

# SWING CHECK VALVES

PRESSURE SEAL COVER

# CAST STEEL SWING CHECK VALVES PRESSURE SEAL COVER

## HINGE PIN

The hinge pin is inserted into the valve body to achieve pressure seal construction.

## COVER

The cover material is a steel forging identical to the body to insure high dependability.

## ARM

The arm is of a steel material identical to the body. Larger sizes valves are provided with a hinge bushing to reduce friction and to prevent galling.

## DISC

The disc has a sufficient seating surface area, which is ground and lapped to a mirror finish. It is of one-piece construction and is heat-treated to deliver the required mechanical properties and hardness.

## SEAT RING

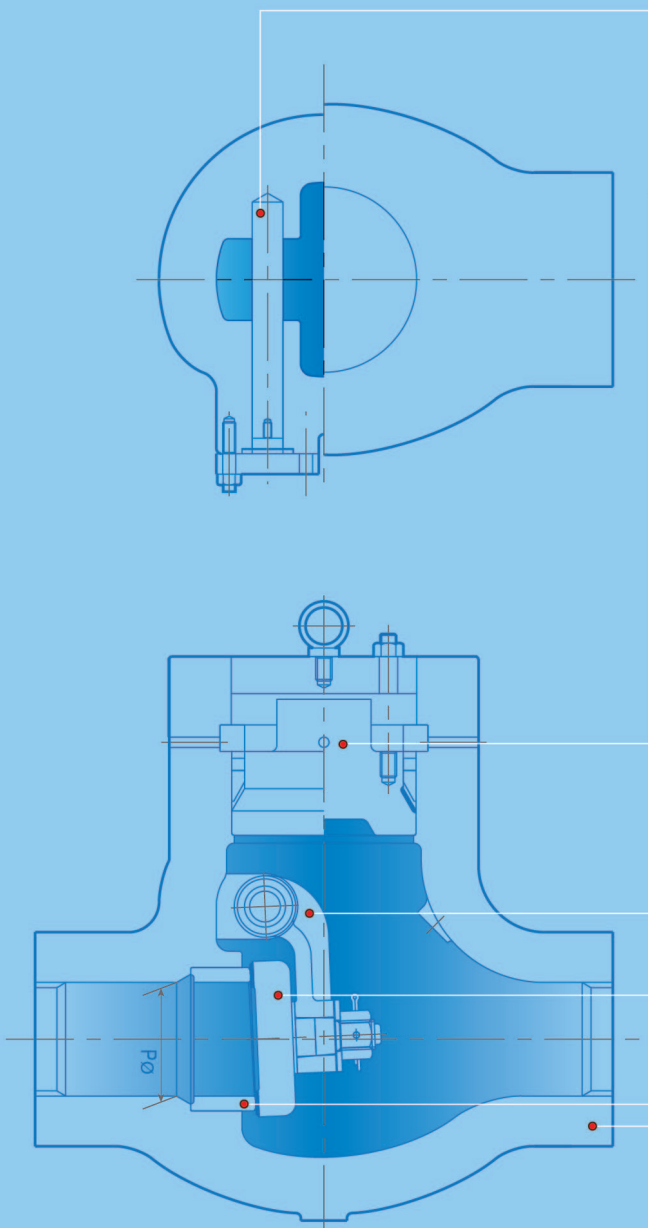
The stellite 6 surface of the seat ring is integrally applied to the body by means of welding in all valve sizes. Perfect mating with the DISC surfaces attained by a lapping finish applied to the seating.

## BODY

The cylindrically shaped valve body prevents distortion or undue stress under extreme working conditions. Padding is also provided to achieve a sound cast structure in the critical areas.

The wall thickness is greater than, or in accordance with, API, ANSI and ASME requirements. The area contacting the pressure seal gasket has a stainless steel 18/8 inlay to eliminate corrosion or wire drawing.

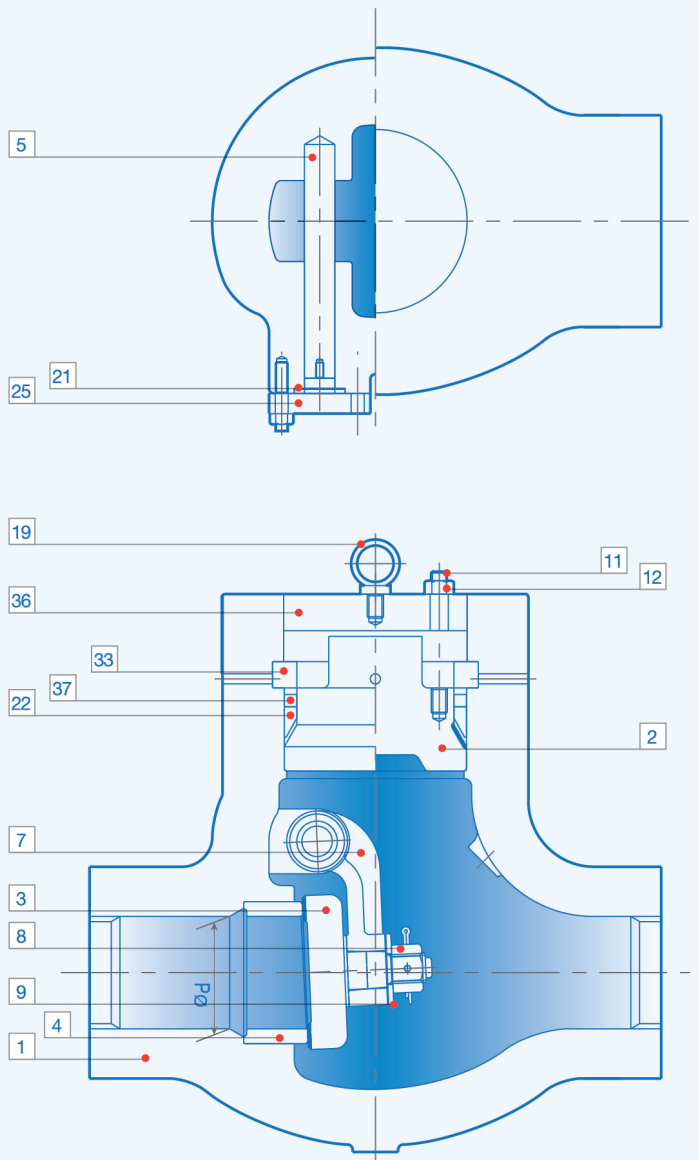
The close tolerances of the inside diameter of this area attained by accurate machining and honing finish.



# CAST STEEL

NO	NAME OF PART	ASTM SPECIFICATION						
		STANDARD	HIGH TEMPERATURE SERVICE				LOW TEMP. SERVICE	
1	BODY	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	A352-LC1/LC2/LC3
2	COVER	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	A352-LC1/LC2/LC3
3	DISC	A216-WCB+HF	A217-WC1+HF	A217-WC6+HF	A217-WC9+HF	A217-C5	A352-LCB	A352-LC1/LC2/LC3
4	BODY SEAT RING	C/S1020+HF	A182-F1	A182-F11	A182-F22	A182-F5a	A182-F304	A182-F304
5	HINGE PIN	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
7	ARM	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	A352-LC1/LC2/LC3
11	BONNET BOLT	A193-B7	A193-B7	A193-B16	A193-B16	A193-B16	A320-L7	A320-L7
12	BONNET NUT	A194-2H	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4
25	PLUG	A276-410	A276-410	A276-410	A276-410	A276-410	A276-410	A276-410
33	RETAINER	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
36	BONNER CLAMP	C/S1045	C/S1045	C/S1045	C/S1045	C/S1045	C/S1045	C/S1045
37	GASKET SPACER	A240-304	A240-304	A240-304	A240-304	A240-304	A240-304	A240-304

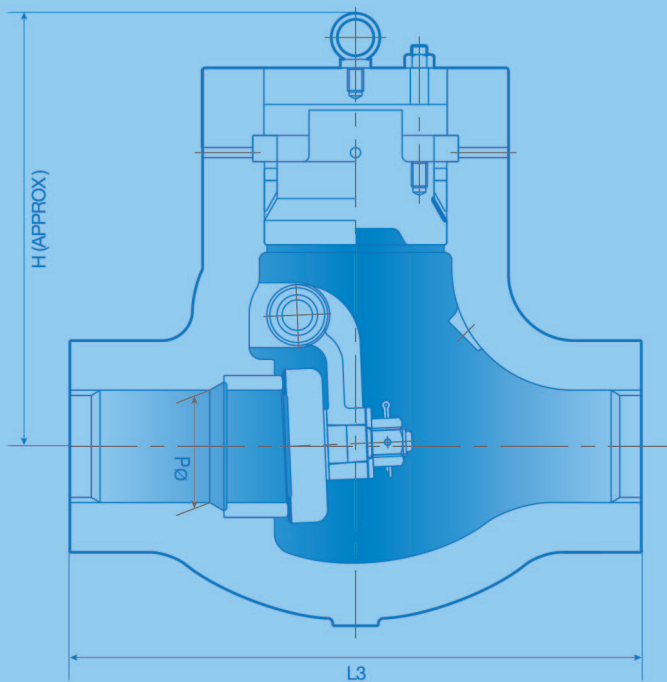
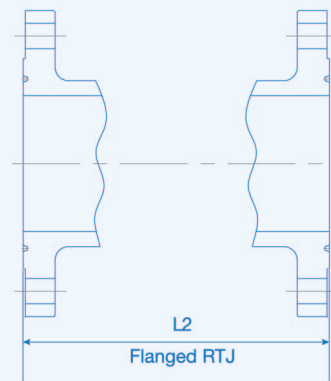
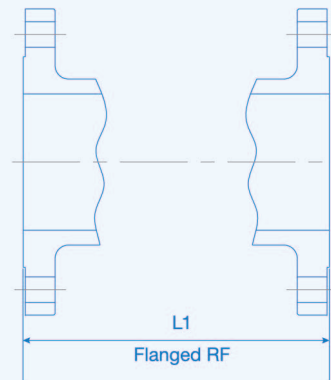
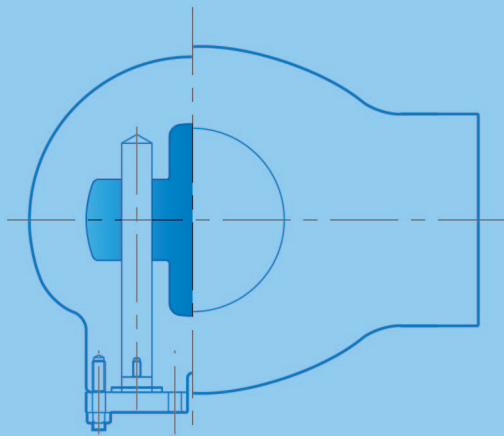
NO	NAME OF PART	ASTM SPECIFICATION
8	DISC NUT	A194-8
9	WASHER	A240-304
19	EYE BOLT	A307-B
21	PLUG GASKET	SEE PAGE 63
22	GASKET	SEE PAGE 63



# ASME CLASS 600LB

**CAST STEEL**  
 PRESSURE SEAL COVER  
 SWING CHECK VALVES

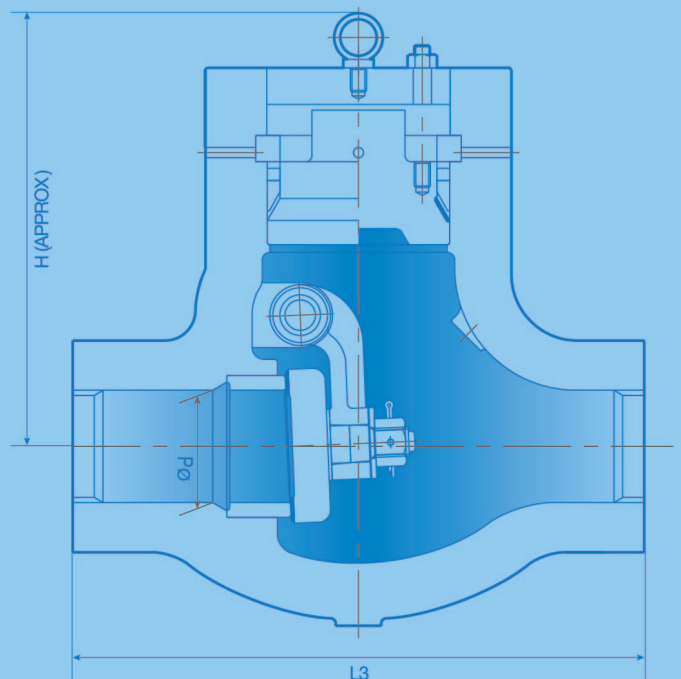
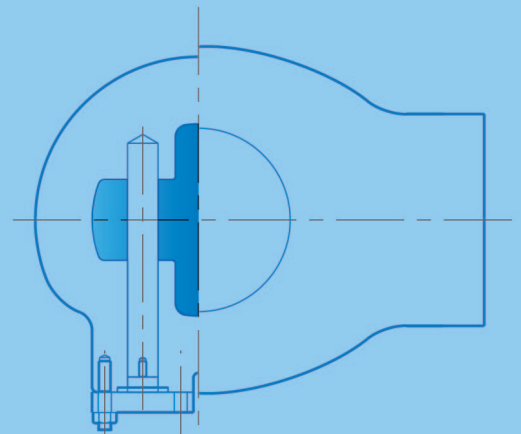
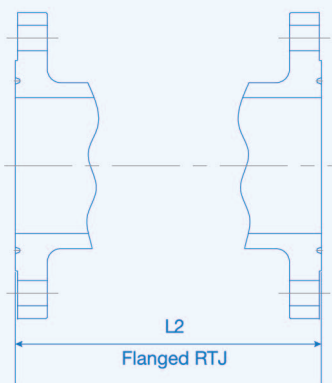
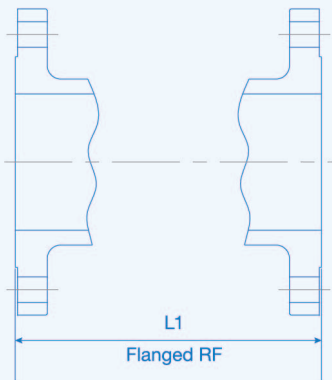
VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L3	inch	7.0	8.5	10.0	12.0	18.0	23.0	28.0	32.0	35.0	39.0	43.0	47.0	55.0
	mm	178	216	254	305	457	584	711	813	889	991	1092	1194	1397
L2	inch	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38
	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407
L1	inch	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
H	inch	9.5	10.4	10.6	12.5	15.7	23.1	23.9	27.4	29.5	28.7	28.7	32.2	37.4
	mm	241	264	270	318	400	587	606	695	749	730	730	819	949
WEIGHT	LB	59.5	77.2	99.2	187.4	419.0	771.8	1102.5	1477.4	1940.4	2535.8	3263.4	4145.4	5733
	Kg	27	35	45	85	190	350	500	670	880	1150	1480	1880	2600



# ASME CLASS 900LB

**SWING CHECK VALVES**  
PRESSURE SEAL COVER  
**CAST STEEL**

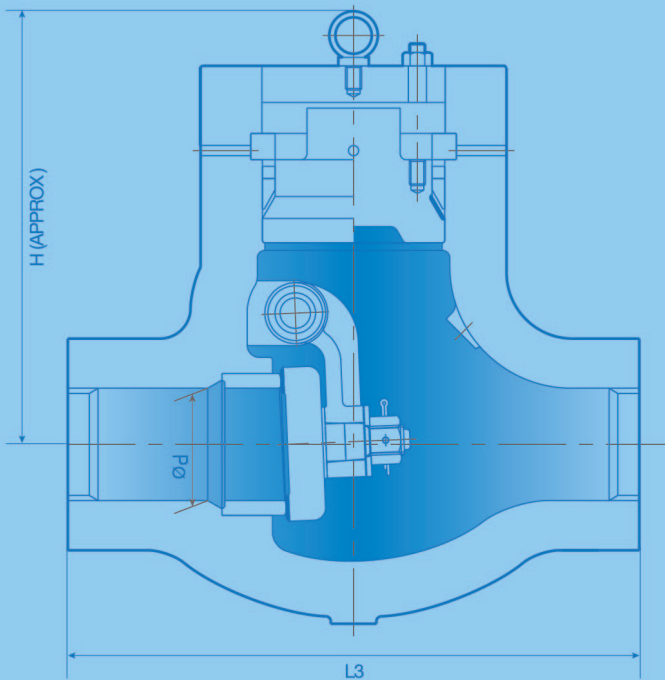
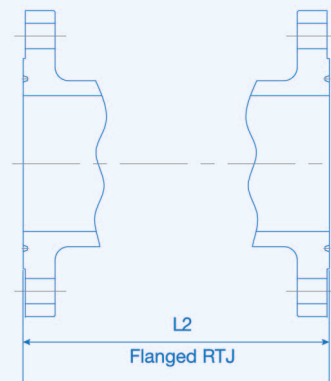
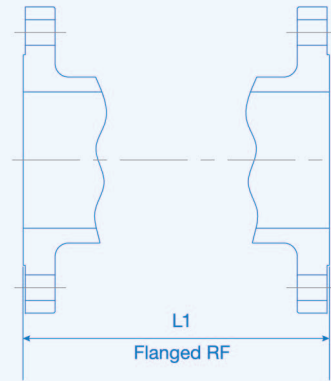
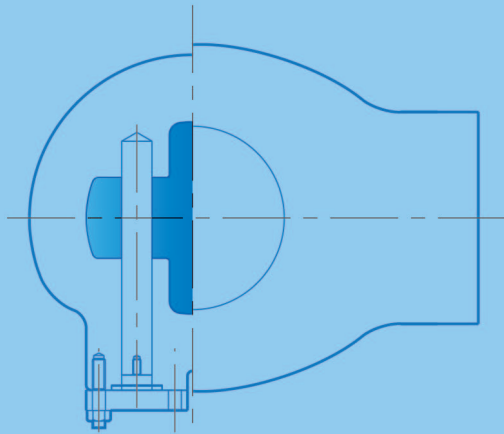
VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
L3	inch	8.5	10.0	12.0	14.0	20.0	26.0	31.0	36.0	39.0	43.0
	mm	216	254	305	356	508	660	787	914	991	1092
L2	inch	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	mm	371	422	384	460	613	740	841	968	1038	1140
L1	inch	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
H	inch	9.5	1.4	10.6	12.5	15.7	23.1	23.9	27.4	29.5	28.7
	mm	241	264	270	318	400	587	606	695	749	730
WEIGHT	LB	88.2	121.3	114.7	231.5	507.2	1256.9	1874.3	2866.5	3417.8	3638.3
	Kg	40	55	52	105	230	570	880	1300	1550	1650



# ASME CLASS 1500LB

SWING CHECK VALVES  
PRESSURE SEAL COVER  
CAST STEEL

VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14
	mm	50	65	80	100	150	200	250	300	350
L3	inch	8.5	10.0	12.0	16.0	22.0	28.0	34.0	39.0	42.0
	mm	216	254	305	406	559	711	864	991	1067
L2	inch	14.62	16.62	18.62	21.62	28.0	33.13	39.38	45.12	50.25
	mm	371	422	473	549	711	842	1000	1146	49.5
L1	inch	14.5	16.5	18.5	21.5	27.75	32.75	39.0	44.5	1257
	mm	368	419	470	546	705	832	991	1130	1276
H	inch	9.5	10.4	10.6	12.5	15.7	18.9	23.3	25.4	28.0
	mm	241	264	270	318	400	479	591	645	711
WEIGHT	LB	88.2	121.3	220.5	308.7	882.0	1345.1	2315.3	3417.8	4630.5
	Kg	40	55	100	140	400	610	1050	1550	2100



# ASME CLASS 2500LB

**SWING CHECK VALVES**  
PRESSURE SEAL COVER  
**CAST STEEL**

VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14	16	18
	mm	50	65	80	100	150	200	250	300	350	400	450
L3	inch	11.0	13.0	14.5	18.0	24.0	30.0	36.0	41.0	44.0	49.0	55.0
	mm	279	330	368	457	610	762	914	1041	1118	1245	1397
L2	inch	17.87	20.25	23.0	26.88	36.5	40.87	50.88	56.88	-	-	-
	mm	454	514	584	683	927	1038	1292	1445	-	-	-
L1	inch	17.75	20.0	22.75	26.5	36.0	40.25	50.0	56.0	62.0	68.0	-
	mm	451	508	578	673	914	1022	1270	1422	1575	1727	-
H	inch	9.6	10.4	10.6	12.5	15.7	22.0	24.8	27.5	33.9	35.4	39.4
	mm	245	264	270	318	400	559	629	699	860	899	1000
WEIGHT	LB	187.4	260.2	341.8	628.4	1653.8	2976.8	4740.8	6615.0	9216.9	11157.3	16493.4
	Kg	85	118	155	285	750	1350	2150	3000	4180	5060	7480

