



Check Valve

Design

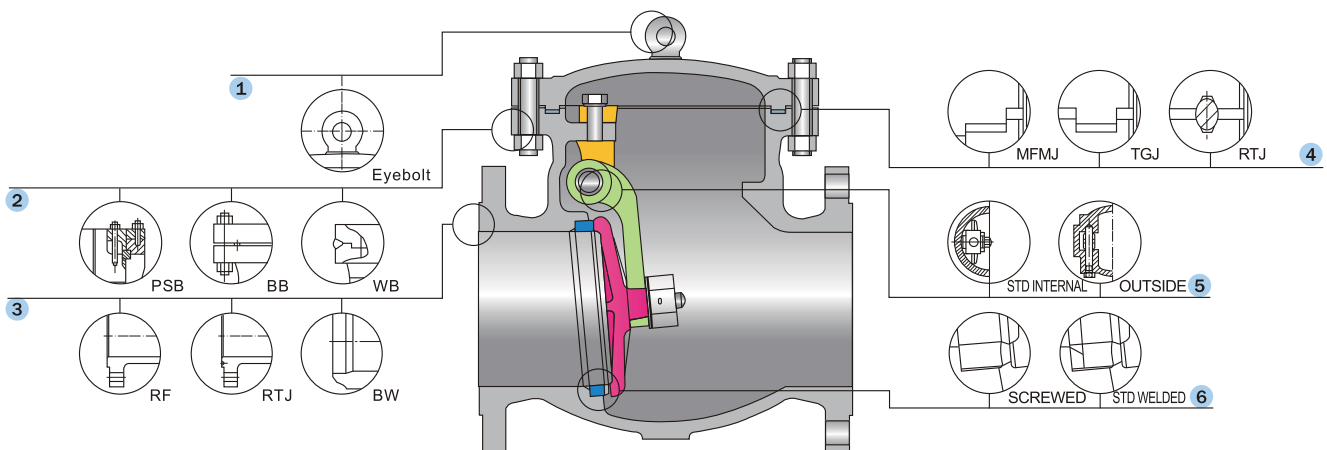
KOSEN cast steel check valve are designed and manufactured to provide maximum service life and dependability. All check valves are meet the design requirements of American Petroleum Institute Standard API 600 & API 6D, BS 1868, BS EN 13709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Available Modifications for **KOSEN** Cast Steel Valves

- *Trim Changes
- *End Connection Modifications
- *Gasket Changes
- *Outside Lever and Weight
- *Slam Retarders

Rang of Materials

Standard body/bonnet materials include nine of carbon, low alloy and stainless steels. For special applications they can be supplied in other grades of alloy and stainless steel. There, s a full range of trim materials to match any service. Optional packing and gasket materials are available for a full range of service conditions.



1 Eyebolt

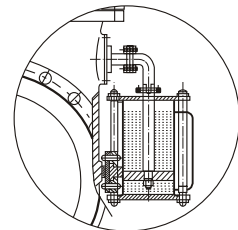
For 1580Lb-8 " , 300Lb-8 " , 600Lb-6 " , 900Lb/1500Lb/ 2500Lb-4 " & Over.

3 End Connections

A choice of Flanged, RTJ flanged or Butt welding end for piping flexibility.

5 Outside Lever and Weight

All external hinge pin swing check valves 12 " and smaller are available with an optional outside lever and weight. Internal hinge available with all swing check valves.



2 BB

Bolted bonnet. Welding bonnet and pressure seal bonnet in services requiring frequent cycling or with high pressure/ temperature variations.

4 Body-to -Bonnet Joint

A Male and Female joint or Tongue and Groove joint is used 150Lb to 600Lb valves. Ring joint is used in the body to bonnet connection in 900Lb & higher rated valves.

6 Seat Rings

Separate heavy duty, full ported rings for easy maintenance. Screwed or welded connection into body.

HCU Weighted Mechanical Accumulator

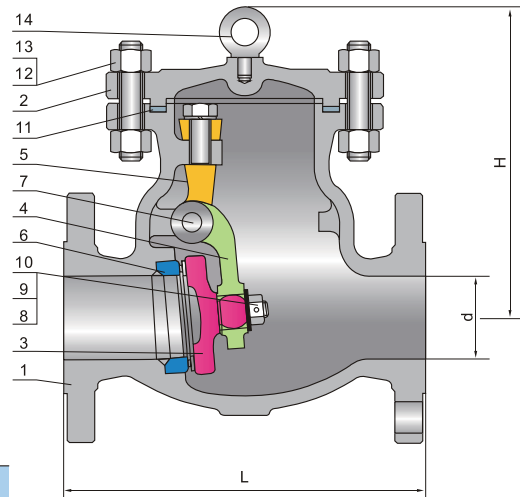
This design can be used to either dampen or assist closing of the check valve disc depending on orientation. By using the Hydraulic Control Unit to buffer action the disc, the valve opens at lower flow rates.

Applicable standards:

STEEL CHECK VALVES,API6D/BS1868
STEEL CHECK VALVES,ISO 14313
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598/API 6D

Design description:

BB, BOLTED BONNET CAP
SWING TYPE, ANTI-ROTATION DISC
RENEWABLE SEAT RINGS
NON-PENETRATE DISC SHAFT
HORIZONTAL OR VERTICAL SERVICE
FLANGED OR BUTTWELDING ENDS



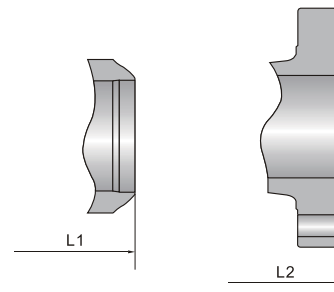
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1¼Cr-½Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A105-CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾	Carbon Steel		

Note:1).Cast steel disc for NPS 4 " and above.

2).NPS 6 " & larger.

3).Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900	mm

ANSI Class 150Lb

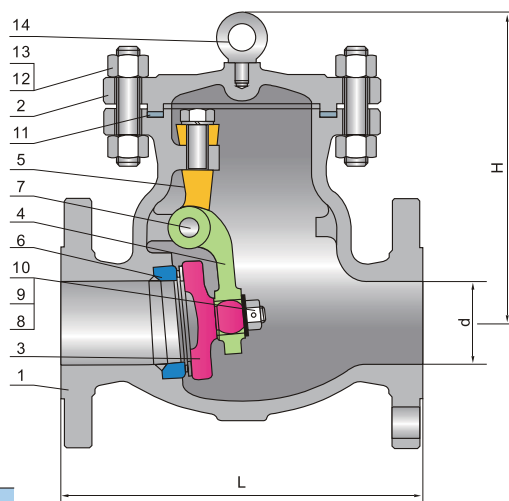
L/L1 (RF/BW)	8.00	8.50	9.50	11.50	14.00	19.50	24.50	27.50	31.00	34.00	38.50	38.50	51.00	51.00	57.00	60.00	77.00	in
	203	216	241	292	356	495	622	699	787	864	978	978	1295	1295	1448	1524	1956	mm
L2 (RTJ)	8.50	9.00	10.00	12.00	14.50	20.00	25.00	28.00	31.50	34.50	39.00	39.00	51.50	-	-	-	-	in
	216	229	254	305	368	508	635	711	800	876	991	991	1308	-	-	-	-	mm
H	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00	in
	152	165	175	204	293	353	390	432	475	525	582	627	883	910	940	980	1220	mm
(d)	50	63	76	100	150	200	250	300	336	387	438	488	590	641	692	743	876	mm
WT (kg)	14	20	25	40	71	118	177	263	353	542	632	855	970	1275	1600	1990	2760	RF
	10	12	17	29	57	96	143	227	295	468	552	755	831	1120	1420	1760	2230	BW

Applicable standards:

STEEL CHECK VALVES,API6D/BS1868
STEEL CHECK VALVES,ISO 14313
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598/API 6D

Design description:

BB, BOLTED BONNET CAP
SWING TYPE, ANTI-ROTATION DISC
RENEWABLE SEAT RINGS
NON-PENETRATE DISC SHAFT
HORIZONTAL OR VERTICAL SERVICE
FLANGED OR BUTTWELDING ENDS



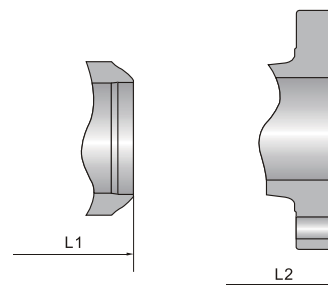
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A105-CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾	Carbon Steel		

Note:1).Cast steel disc for NPS 4 " and above.

2).NPS 6 " & larger.

3).Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900	mm

ANSI Class 300Lb

L/L1 (RF/BW)	10.50	11.50	12.50	14.00	17.50	21.00	24.50	28.00	33.00	34.00	38.50	40.00	53.00	53.00	59.00	62.75	82.00	in
	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1346	1499	1594	2083	mm
L2 (RTJ)	11.12	12.12	13.12	14.62	18.12	21.62	25.12	28.62	33.62	34.62	39.12	40.75	53.88	54.00	60.00	63.75	-	in
	283	308	333	371	460	549	638	727	854	879	994	1035	1368	1372	1524	1619	-	mm
H	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00	in
	152	165	175	204	292	353	390	432	475	525	582	627	883	910	940	980	1220	mm
(d)	50	63	76	100	150	200	250	300	336	387	431	482	584	635	686	737	876	mm
WT (kg)	16	23	29	46	82	136	204	302	405	625	730	985	1115	1465	1840	2290	3180	RF
	11	13	18	31	61	103	155	245	315	503	593	812	895	1205	1525	1895	2395	BW

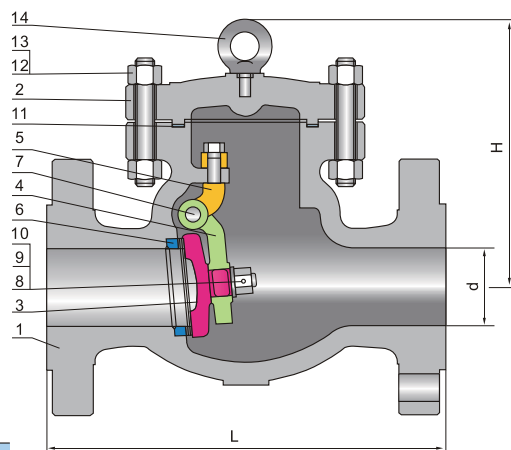
SWING CAST STEEL CHECK VALVE 600LB

Applicable standards:

STEEL CHECK VALVES, API 6D/BS1868
 STEEL CHECK VALVES, ISO 14313
 STEEL VALVES, ASME B16.34
 FACE TO FACE, ASME B16.10
 END FLANGES, ASME B16.5
 BUTTWELDING ENDS, ASME B16.25
 INSPECTION AND TEST, API 598/API 6D

Design description:

BB, BOLTED BONNET CAP
 SWING TYPE, ANTI-ROTATION DISC
 RENEWABLE SEAT RINGS
 NON-PENETRATE DISC SHAFT
 HORIZONTAL OR VERTICAL SERVICE
 FLANGED OR BUTTWELDING ENDS



Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A105-CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾	Carbon Steel		

Note: 1), NPS 6" & larger.

2), Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	mm

ANSI Class 600Lb

L/L1 (RF/BW)	11.50 292	13.00 330	14.00 356	17.00 432	22.00 559	26.00 660	31.00 787	33.00 838	35.00 889	39.00 991	43.00 1092	47.00 1194	55.00 1397	57.00 1448	62.99 1600	65.00 1651	in mm
L2 (RTJ)	11.62 295	13.12 333	14.12 359	17.12 435	22.12 562	26.12 664	31.12 791	33.12 841	35.12 892	39.12 994	43.12 1095	47.25 1200	55.38 1407	57.51 1461	63.50 1613	65.51 1664	in mm
H	7.50 190	8.00 205	8.75 222	10.00 255	14.50 368	17.50 445	19.25 490	21.38 540	23.38 595	25.75 655	28.75 730	31.00 785	43.50 1105	40.00 1016	40.00 1066	45.98 1168	in mm
(d)	50	63	76	100	150	199	247	298	326	374	419	463	558	603	648	695	mm
WT (kg)	24 16	35 19	44 26	70 44	125 87	207 147	310 220	460 350	615 452	945 720	1105 845	1495 1160	1695 1280	3800 3010	4600 3724	5500 4528	RF BW

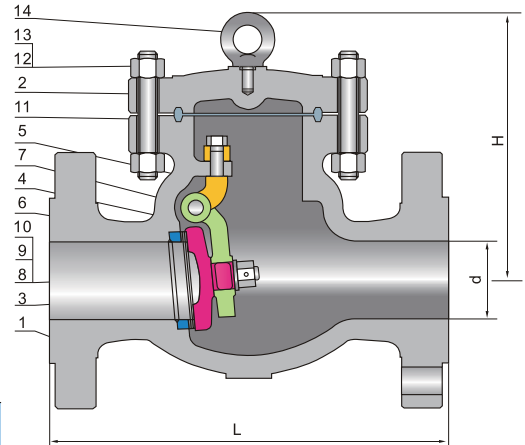
SWING CAST STEEL CHECK VALVE 900Lb

Applicable standards:

STEEL CHECK VALVES, API6D/BS1868
 STEEL CHECK VALVES, ISO 14313
 STEEL VALVES, ASME B16.34
 FACE TO FACE, ASME B16.10
 END FLANGES, ASME B16.5
 BUTTWELDING ENDS, ASME B16.25
 INSPECTION AND TEST, API 598/API 6D

Design description:

BB, BOLTED BONNET CAP
 SWING TYPE, ANTI-ROTATION DISC
 RENEWABLE SEAT RINGS
 NON-PENETRATE DISC SHAFT
 HORIZONTAL OR VERTICAL SERVICE
 FLANGED OR BUTTWELDING ENDS



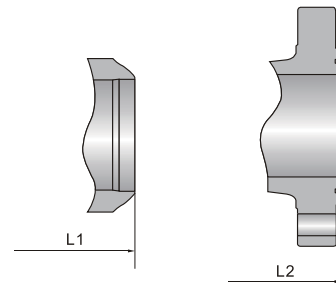
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A216-WCB+Cr13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾		Carbon Steel	

Note: 1). Cast steel disc for NPS 4" and above.

2). NPS 6" & larger.

3). Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	in mm
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ANSI Class 900Lb

L/L1 (RF/BW)	14.50 368	16.50 419	15.50 381	18.00 457	24.00 610	29.00 737	33.00 838	38.00 965	40.50 1029	44.50 1130	48.00 1219	52.00 1321	in mm
L2 (RTJ)	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	48.50 1232	52.50 1334	in mm
H	9.50 240	10.00 256	11.00 278	12.50 320	18.12 460	22.00 560	24.00 610	26.50 675	29.38 745	32.00 815	33.50 850	38.75 985	in mm
(d)	47	57	72	98	146	190	238	282	311	355	400	444	mm
WT (kg)	37 21	54 25	68 34	109 58	195 115	321 194	481 290	711 461	956 597	1468 950	1870 1210	2316 1533	RF BW

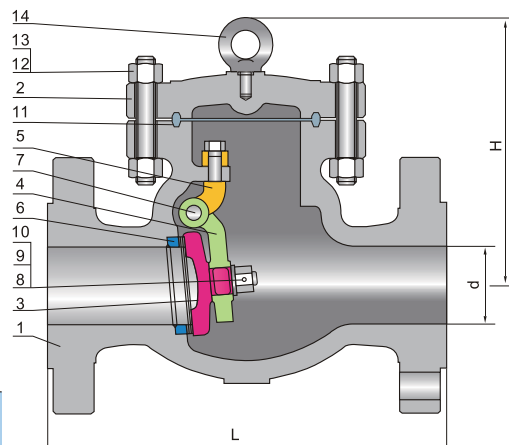
SWING CAST STEEL CHECK VALVE 1500Lb/2500Lb

Applicable standards:

STEEL CHECK VALVES,API6D/BS1868
STEEL CHECK VALVES,ISO 14313
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598/API 6D

Design description:

BB,BOLTED BONNET CAP
SWING TYPE,ANTI-ROTATION DISC
RENEWABLE SEAT RINGS
NON-PENETRATE DISC SHAFT
HORIZONTAL OR VERTICAL SERVICE
FLANGED OR BUTTWELDING ENDS



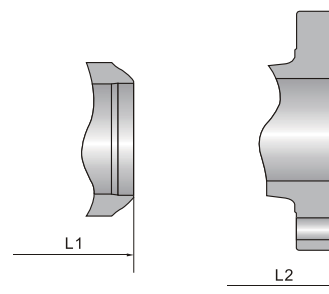
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{4}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A216-WCB+Cr13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾		Carbon Steel	

Note:1).Cast steel disc for NPS 4 " and above.

2).NPS 6 " & larger.

3).Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 $\frac{1}{2}$ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	2 50	2 $\frac{1}{2}$ 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
	ANSI Class 1500Lb										ANSI Class 2500Lb								
L/L1 (RF/BW)	14.50 368	16.50 419	18.50 470	21.50 546	27.75 705	32.75 832	39.00 991	44.50 1130	49.50 1257	54.50 1384	17.75 451	20.00 508	22.75 578	26.50 673	36.00 914	40.25 1022	50.00 1270	56.00 1422	in mm
L2 (RTJ)	14.62 371	16.62 422	18.62 473	21.62 549	28.00 711	33.12 841	39.38 1000	45.12 1146	50.25 1276	55.38 1407	17.88 454	20.25 514	23.00 584	26.88 683	36.50 927	40.88 1038	50.88 1292	56.88 1445	in mm
H	9.50 240	10.00 256	13.00 330	14.75 375	18.88 480	23.50 595	26.00 660	29.12 740	30.88 785	32.88 835	10.75 275	13.25 335	13.75 350	15.12 385	19.50 495	24.62 625	28.00 712	35.62 905	in mm
(d)	47	57	69	92	136	177	222	263	288	330	38	47	57	72	111	146	184	218	mm
WT (kg)	40 29	63 47	70 49	115 84	250 152	470 310	740 470	1100 710	1410 910	1600 1100	50 35	76 55	85 68	165 115	460 225	900 580	1300 860	1800 1150	RF BW

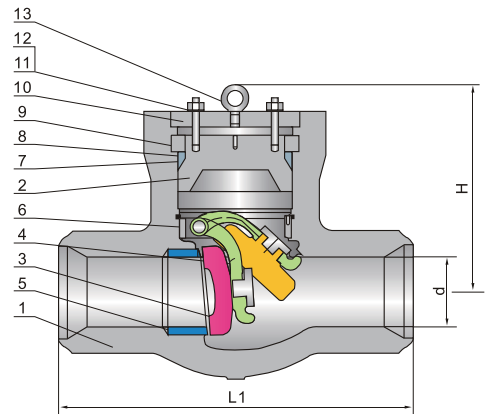
PRESSURE SEAL CAST STEEL SWING CHECK VALVE 900lb

Applicable standards:

STEEL CHECK VALVES, API6D/BS1868
 STEEL CHECK VALVES, ISO 14313
 STEEL VALVES, ASME B16.34
 FACE TO FACE, ASME B16.10
 END FLANGES, ASME B16.5
 BUTTWELDING ENDS, ASME B16.25
 INSPECTION AND TEST, API 598/API 6D

Design description:

PRESSURE SEAL BONNET CAP
 SWING TYPE, ANTI-ROTATION DISC
 RENEWABLE SEAT RINGS
 NON-PENETRATE DISC SHAFT
 HORIZONTAL OR VERTICAL SERVICE
 FLANGED OR BUTTWELDING ENDS

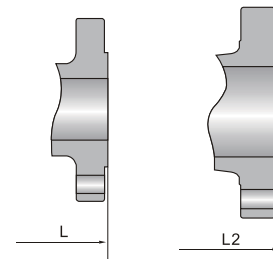


Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1¼Cr-½Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105+HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket ¹⁾	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Bonnet Clamp	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B7	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-2H	A194-8M
13	Eyebolt		Carbon Steel	

Note: 1) Graphite optional

2) Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	mm

ANSI Class 900Lb

L1 (BW)	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00	47.99	52.00	60.98	66.96	71.96	80.00	in
	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1701	1828	2032	mm
L (RF)	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.5	44.5	47.99	52.00	60.98	66.96	71.96	80.00	in
	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1701	1828	2032	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	39.12	33.12	38.12	40.88	44.88	48.50	52.51	61.73	67.83	72.83	80.86	in
	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	1723	1850	2054	mm
H	9.50	9.50	10.00	13.38	15.75	18.12	21.62	24.00	27.00	29.50	33.97	36.96	41.96	45.00	46.96	50.00	in
	240	240	255	340	400	460	550	610	685	750	863	939	1066	1143	1193	1270	mm
(d)	47	57	72	98	146	190	238	282	311	355	400	444	533	-	-	-	mm
WT (kg)	22	34	38	71	176	485	761	1125	1345	1490	2840	3756	6000	6375	7229	8232	RF
	44	55	61	116	255	630	940	1433	1710	1820	2000	2700	4100	5100	5750	6510	BW

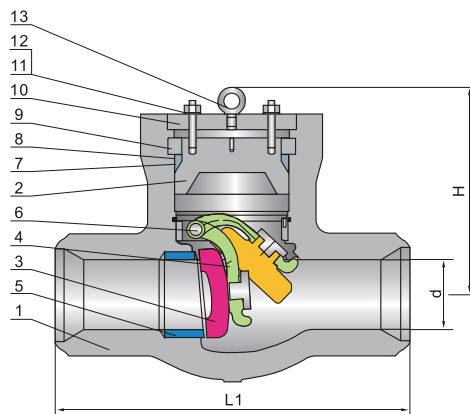
PRESSURE SEAL CAST STEEL SWING CHECK VALVE 1500lb

Applicable standards:

STEEL CHECK VALVES,API6D/BS1868
STEEL CHECK VALVES,ISO 14313
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598/API 6D

Design description:

PRESSURE SEAL BONNET CAP
SWING TYPE,ANTI-ROTATION DISC
RENEWABLE SEAT RINGS
NON-PENETRATE DISC SHAFT
HORIZONTAL OR VERTICAL SERVICE
FLANGED OR BUTTWELDING ENDS

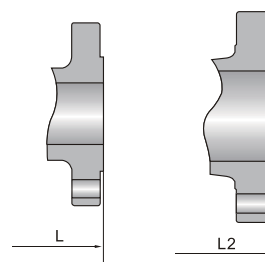


Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{4}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105+HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket ¹⁾	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Bonnet Clamp	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B7	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-2H	A194-8M
13	Eyebolt		Carbon Steel	

Note:1).Graphite optional

2).Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 $\frac{1}{2}$ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	in mm
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ANSI Class 1500lb

L1 (BW)	8.50 216	10.00 254	12.00 305	16.00 406	22.00 559	28.00 711	34.00 864	39.00 991	42.00 1067	42.99 1092	47.99 1219	52.00 1321	60.98 1549	in mm
L (RF)	14.50 368	16.50 419	18.50 470	21.50 546	27.75 705	32.75 832	39 991	44.5 1130	49.5 1257	44.48 1130	47.99 1219	52.00 1321	60.98 1549	in mm
L2 (RTJ)	14.62 371	16.62 422	18.62 473	21.62 549	28.00 711	33.12 842	39.38 1000	45.12 1146	50.25 1276	44.88 1140	48.50 1232	52.51 1334	61.73 1568	in mm
H	9.50 240	9.50 240	11.88 300	15.38 390	18.00 455	20.62 525	24.00 610	27.00 685	30.00 760	30.00 762	33.97 863	36.96 939	41.96 1066	in mm
(d)	47	57	69	92	136	177	222	263	288	330	371	415	498	mm
WT (kg)	22 44	37 61	45 110	78 155	245 378	530 675	815 1160	1213 1710	1555 2315	3250 2200	3960 2600	4400 2700	6800 4100	RF BW

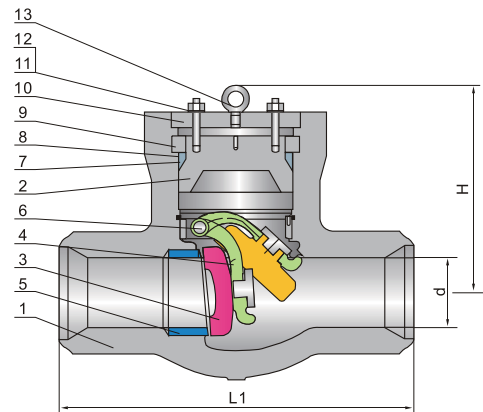
PRESSURE SEAL CAST STEEL SWING CHECK VALVE 2500lb

Applicable standards:

STEEL CHECK VALVES,API6D/BS1868
STEEL CHECK VALVES,ISO 14313
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598/API 6D

Design description:

PRESSURE SEAL BONNET CAP
SWING TYPE,ANTI-ROTATION DISC
RENEWABLE SEAT RINGS
NON-PENETRATE DISC SHAFT
HORIZONTAL OR VERTICAL SERVICE
FLANGED OR BUTTWELDING ENDS

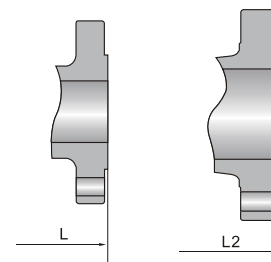


Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{4}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105+HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket ¹⁾	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Bonnet Clamp	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B7	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-2H	A194-8M
13	Eyebolt		Carbon Steel	

Note:1).Graphite optional

2).Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 $\frac{1}{2}$ 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 2500Lb									
L1 (BW)	11.0 279	13.00 330	14.50 368	18.00 457	24.00 610	30.00 762	36.00 914	41.00 1041	in mm
L (RF)	17.75 451	20.00 508	22.75 578	26.50 673	36.00 914	40.25 1022	50 1270	56 1422	in mm
L2 (RTJ)	17.88 454	20.50 514	23.00 584	26.88 683	36.50 927	40.88 1038	50.88 1292	56.88 1445	in mm
H	10.25 260	10.25 260	13.75 350	16.12 410	18.88 480	22.38 570	25.25 640	32.00 815	in mm
WT (kg)	55 93	78 130	95 170	182 315	300 618	630 1125	825 1760	1580 2910	RF BW