269.7	12	3/4"	280	240	8	M20	305	260	12	M22	225	8	M16	240	8	M20	240	8	M20	250	8	M20	250	8	M24		
200	8"	296.5	8	3/4"	330.2	12	7/8"	330	290	12	M20	350	305	12	M22	280	8	M16	295	8	M20	295	12	M20	310	12	M24	310	12	M24		
250	10"	362	12	7/8"	387.4	16	1"	400	355	12	M22	430	380	12	M24	335	12	M16	350	12	M20	355	12	M20	370	12	M24	370	12	M27		
300	12"	431.8	12	7/8"	450.9	16	1 1/8"	445	400	16	M22	480	430	16	M24	395	12	M20	400	12	M20	410	12	M20	430	16	M24	430	16	M27		
350	14"	476.3	12	1"	514.4	20	1 1/8"	490	445	16	M22	540	480	16	M30	445	12	M20	460	16	M20	470	16	M20	490	16	M24	490	16	M30		
400	16"	539.8	16	1"	571.5	20	1 1/4"	560	510	16	M24	605	540	16	M30	495	16	M20	515	16	M24	525	16	M24	550	16	M27	550	16	M33		
450	18"	577.9	16	1 1/8"	628.7	24	1 1/4"	620	565	20	M24	675	605	20	M30	550	16	M20	565	20	M24	585	20	M24	600	20	M27	600	20	M33		
500	20"	635	20	1 1/8"	685.8	24	1 1/4"	675	620	20	M24	730	660	20	M30	600	20	M20	620	20	M24	650	20	M30	660	20	M33	660	20	M33		
550	22"	692.2	20	1 1/4"	-	-	-	745	680	20	M30	795	720	20	M36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
600	24"	749.3	20	1 1/4"	812.8	24	1 1/2"	795	730	24	M30	845	770	24	M36	705	20	M24	725	20	M27	770	20	M33	770	20	M36	770	20	M36		
650	26"	806.5	24	1 1/4"	-	-	-	845	780	24	M30	895	820	24	M36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
700	28"	863.6	28	1 1/4"	-	-	-	905	840	24	M30	960	875	24	M39	810	24	M24	840	24	M27	840	24	M33	875	24	M36	875	24	M39		
750	30"	914.4	28	1 1/4"	-	-	-	970	900	24	M30	1020	935	24	M39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
800	32"	977.9	28	1 1/2"	-	-	-	1020	950	28	M30	1085	990	24	M45	920	24	M27	950	24	M30	950	24	M36	990	24	M45	990	24	M45		
900	36"	1085.9	32	1 1/2"	-	-	-	1120	1050	28	M30	1185	1090	28	M45	1020	24	M27	1050	28	M30	1050	28	M36	1090	28	M45	1090	28	M45		
1000	40"	1200.2	36	1 1/2"	-	-	-	1235	1160	28	M36	1320	1210	28	M52	1120	28	M27	1160	28	M33	1170	28	M39	1210	28	M52	1210	28	M52		
1100	44"	1314.5	40	1 1/2"	-	-	-	1345	1270	28	M36	1420	1310	32	M52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1200	48"	1422.4	44	1 1/2"	-	-	-	1465	1380	32	M36	1530	1420	32	M52	1340	32	M30	1380	32	M36	1390	32	M45	1420	32	M52	1420	32	M52		
1300	52"	1536.7	44	1 3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1350	54"	1593.9	44	1 3/4"	-	-	-	1630	1540	36	M42	1700	1590	32	M56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1400	56"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1560	36	M33	1590	36	M39	1590	36	M45	1640	36	M56	1640	36	M56		
1500	60"	1759.0	52	1 3/4"	-	-	-	1795	1700	40	M42	1865	1750	36	M56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1600	64"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1760	40	M33	1820	40	M45	1820	40	M52	1860	40	M56	1860	40	M56		
1650	66"	1930.4	52	1 3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1800	72"	2095.5	60	1 3/4"	-	-	-	-	-	-	-	-	-	-	-	1970	44	M36	2020	44	M45	2020	44	M52	2070	44	M64	2070	44	M64		
2000	80"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2180	48	M39	2230	48	M45	2230	48	M56	2300	48	M64	2300	48	M64		
2100	84"	2425.7	64	2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2200	88"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2390	52	M39	-	-	-	-	-	-	-	-	-	-	-	-		
2400	96"	2755.9	68	2 1/4"	-	-	-	-	-	-	-	-	-	-	-	2600	56	M39	-	-	-	-	-	-	-	-	-	-	-	-		
2600	104"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2810	60	M45	-	-	-	-	-	-	-	-	-	-	-	-		
2800	112"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3000	120"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3500	140"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4000	160"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

NOTE
 For DN2800 and larger,
 it is available upon request.

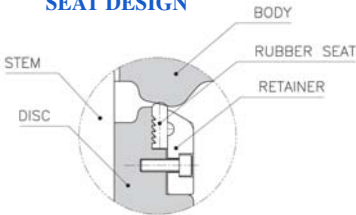
Applications

- Desalination
- Power Plant
- District Heating and Cooling
- Other
- Pump Isolation
- Salt Water Service
- Sea Water

Hydro Test Specifications

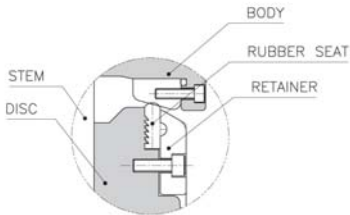
Series	ISO Series	AWWA Series
"Hydrostatic Shell test"	1.5 x maximum service pressure	2.0 x maximum service pressure
"Hydrostatic Seat test"	1.1 x working service pressure	working service pressure

SEAT DESIGN



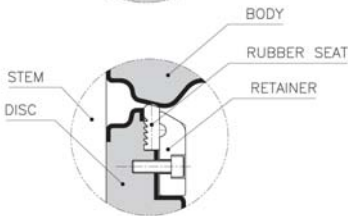
Standard Disc Seated Design

- Retained rubber seat in the disc.
- Rubber seat material can be adopted to suit the application.
- Rubber seat can easily be exchanged.



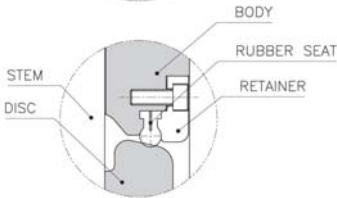
Disc Seated Design With Replaceable Metal Body Seat

- Retained rubber seat in the disc.
- Rubber seat material can be adopted to suit the application.
- Rubber seat can easily be exchanged.
- An additional replaceable ring is inserted in the body.



Disc Seated Design With Rubber Lined Body and Disc

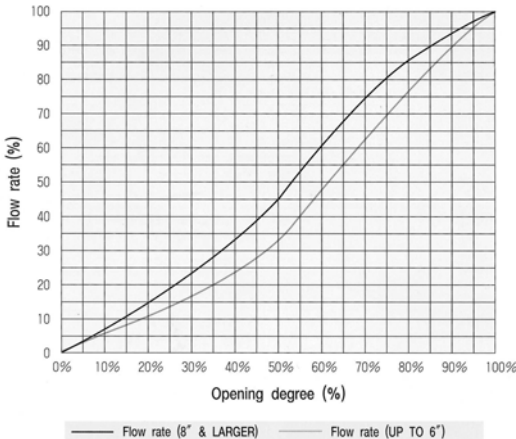
- Retained rubber seat in the disc.
- Rubber seat material can be adopted to suit the application.
- Rubber seat can easily be exchanged.
- Body and Disc Rubber Lined to prevent corrosion of body and disc.



Body Seated Design

- Retained rubber seat in the body.
- Effective design for stainless steel disc applications.
- Rubber seat material can be adopted to suit the application.

Flow Characteristic curve



FLOW DATA

Cv of a valve is defined as the flow of water at 60°F in gallons per minute (GPM) at a pressure drop of one pound per square inch (1psi) across the valve

$$Q = C_v \sqrt{(\Delta P (62.4/\rho))}$$

Where

Q : Flow rate (GPM)

Cv : Flow coefficient value

ΔP : Pressure drop (PSI)

ρ : Density of fluid (for water at 60 °F: $\rho = 62.4$)

Therefore

$$Q = C_v \sqrt{\Delta P}$$

Installation Instructions

General

- Valves can be installed in the pipeline in any position.
- Before installing valves, the pipeline must be cleaned from dirt and welding residues. otherwise seat may be damaged.
- Also the pipeline must be free from tension and electric current.
- When handling valves, be careful to avoid contact with the process fluid.
- Check carefully whether valve seat / disc surface, as well as mating face, are all clean.
- Tighten again, if any, all bolts loosened during transport and / or handling.
- Open and close valves to check proper operation.
- Do not put weight on the lever or gear handle during valve operation.
- If possible, install valves in the direction of the arrow marked on the body.
- The pipeline connecting to the valve must be free from excessive loads.
- Do not weld the piping with the valve installed to avoid valve damage.

Installation on new pipeline

- Shut the valve disc until the disc is at least 10mm within the body.
- Align the two pipeline flanges with the valve flanges.
- Flange gasket surfaces should be aligned.
- Span the valve body with the flange-bolts and tighten the bolts partially.
- Finish tightening by uniform cross bolting.
- Center the valve and connecting flanges carefully.
- Tack-weld the flanges to the pipe.
- Remove the bolts and the valve from the flanges. Just perform tack-welding only when the valve is inserted, as high heat temperature can damage valve seat.
- Weld flanges to the pipe and wait until completely cooled down.
- Install the valve in accordance with the instructions.

Replacement of Packing

- Before replacing gland packing or a seat ring, close upstream valve and detach the valve from the piping.

DISC SEATED BUTTERFLY VALVE TORQUE TABLE

SIZE	WORKING PRESSURE (bar)											
	5bar			10bar			16bar			25bar		
	kgf-m	N.m	lbf.ft	kg-m	Nm	ft-lb	kg-m	Nm	ft-lb	kg-m	Nm	ft-lb
80A	15	15	11	20	20	14	28	27	20	40	39	29
100A	20	20	14	40	39	29	53	52	38	70	69	51
125A	32	31	23	58	57	42	70	69	51	110	108	80
150A	45	44	33	90	88	65	119	116	86	160	157	116
200A	85	83	61	17	166	122	222	218	161	340	333	246
250A	18	176	130	36	351	259	473	464	342	570	559	412
300A	28	272	201	55	541	399	728	714	526	910	892	658
350A	38	373	275	75	739	545	993	973	718	1300	1274	940
400A	53	521	385	105	1030	760	1384	1356	1000	1910	1872	1381
450A	77	754	556	152	1487	1097	1998	1958	1444	2790	2734	2017
500A	103	1007	743	203	1985	1464	2668	2614	1928	3670	3597	2653
550A	128	1256	927	252	2469	1821	3314	3248	2396	4620	4528	3339
600A	161	1574	1161	315	3086	2276	4143	4060	2994	5700	5586	4120
650A	207	2026	1494	405	3965	2924	5322	5215	3847	7240	7095	5233
700A	246	2412	1779	481	4709	3473	6317	6191	4566	8870	8693	6411
750A	290	2843	2097	565	5533	4081	7420	7271	5363	10730	10515	7756
800A	339	3320	2449	657	6443	4752	8634	8461	6241	12560	12309	9079
900A	451	4424	3263	871	8532	6293	11421	11193	8255	17400	16797	12389
1000A	586	5745	4237	1123	11009	8120	14721	14427	10641	23080	22618	16682
1100A	836	8195	6044	1602	15698	11578	20986	20566	15169	30370	29763	21952
1200A	1055	10334	7622	2007	19672	14509	26272	25747	18990	42330	41483	30597
1300A	1341	13144	9694	2542	24916	18377	33252	32587	24035	51580	50548	37283
1400A	1620	15875	11709	3052	29905	22057	39865	39068	28815	65310	64004	47207
1500A	1914	18753	13832	3579	35075	25870	5186	50823	37485	86940	85201	62841
1600A	2266	22211	16382	4212	41275	30443	6117	59947	44214	100680	98666	72773
1650A	2793	27369	20187	5176	50728	37415	6773	66375	48956	104650	102557	75642
1800A	3282	32164	23723	6050	59286	43727	8029	78684	58034	133060	130399	96177
2000A	4279	41937	30931	7715	76192	56196	10710	104958	77413	175910	172392	127150
2100A	5159	50560	37291	9365	91781	67694	12156	119129	87865	212500	207026	152694
2200A	5859	57420	42351	10571	103592	76405	13778	135024	99589	227200	222578	164165
2400A	7459	73096	53913	13292	130261	96075	17253	169079	124707	285330	279623	206240
2500A	8555	83835	61834	15195	148912	109832	19303	189169	139524	317840	311483	229738
2800A	11650	114166	84205	20287	198816	146639	26558	260268	191964			
3000A	14551	142597	105174	25132	246297	181659	32677	320235	236193			
3400A	19118	187356	138187	28746	281711	207779						
4000A	34621	339286	250244									

COMBINED CHECK VALVE

Series 755 Double Flanged (AWWA, BS)

The Single Eccentric Design Principle

Applicable for butterfly valve with interchangeable soft seat.

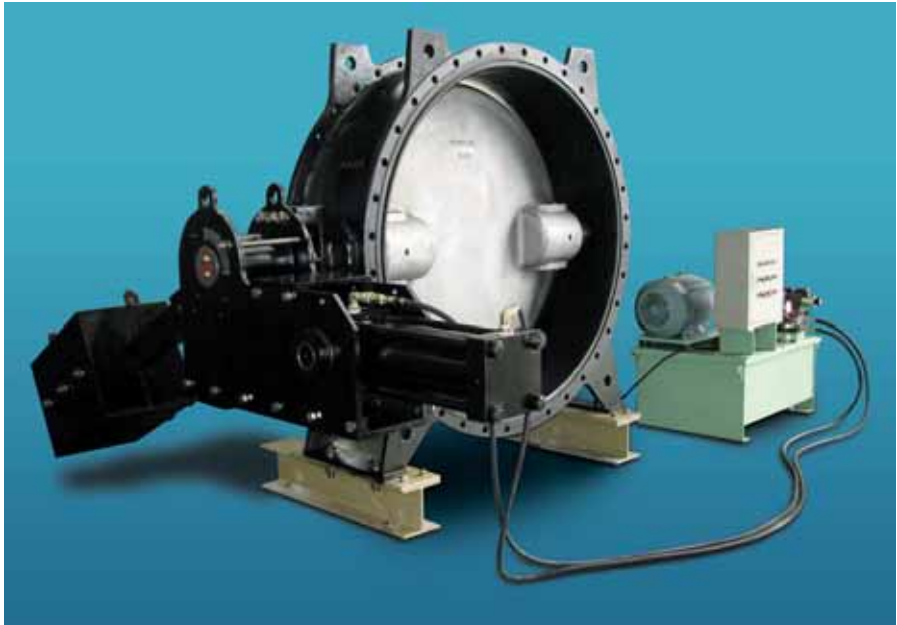
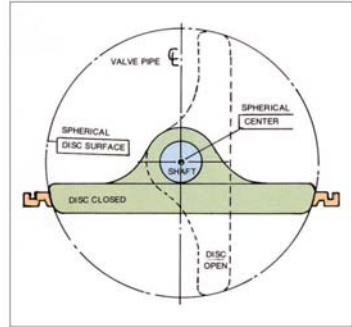
- Circular unbroken seats on disc and in body.
- Simple maintenance.
- Change of seat ring by dismantling of the retaining ring only.
- Wide variety of seat materials available.

Suitable for installation in Medium Range Pressure System (<30 kg/cm²)

No limitation on corrosiveness of medium when proper seat material chosen.

- Flow characteristics and pressure-drop less favorable than 'concentric design'
- Operating torque is higher than concentric design but substantially lower than double eccentric design
- The valve seat will be remained off position when the disc is fully opened position.

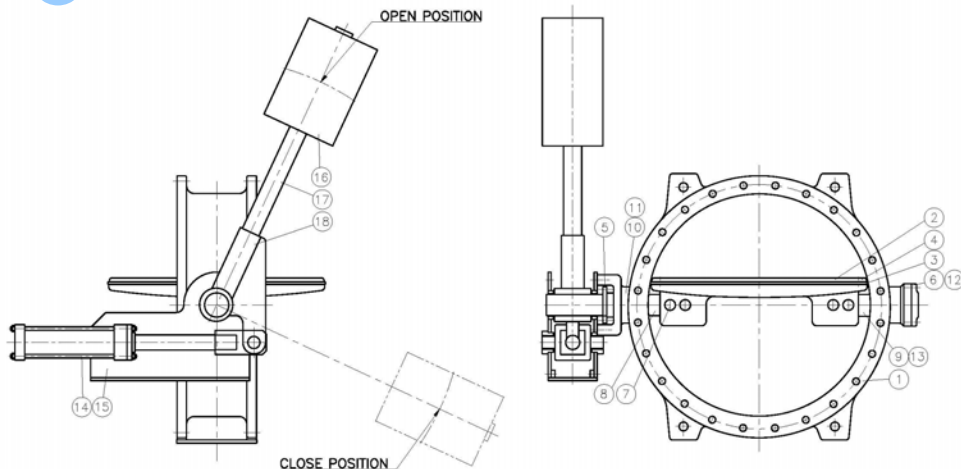
Not suitable for FIRE SAFE.



COMBINED CHECK VALVE

Series 755 Double Flanged (AWWA, BS)

CONSTRUCTION AND MATERIAL



Outline of Combined Check Valves

The valve consists of a hydraulic cylinder, counter weight for emergency shut-off and hydraulic generator unit, etc. In normal condition, it is used as a general valve. In emergency condition, (e.g. power failure) all hydraulic circuits are converted to shut-off circuits which can close the valve by operation of weight for emergency shut-off and a lever. Shut off speed can be adjusted by a relief valve on hydraulic generator unit.

Feature

This valve has function as follows :

1. Open in normal position
2. Closed in normal position
3. Shut-off in case of emergency
 (Valve shut-off speed can be adjusted by two steps at site)
4. Intermediate open / close control

P.NO.	PART NAME	MATERIAL
1	BODY	CAST STEEL / DUCTILE IRON STAINLESS STEEL / Ni-AL BRONZE
2	DISC	STAINLESS STEEL / DUCTILE IRON Ni-AL BRONZE
3	SEAT	EPDM / NBR / VITON
4	RETAINER	STAINLESS STEEL / Ni-AL BRONZE
5	PACKING GLAND	DUCTILE IRON / CAST STEEL STAINLESS STEEL / Ni-AL BRONZE
6	BOTTOM COVER	CAST STEEL / DUCTILE IRON STAINLESS STEEL / Ni-AL BRONZE
7	DISC PIN	STAINLESS STEEL
8	STEM	STAINLESS STEEL(304, 316, 316L, 630(17-4PH), SUPER DUPLEX, MONEL)
9	STEM BEARING	OILLESS BEARING
10	V-PACKING	EPDM / NBR / VITON
11	GLAND RING	BRONZE
12	THRUST PLATE	BRONZE
13	SHAFT O-RING	EPDM / NBR / VITON
14	HYD' CYLINDER	ASSY
15	SUPPORT BRACKET	STEEL
16	COUNTER WEIGHT	STEEL
17	ADJUST LEVER	STEEL
18	JOINT & ARM	STEEL

Product Group 100
Bonded Rubber Liner Butterfly Valves

Product Group 200
Replaceable Rubber Liner Butterfly Valves

Product Group 300
Cassette Type Rubber Liner Butterfly Valves

Product Group 400
**Double Eccentric Replaceable Seat Ring
Type Butterfly Valves**

Product Group 500
High Performance Butterfly Valves

Product Group 600
Tripple Eccentric Metal Seated Butterfly Valves

Product Group 700
Disc Seated Butterfly Valves

Product Group 800
Cryogenic Butterfly Valves (LPG, LNG)

Product Group 900
Damper Butterfly Valves



Please contact us for further information