

**\*Design** –Newway cast steel swing check valves have been designed to meet the requirements of British Standard Bs1868, and conform to American National Standard ANSI B 16.34. Valves also Comply with API 6D for regular bore type.

Wall thickness dimensions comply to API 600

Face to face and end to end dimensions conform to BS 2080, ANSI B 16.10 and ISO 5752

End flange dimensions conform to ANSI B 16.5

BW end dimensions conform to ANSI B 16.25



**\*Seat Ring** is tight seal welded into valve body, however, threaded seat ring is available upon request.

**\*Body-To-Bonnet Joint-** A flat face gasket joint is used in the 150-lb valve. A male and female joint is used in 300-lb, 600-lb valve. Ring joint is used 900-lb and higher rated valves.

**\*Drain Tapping-** Newway swing valves are normally provided with boss at location G only, but additional bosses Can be provided upon client request.

**\*Outside Lever and Weight** - To overcome slow response to retarding flow, the disc can be provided with a lever mounted weight upon customer request.

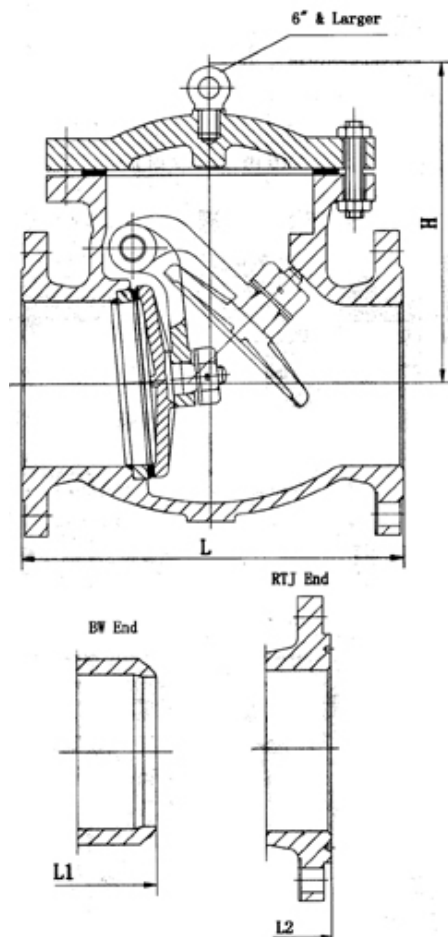
\*The function of a check valve is to prevent reversal of flow automatically and promptly. These valves are usually supplemented by gate, globe, or other valves for manual control of the media in the line.

\*Check valves should always be installed so that the force of gravity will assist in closing and holding the disc or clapper to assure positive closure.

\*Check valves are one way valves and should be installed so that the line pressure is under the disc.

\*Swing check valves should not be used in vertical pipe lines handling liquids at high heads because severe water hammer may result from reversal of flow

### Class 150



**Figure No. S1RA8 S1JA8 S1BS8**

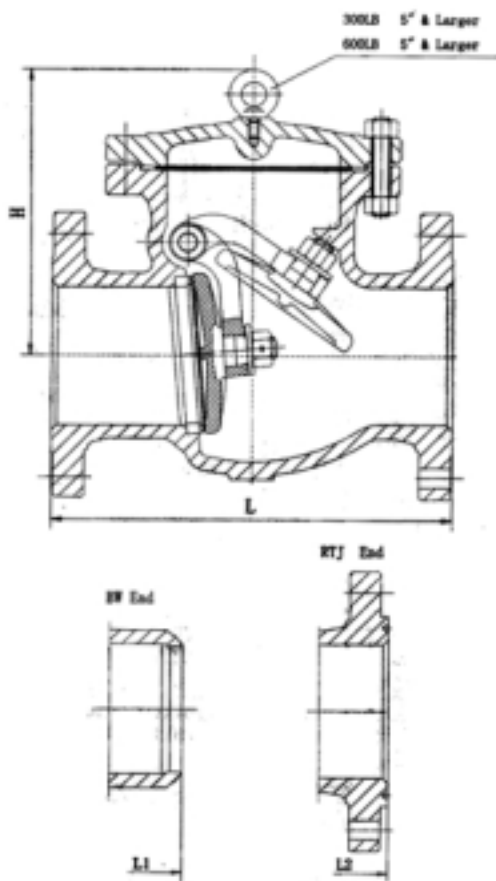
#### Standard materials of parts

Parts	Materials
Body	ASTM A216-WCB
Cover	ASTM A216-WCB ASTM A105(4\" & Smaller)
Disc	ASTM A216-WCB+Cr13 Overlay ASTM A217-CA15(12\" & smaller)
Hinge	ASTM A216-WCB
Seat ring	ASTM A105+STL.Overlay
Hinge pin	ASTM A 276-420
Washer	ASTM A 276-420
Gasket	Reinforced graphite
Plug	Carbon steel
Cover stud/nut	ASTM A193-B7/ASTM A194-2H
Disc nut	ASTM A276-420
Split pin	ASTM A276-420
Hook screw	Carbon steel

**Dimensions(in./mm)**

NPS	In	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750
L-L1 (RF-BW)	In	8	8.5	9.5	11.5	13	14	19.5	24.5	27.5	31	34	38.5	38.5	51	51	57	60
	mm	203	216	241	292	330	356	495	622	699	787	864	978	978	1295	1295	1448	1524
L2 RTJ	In	8.5	9.0	10.0	12.0	13.5	14.5	20.0	25.0	28.0	31.5	34.5	39.0	39.0	51.5	---	---	---
	mm	216	229	254	305	343	368	508	635	711	800	876	991	991	1308			
H	In	5.9	6.6	6.7	8	9.1	11.7	13.8	15.3	17.2	18.8	20.7	22.9	24.7	34.6	35.8	36.8	38.2
	mm	150.5	168	171	204	230	296.5	351.5	389.5	437.5	476.5	525	582	627	880	910	935	970
WT (KG)	RF	14	20	25	40	56	71	118	177	263	353	542	632	855	970	1276	1600	1990
	BW	10	12	17	29	45	57	96	143	227	294	468	552	755	831	1120	1420	1760

**Class 300/600**



**Figure No. S3RA8 S6RA8 S3JA8 S6JA8 S3BA8 S6BA8**

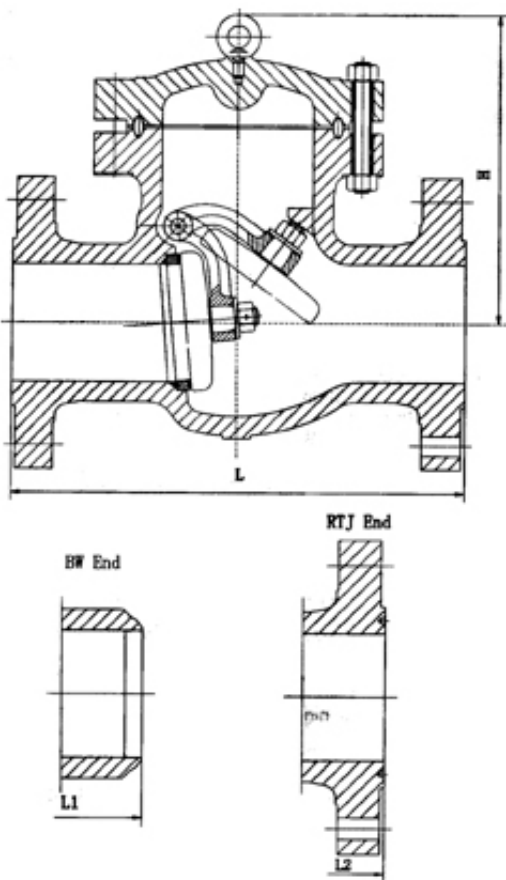
**Standard materials of parts**

Parts	Materials
Body	ASTM A216-WCB
Cover	ASTM A216-WCB ASTM A105(4" & Smaller)
Disc	ASTM A216-WCB+Cr13 Overlay ASTM A217-CA15(10" & smaller)
Hinge	ASTM A216-WCB
Seat ring	ASTM A105+STL.Overlay
Hinge pin	ASTM A 276-420
Washer	ASTM A 276-420
Gasket	Spiral wound graphite
Plug	Carbon steel
Cover stud/nut	ASTM A193-B7/ASTM A194-2H
Disc nut	ASTM A276-420
Split pin	ASTM A276-420
Hook screw	Carbon steel

**Dimensions(in./mm)**

300#	NPS	In	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30
	DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750
	L-L1	In	10.5	11.5	12.5	14	15.75	17.5	21	24.5	28	33	34	38.5	40	53	53	59	62.75
	(RF-BW)	mm	267	292	318	356	400	445	533	622	711	838	864	978	1016	1346	1346	1499	1594
	L2	In	11.12	12.12	13.12	14.62	16.37	18.12	21.62	25.12	28.62	33.62	34.62	39.12	40.75	53.88	54.00	60.00	63.75
RTJ	mm	283	308	333	371	416	460	549	638	727	854	879	994	1035	1369	1372	1524	1619	
H	In	6.9	7.3	8.5	10.2	12	12.5	15	17.1	20.1	22.1	23.5	26.6	28.7	33.9	36.6	45.8	50	
	mm	176	185	216	259	304	317	380	434	511	561	596	675	730	860	930	1163	1270	
WT	RF	20	30	38	64	84	115	191	310	450	644	840	1025	1320	1931	2375	2660	3230	
(KG)	BW	16	22	30	53	73	101	169	276	414	585	766	945	1220	1792	1995	2660	2780	
600#	L-L1	In	11.5	13	14	17	20	22	26	31	33	35	39	43	47	55	---	---	---
	(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	---	---	---
	L2	In	11.62	13.12	14.12	17.12	20.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38	---	---	---
	(RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	---	---	---
H	In	7.2	8.3	9.1	10.4	11.6	14.7	16.8	20.4	22.4	24.5	26.8	29.6	38.4	43.7	---	---	---	
	mm	184	210	232	263	295	374	426	517	569	622	680	752	975	1111	---	---	---	
WT	RF	28	45	56	93	160	202	339	513	750	885	1220	1620	2120	3100	---	---	---	
(KG)	BW	21	35	42	64	115	145	256	375	589	694	932	1279	1702	2497	---	---	---	

### Class 900/1500/2500



**Figure No. S9RA8 S15RA8 S25RA8 S9JA8 S15JA8 S25JA8 S9BA8 S15BA8 S25BA8**

#### Standard materials of parts

Parts	Materials
Body	ASTM A216-WCB
Cover	ASTM A216-WCB
Disc	ASTM A216-WCB+Cr13 Overlay ASTM A217-CA15(6" & smaller)
Hinge	ASTM A216-WCB
Seat ring	ASTM A105+STL.Overlay
Hinge pin	ASTM A 276-420
Washer	ASTM A 276-420
Gasket	Soft iron
Plug	Carbon steel
Cover stud/nut	ASTM A193-B7/ASTM A194-2H
Disc nut	ASTM A276-420
Split pin	ASTM A276-420
Hook screw	Carbon steel

**Dimensions(in./mm)**

900#	NPS	In	2	2 1/2	3	4	6	8	10	12	14	16
	DN	mm	50	65	80	100	150	200	250	300	350	400
	L-L1 (RF-BW)	In mm	14.5 368	16.5 419	15 381	18 457	24 610	29 737	33 838	38 965	40.5 1029	44.5 1130
	L2 RTJ	In mm	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968	40.88 1038	44.88 1140
	H	In mm	11.7 296	11.8 300	11.8 300	12.9 327	17.4 441	19.8 502	26.1 664	30.5 775	30.8 782	33 838
1500#	WT (KG)	RF BW	70 50	100 77	91 68	150 113	305 230	510 387	810 632	1120 901	1380 1139	1900 1613
	L-L1 (RF-BW)	In mm	14.5 368	16.5 419	18.5 470	21.5 546	27.75 705	32.75 832	39 991	44.5 1130	49.5 1257	54.5 1384
	L2 (RTJ)	In mm	14.62 371	16.62 422	18.62 473	21.62 549	28.00 711	33.13 842	39.38 1000	45.12 11.46	50.25 1276	55.38 1407
	H	In mm	11.7 296	11.8 300	13.4 341	16.2 412	20.1 511	26.8 680	29.8 756	33.7 857	37.4 950	40.1 1020
2500#	WT (KG)	RF BW	70 50	100 77	150 115	245 190	550 452	1010 845	1550 1280	2280 1780	3060 2290	4500 3500
	L-L1 (RF-BW)	In mm	17.75 451	20 508	22.75 578	26.5 673	36 914	40.25 1022	50 1270	56 1422	---	---
	L2 (RTJ)	In mm	17.87 454	20.25 514	23.00 584	26.88 683	36.50 927	40.87 1038	50.88 1292	56.88 1445	---	---
	H	In mm	16.4 416	16.4 419	17.4 441	18.9 479	20.1 511	28 711	33.5 851	39.4 1000	---	---

**Class 150**

Basic Design:API 603

Wall Thickness:ANSI B16.34

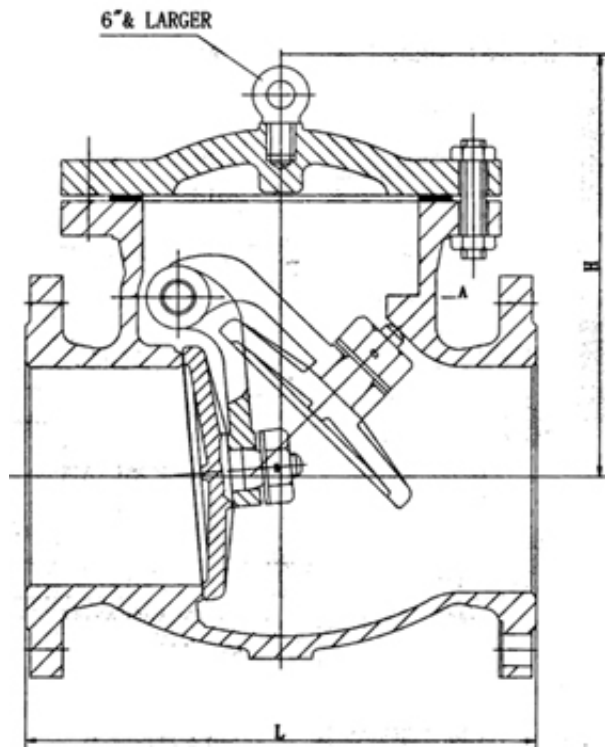


Figure No. S1RG10

Standard materials of parts

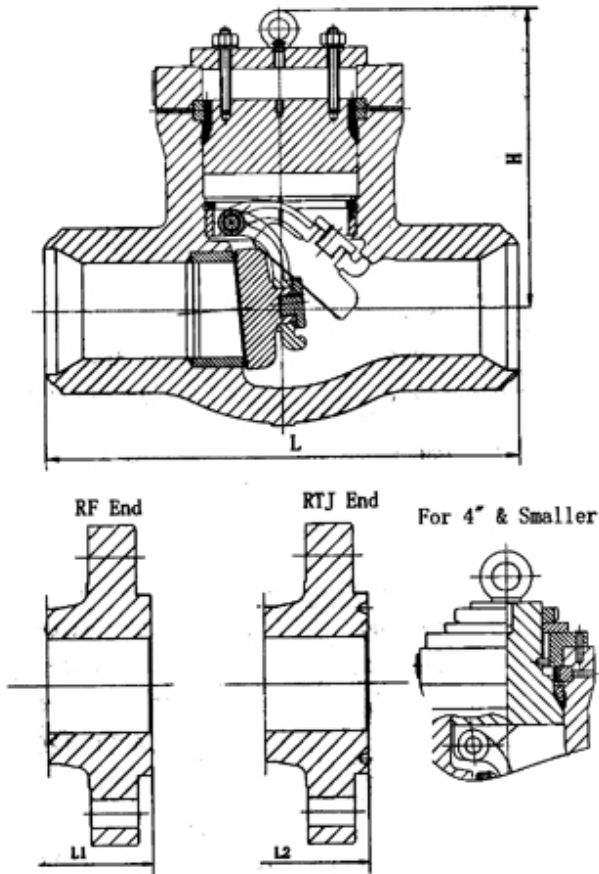
Parts	Materials
Body	ASTM A351-CF8M
Cover	ASTM A351-CF8M
Disk	ASTM A351-CF8M
Hinge	ASTM A351-CF8M
Hinge pin	ASTM A182-F316
Washer	ASTM A182-F316
Gasket	Reinforced graphite
Plug	ASTM A276-316
Cover stud/nut	ASTM A193-B8/ASTM A194-8
Disc nut	ASTM A182-F316
Split pin	ASTM A182-F316
Hook screw	ASTM A276-304

Dimensions(in./mm)

NPS	In	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
L	In	4.25	4.62	5	6.5	8	8.5	9.5	11.5	14	19.5	24.5	27.5
	mm	108	118	127	165	203	216	241	292	356	495	622	699
H	In	3.30	3.30	3.90	4.10	5.9	6.6	6.7	8	11.7	13.8	15.3	17.2
OPEN	mm	83	85	98	104	150.5	168	171	204	296.5	351.5	389.5	437.5
WT	Kg	2	2.9	3.2	6.9	11	15	21	33	61	106	156	229

Class 900/1500/2500

**Figure No. S9BA5-PS S15BA5-PS S25BA5-PS S9RA5-PS  
S15RA5-PS S25RA5-PS S9JA5-PS S15JA5-PS S25JA5-PS**



**Standard materials of parts**

Parts	Materials
Body	ASTM A216-WCB
Cover	ASTM A105+STL.Overlay
Disc	ASTM A216-WCB+STL.Overlay
Hinge	ASTM A216-WCB
Seat ring	ASTM A105+STL.Overlay
Hinge pin	ASTM A276-420
Washer	ASTM A276-420
Disc nut	ASTM A276-420
Gasket	ASTM A182-304
Spacer ring	ASTM A276-420
Thrust ring	ASTM A276-420
Supporting cover	ASTM A276-WCB
Bonnet stud/nut	ASTM A193-B7/A194-2H
Washer	Carbon steel
Hook screw	Carbon steel

**Dimensions(in./mm)**

900#	NPS	In	2	2-1/2	3	4	6	8	10	12	14	16
	DN	mm	50	65	80	100	150	200	250	300	350	400
	L	In	8.5	10	12	14	20	26	31	36	39	43
	(BW)	mm	216	254	305	356	508	660	787	914	991	1092
	L1	In	14.5	16.5	15	18	24	29	33	38	40.5	44.5
	(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
1500#	L2	In	14.62	16.12	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
	H	RF	9.5	10.4	10.6	12.5	15.7	23.1	23.9	27.4	29.5	28.7
		BW	241	264	270	318	400	587	606	695	749	730
	WT	In	42	58	55	110	242	599	893	1365	1628	1733
	(KG)	mm	21	34	32	68	168	462	725	1071	1281	1418
1500#	L	In	8.5	10	12	16	22	28	34	39	42	47
	(BW)	mm	216	254	305	406	559	711	864	991	1067	1194
	L1	In	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5
	(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
1500#	L2	In	14.62	16.62	18.62	21.62	28.00	33.13	39.38	45.12	50.25	55.38
	(RTJ)	mm	371	422	473	549	711	842	1000	1146	1276	1407
1500#	H	RF	9.5	10.4	10.8	12.5	16.6	18.9	23.3	25.4	28	29.5
		BW	241	264	274	318	422	479	591	645	711	749

	WT (KG)	In mm	42 21	58 34	105 42	147 74	360 233	641 504	1103 777	1628 1155	2205 1481	2730 1680
2500#	L (BW)	In mm	11 279	13 330	14.5 368	18 457	24 610	30 762	36 914	41 1041	---	---
	L1 (RF)	In mm	17.75 451	20 508	22.75 578	26.5 673	36 914	40.25 1022	50 1270	56 1422	---	---
	L2 (RTJ)	In mm	17.87 454	20.25 514	23.00 584	26.88 683	36.50 927	40.87 1038	50.88 1292	56.88 1445	---	---
	H	RF BW	9.6 245	10.4 264	10.6 270	12.5 318	17.8 451	22 559	22.7 576	25.8 656	---	---
	WT (KG)	In mm	89 53	124 74	163 89	299 173	588 285	1071 598	1676 783	2772 1512	---	---