



Fig63 Ringset Butterfly Valve

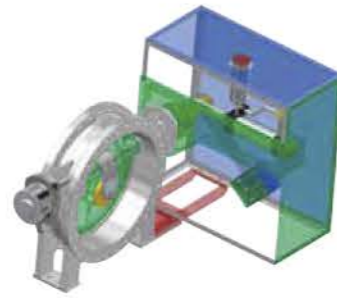
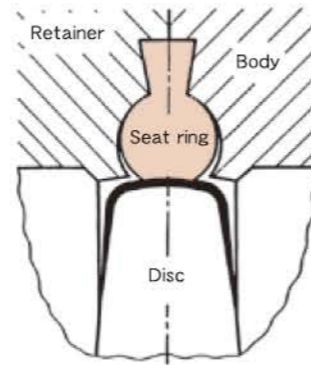


Fig67 Ringset Check Valve



1. What is Ringset?

The body of a ringset valve is provided with a seat ring which is a non-integral seating to the body as shown in the right figure. The seat ring is replaceable at a site, so that easier maintenance of the valve can be get. This replaceability also brings a longservice life of the valve.

2. Body Materials

The body and the disc are of grey cast iron as a basic material. Other materials, such as, cast steel, stainless steel, spheroidal graphite iron, and carbon steel are available on request. Rubber linings for the body and the disc are also available.

3. Materials of Seat Ring and Temperature Ratings

Seat ring material	Applicable fluid	Temperature range(°C)
NR	water, weak acid, weak alkali, etc.	-20 ~60
CR	water, air, weak acid, alkali, etc.	-10 ~80
NBR	mineral oil, gasoline, benzine, etc.	0 ~80
FPM	hot oil, steam, air, etc.	-20 ~200
EPDM	steam, air, etc.	-10 ~120
PTFE	any kind of fluid	-196 ~200

4. Pressure Ratings

We have two types of valves designated by pressure. Type RBL is for low pressure use and type RBH for high pressure use. The relation between nominal diameter and pressure is shown in the right figure.

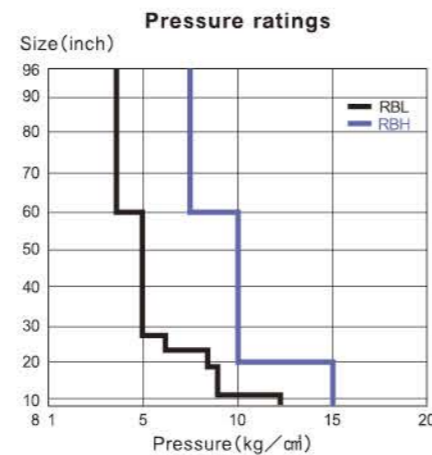


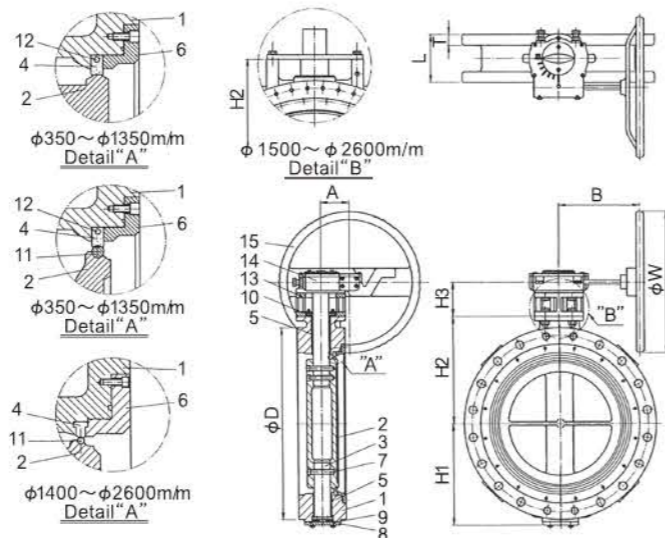
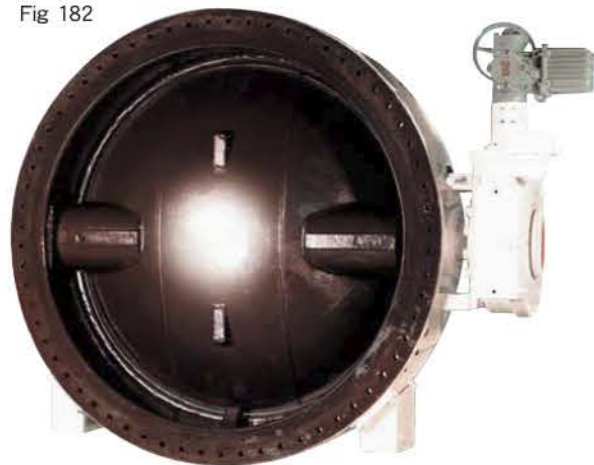
Fig No.	61	62	63	64
Item	Ringset Butterfly Gear Ope.		Ringset Butterfly Electric Ope.	
Material	Cast Iron·Cast Steel·Ductile Iron·Stainless			
Type	Flanged	Wafer	Flanged	Wafer
Flange	10K·125Lb·10bar·16bar			
Standard	AWWA C-504			
Appearance				

Dimension	L	H			L	H			L	H			L	H		
		RBL	RBH			RBL	RBH			RBL	RBH			RBL	RBH	
8 inch	200mm	152	380	380	95	380	380	152	719	743	95	719	743			
10	250	203	415	415	100	415	415	203	754	781	100	754	781			
12	300	203	468	468	110	468	468	203	790	808	110	790	808			
14	350	203	493	493	120	493	493	203	824	854	120	824	854			
16	400	203	558	573	135	558	573	203	870	920	135	870	920			
18	450	203	578	593	145	578	593	203	900	945	145	900	945			
20	500	203	628	678	155	628	678	203	970	978	155	970	978			
22	550	203	653	703	155	653	703	203	988	1011	155	988	1011			
24	600	203	683	733	180	683	733	203	1020	1046	180	1020	1046			
26	650	305	763	785	180	763	785	305	1081	1104	180	1081	1104			
28	700	305	798	825	185	798	825	305	1101	1159	185	1101	1159			
30	750	305	828	850	185	828	850	305	1141	1191	185	1141	1191			
32	800	305	905	905	205	905	905	305	1176	1939	205	1176	1939			
34	850	305	930	930	215	930	930	305	1215	1282	215	1215	1282			
36	900	305	955	965	225	955	965	305	1270	1354	225	1270	1354			
38	950	305	1015	990	235	1015	990	305	1375	1460	235	1375	1460			
40	1000	305	1015	1025	250	1015	1025	305	1405	1496	250	1405	1496			
44	1100	305	1085	1085	270	1085	1085	305	1420	1539	270	1420	1539			
48	1200	381	1150	1180	280	1150	1180	381	1562	1617	280	1562	1617			
54	1350	381	1235	1345	320	1235	1345	381	1673	1713	320	1673	1713			
60	1500	381	1350	1495	340	1350	1495	381	1821	1881	340	1821	1881			
64	1600	457	1480	1564	355	1480	1564	457	1866	1950	355	1866	1950			
72	1800	457	1620	1744	380	1620	1744	457	2091	2190	380	2091	2190			
80	2000	559	1755	1864	410	1755	1864	559	2195	2304	410	2195	2304			
88	2200	559	1895	2044	435	1895	2044	559	2398	2522	435	2398	2522			
96	2400	559	2035	2174	460	2035	2174	559	2526	2684	460	2526	2684			

Fig No.	65	66	67
Item	Ringset Check		
Material	Cast Iron·Cast Steel·Ductile Iron·Stainless		
Type	Standard	With Counter Weight	With Dash Pot
Flange	10K·125Lb·10bar·16bar		
Standard	SHOWA Original		
Appearance			

Dimension	L	A	B	L	A	B	L	A	B
14 inch	350mm	203	339	312	203	339	490		
16	400	203	385	405	203	385	575		
18	450	203	405	422	203	405	605		
20	500	203	440	520	203	440	650		
22	550	203	465	547	203	465	685		
24	600	203	503	561	203	503	735	203	890
26	650				305	540	775	305	930
28	700				305	580	825	305	1155
30	750				305	605	860	305	1180
32	800				305	658	925	305	1210
34	850				305	683	975	305	1240
36	900				305	708	1000	305	1260
40	1000				305	768	1065	305	1350
44	1100				305	833	1130	305	1555
48	1200				381	910	1200	381	1600
54	1350				381	1015	1320	381	1680

Fig 182



● AWWA Butterfly Valve...

Conforming to AWWA C504 (DN350~PN1800) and AWWA C516 (DN2000~DN2600)

● Material

No.	Part Name	Standard Material	Available Material	No.	Part Name	Standard Material
1	Body	A126-B	A536	9	O Ring	NBR
2	Disc	A536	CF8, CF8M, WCB	10	Gland	B62
3	Shaft	A182 F6a	F316, Monel	11	Disc Edge Ring	A182 F316
4	Seat	NBR	EPDM-CR-VITON	12	Metal Ring	SS400
5	Bushing	B62	—	13	Stand	A536
6	Retainer	A536	—	14	Gear	Cast Iron
7	Pin	A182 F6a	F316, Monel	15	Handwheel	Ductile Iron
8	Bottom Cover	A126-B	A536			

● Dimensions

Size mm	Dimensions (mm)									
	L	ΦD	H1	H2	H3	T	A	B	ΦW	
350	203	535	302	320	152	35	123	345	600	
400	203	597	332	326	152	37	123	345	600	
450	203	640	366	395	206	40	123	345	600	
500	203	700	391	400	206	43	123	345	600	
600	203	815	449	455	206	45	123	345	600	
700	305	927	549	552	295	48	160	360	600	
750	305	985	551	575	295	54	160	360	600	
800	305	1060	602	616	295	57	160	360	600	
900	305	1170	632	690	346	60	215	415	600	
1000	305	1289	734	789	346	64	215	415	600	
1050	305	1347	733	789	346	64	215	415	600	
1100	305	1405	773	800	346	67	215	415	600	
1200	381	1512	822	880	310	70	282	574	600	
1350	381	1626	871	930	310	76	330	826	600	
1500	381	1854	998	1100	161	79	330	826	600	
1650	457	2032	1078	1185	161	86	330	826	600	
1800	457	2197	1177	1280	314	89	462	865	600	
2000	508	2362	1277	1380	314	99	462	865	600	
2200	580	2642	1397	1500	314	89	462	865	600	
2400	580	2877	1558	1650	221	108	462	865	600	
2600	580	3048	1596	1700	221	117	462	865	600	

● Working Pressure

1.0Mpa-Water Size 350~1500mm
0.75Mpa-Water Size 1600mm & over

● Test Pressure

Size	350~1500mm	1600mm&over
Shell	1.5Mpa	1.13Mpa
Seat	1.1Mpa	0.83Mpa

● Available for Electric Operation Type



Outside Screw & Yoke Rising Stem

Fig No.	6 or 8	6G or 8G
Operation	Manual	Gear
Material	Body	Cast Iron or Ductile Iron
	Trim	Bronze or Aluminium Bronze or Z·F·Bronze or S/Steel
Flange Standard & Working Pressure	Fig6-ANSI125	150PSI-WOG(100°F)100PSI-Steam
	Fig8-BS-PN16	16bar(-10~120°C)
	Fig8-JIS10K	1.0MPa(-10~120°C)



Dimension	L	H(Open)	W	L	H	W	
14 inch	350mm	381	1544	450	381	1636	460
16	400	406	1800	500	406	1830	460
18	450	432	2002	560	432	2064	460
20	500	457	2212	600	457	2207	610
24	600	508	2690	710	508	2633	610
28	700	610	3060	750	610	3125	760
32	800				660	3625	760
36	900				711	3995	760
40	1000				811	4375	760

Non-Rising Stem

Fig No.	1 or 3	1G or 8G
Operation	Manual	Gear
Material	Body	Cast Iron or Ductile Iron
	Trim	Bronze or Aluminium Bronze or Z·F·Bronze or S/Steel
Flange Standard & Working Pressure	Fig1-ANSI125	150PSI-WOG(100°F)100PSI-Steam
	Fig3-BS-PN16	16bar(-10~120°C)
	Fig3-JIS10K	1.0MPa(-10~120°C)



Dimension	L	H	W	L	H	W	
14 inch	350mm	381	975	450	381	1153	308
16	400	406	1132	500	406	1345	460
18	450	432	1227	560	432	1445	460
20	500	457	1339	600	457	1648	610
24	600	508	1566	710	508	1852	610
28	700	610	1780	710	610	2140	760
32	800				660	2396	760
36	900				711	2605	760
40	1000				811	2777	760