

SSH type/ Cast Swing Check Valve



Swing check valve /Single disc non return valve: Simple, Stable, Easy to repair.

Standard and Scope:

Size: NPS 2"~36" DN50~DN900

Pressure Rating: Class 150~2500 PN2.5~PN100

Connection: Double flange, Weld, Wafer/Lug

Connection: RF, BW, RTJ, SW and so on

Material: Carbon steel, Stainless steel, Alloy and so on

Design and Manufacture: ASME B16.34, API 6D, BS EN 1868-1873, DIN 3840

Test and Inspection: API598, API6D, BS EN12569

End flange dimension: ASME B16.5 (for NPS≤24) ; ASME B 16.47 series B(our normal standard)、API 605 or ASME B16.47 series A、MSS SP-44 (for NPS>24; BS EN 1092-1, DIN 243, DIN2544, DIN2545, DIN 2546, DIN 2548

BW End connection: ASME B16.25

Pressure-temperature ratings: ASME B16.34.

Face-to-Face: ASME B16.10, BS EN 558-1, DIN 3202, ISO 5752

Wall thickness dimension: API 600 and BS 1868, API603

Design feature

- **Seat**
- For carbon steel swing check valve, the seat is usually forged steel. The sealing surface of the seat is spray welded with hard alloy required by the client. Renewable threaded seat is used for NPS≤8 check valves, and welded on seat can be also optional if being requested by the customer. Welded on seat is used for NPS ≥10 carbon steel gate valves.
- For stainless steel check Valve, integral seat is usually adopted, or to weld hard alloy directly integrally. Threaded or welded on seat is also optional for stainless steel check valve if required.
- **Body-To-Bonnet Joint: Gasket**
Stainless steel + flexible graphite wounded gasket is used for Class150 and Class300 check valve; Stainless steel + flexible graphite wounded gasket is used for Class600 check valve, and joint gasket is also optional for Class600 check valve; Ring joint gasket

is used for Class900 check valve; Pressure seal design is used for Class1500~ Class2500 check valves.

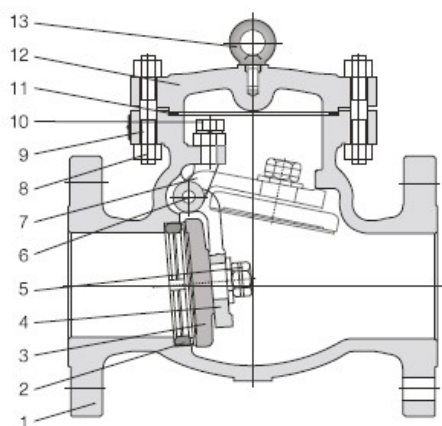
- **Body and Bonnet Connection**

The body and bonnet of Class150~Class900 check valves are usually connected with studs and nuts. And the body and bonnet of Class1500~Class2500 check valves are usually of pressure Seal design.

- **Other Swing Check Valve(Optional)**

Swing check valve with Counter weight, Hydraulic Slow Shut Swing check valve

API Swing Check Valve

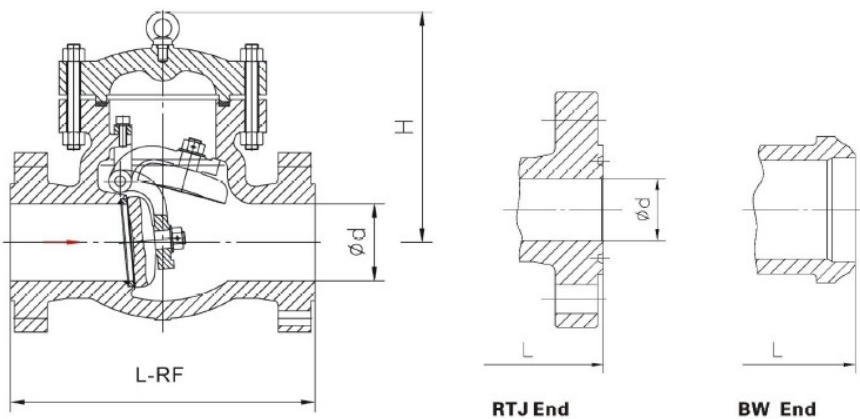


Major Parts Chart – API Standard

Parts No.	Part Name	Materials				
		WCB/Trim1	WCB/Trim5	WCB/Trim8	CF8/304	CF8M/316
1	Body	ASTM A126 WCB	ASTM A126 WCB	ASTM A126 WCB	ASTM A351 CF8	ASTM A351 CF8M
2	Seat Ring	A105+13Cr	A105+STL	A105+STL	ASTM A351 CF8	ASTM A351 CF8M
3	Disc	A126 WCB+13Cr	A126 WCB+STL	A126 WCB+13Cr	ASTM A351 CF8	ASTM A351 CF8M
4	Arm	A126 WCB	A126 WCB	A126 WCB	A351 CF8	A351 CF8M
5	Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
6	Arm pin	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
7	Yoke	A126 WCB	A126 WCB	A126 WCB	A351 CF8	A351 CF8M
8	Bonnet Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
9	Bonnet Bolt	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
10	Bolt	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
11	Gasket	SS+graphite				
12	Bonnet	ASTM A126 WCB	ASTM A126 WCB	ASTM A126 WCB	ASTM A351 CF8	ASTM A351 CF8M
13	Eye bolt	ASTM A181				

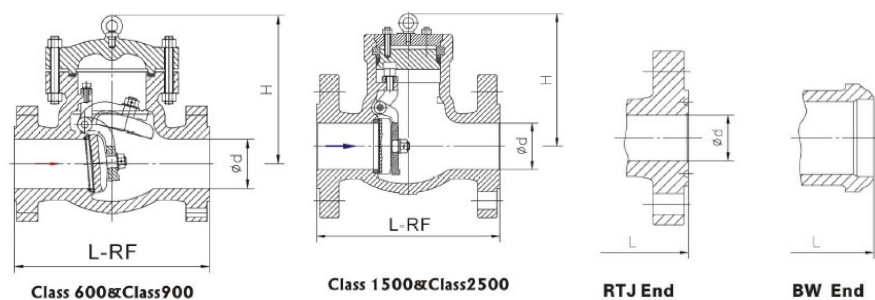
Note: The charts above just only list common combination of swing check valve. SGV able to offer other material if required.

Class 150 Class 300 API Swing Check Valve



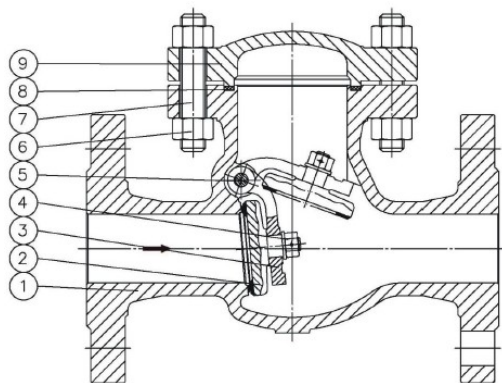
Nominal Size		Class150						Class300					
		F-t-F Dimension(mm)			Dimension(mm)		Weight	F-t-F Dimension(mm)			Dimension(mm)		Weight
NPS	DN	RF	RTJ	BW	d	H	Kg	RF	RTJ	BW	d	H	Kg
2	50	203	216	203	51	138	14	267	283	267	51	150	22
2 1/2	65	216	229	216	64	160	19	292	308	292	64	178	35
3	80	241	254	241	76	172	24	318	333	318	76	223	44
4	100	292	305	292	102	245	43	356	371	356	102	255	57
5	125	330	343	330	127	260	59	400	416	400	127	280	80
6	150	356	368	356	152	280	72	445	460	445	152	310	120
8	200	495	506	495	203	347	124	533	549	533	203	355	194
10	250	622	635	622	254	390	196	622	638	622	254	430	290
12	300	699	711	699	305	435	330	711	727	711	305	500	450
14	350	787	800	787	337	465	417	838	854	838	337	515	587
16	400	864	876	864	387	525	503	864	879	864	387	560	761
18	450	978	991	978	438	580	630	978	994	978	438	620	1030
20	500	978	991	978	489	615	791	1016	1035	1016	489	685	1191
24	600	1295	1308	1295	591	710	960	1346	1368	1346	591	760	1892
26	650	1295		1295	633	840	1250	1346	1372	1346	633	850	2300
28	700	1448		1448	684	920	1580	1499	1524	1499	684	920	2600
30	750	1524		1524	735	980	1950	1594	1619	1594	735	1150	3200
32	800	1727		1727	779	1016	2800	1727		1727	779	1260	3700
36	900	1956		1956	874	1092	3200	2083		2083	874	1390	4300

Class 150 Class 300 API Swing Check Valve



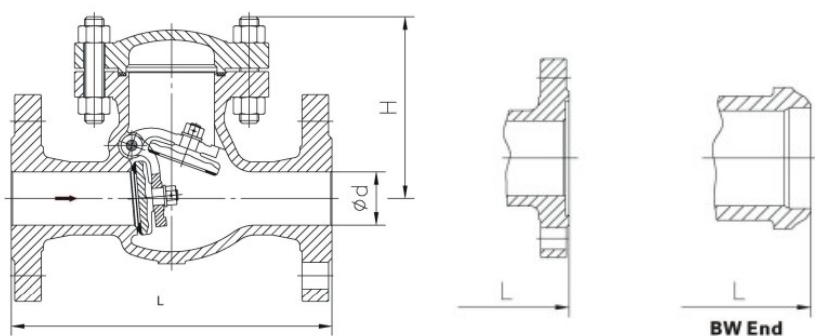
Nominal Size		Class600						Class900					
		F-t-F Dimension(mm)			Dimension(mm)		Weight	F-t-F Dimension(mm)			Dimension(mm)		Weight
NPS	DN	RF	RTJ	BW	d	H	Kg	RF	RTJ	BW	d	H	Kg
2	50	292	295	292	51	170	26	368	371	368	51	183	72
2 1/2	65	330	333	330	64	178	35	419	422	419	64	220	75
3	80	356	359	356	76	225	59	381	384	381	73	280	102
4	100	432	435	432	102	275	99	457	460	457	98	315	134
5	125	508	511	508	127	320	155	559	562	559	127	360	200
6	150	559	562	559	152	385	208	610	613	610	146	390	354
8	200	660	664	660	200	445	357	737	740	737	190	460	514
10	250	787	791	787	248	500	561	838	841	838	238	540	754
12	300	838	841	838	298	570	752	965	968	965	283	640	818
14	350	889	892	889	327	590	889	1029	1038	1029	311	680	1180
16	400	991	994	991	375	650	1285	1130	1140	1130	356	780	1909
18	450	1092	1095	1092	419	778	1800	1219	1232	1219	400	845	2500
20	500	1194	1200	1194	464	970	2150	1321	1334	1321	444	1050	2960
24	600	1397	1407	1397	559	1100	3200	1549	1568	1549	533	1200	4600
Nominal Size		Class1500						Class2500					
		F-t-F Dimension(mm)			Dimension(mm)		Weight	F-t-F Dimension(mm)			Dimension(mm)		Weight
NPS	DN	RF	RTJ	BW	d	H	Kg	RF	RTJ	BW	d	H	Kg
2	50	368	371	368	48	265	67	451	454	451	38	285	93
2 1/2	65	419	422	419	57	240	75	508	514	508	48	305	100
3	80	470	473	470	70	303	188	578	584	578	57	350	196
4	100	546	549	546	92	340	210	673	683	673	73	410	410
5	125	673	676	673	127	380	294	794	807	794	96	490	440
6	150	705	711	705	137	430	473	914	927	914	111	540	868
8	200	832	841	832	178	500	634	1022	1038	1022	146	620	970
10	250	991	1000	991	222	605	1140	1270	1292	1270	184	705	1700
12	300	1130	1146	1130	264	785	1939	1422	1445	1422	219	855	2080
14	350	1257	1276	1257	289	830	2000						
16	400	1384	1407	1384	330	950	2700						
18	450	1537	1559	1537	371	1080	3960						
20	500	1664	1686	1664	416	1145	4400						

DIN Swing Check Valve



Major Parts List– DIN Standard

Parts Name	Materials				
	GS-C25 CR13/CR13	GS-C25 STL/CR13	GS-C25 STL/STL	1.4308 304/304	1.4408 316/316
1 Body	GS-C25+CR13	GS-C25+STL	GS-C25+STL	1.4308	1.4408
2 Disc	GS-C25+CR13	GS-C25+CR13	GS-C25+STL	1.4308	1.4408
3 Arm	GS-C25	GS-C25	GS-C25	1.4308	1.4408
4 Pin	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
5 Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
6 Bolt	ASTM A194 B7	ASTM A194 B7	ASTM A194 B7	ASTM A194 B8	ASTM A194 B8M
7 Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A182 F304	ASTM A182 F316
8 Gasket	SS+graphite				
9 Cover	GS-C25	GS-C25	GS-C25	1.4308	1.4408
Note:	DIN17245:GS-C25;DIN17445:1.4308;DIN17445:1.4408				



PN16 DIN3202-F6									
DN	40	50	65	80	100	125	150	200	250
L	180	200	240	260	300	350	400	500	600
H	129	147	161	178	190	265	285	345	394
w(kg)	13	16	23	31	40	53	80	116	216

DN	300	350	400	450	500	600	700	800	900
L	700	800	900	1000	1100	1300	1500	1700	1900
H	420	455	520	565	610	740	895	1240	1450
w(kg)	316	440	513	582	800	1158	1380	1540	1700
PN25 DIN3202-F6									
DN	40	50	65	80	100	125	150	200	250
L	180	200	240	260	300	350	400	500	600
H	129	147	161	178	190	265	285	345	394
w(kg)	14	20	27	44	55	88	145	213	297
DN	300	350	400	450	500	600	700	800	900
L	700	800	900	1000	1100	1300	1500	1700	1900
H	420	455	520	565	610	740	895	1240	1450
w(kg)	375	495	545	600	815	1200	1400	1620	1830
PN40 DIN3202-F1									
DN	40	50	65	80	100	125	150	200	250
L	200	230	290	310	350	400	490	600	730
H	135	152	178	185	215	290	310	365	445
w(kg)	15	22	29	40	46	58	92	168	310
DN	300	350	400	450	500	600	700	800	900
L	850	980	1100	1200	1250	1450	1650	1850	2050
H	480	510	545	595	6555	860			
w(kg)	430	558	780	915	1170	1350			
PN63 DIN3202-F2									
DN	40	50	65	80	100	125	150	200	250
L	260	300	340	380	430	500	550	650	775
H	168	175	192	225	280	310	335	390	452
w(kg)	40	48	62	80	114	187	214	329	418
DN	300	350	400	450	500	600			
L	900	1025	1150	1275	1400	1600			
H	520	570	626	695	770	905			
w(kg)	640	911	1130	1320	1693	2015			
PN100 DIN3202-F2									
DN	40	50	65	80	100	125	150	200	250
L	260	300	340	380	430	500	550	650	775
H	165	183	205	236	272	305	345	398	456
w(kg)	48	65	73	87	105	192	208	370	668
DN	300	350	400	450	500	600			
L	900	1025	1150	1275	1400	1600			
H	528	600	685						
w(kg)	963	1100	1358						

NOTE: The material in this catalog is for general information. For specific performance data, proper material selection and special design, consult us freely. Although every attempt has been made to ensure correct information, Sangong reserves the right to change designs, materials or specifications without notice.