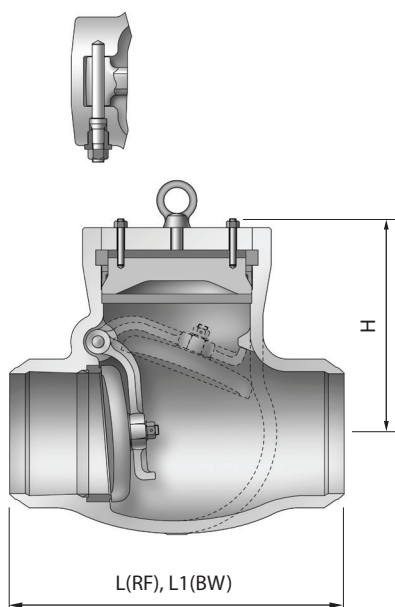


SWING CHECK VALVE



SERVICE RECOMMENDATION

1. The swing check valve shall be operated in a manner to avoid the following troubles;

1) Formation of excessive high surge pressure as a result of valve closing, and

2) Rapid fluctuating movement of valve closing member. The excessively high surge pressure by valve closing is prevented by closing the valve fast enough not to develop a significant reverse flow on a sudden shutoff which is a source of the surge pressure. Thus, the closing speed of valve should match closely with the speed of forward flow retard.

The rapid fluctuating movement of valve closing member must be avoided to prevent the moving valve parts from excessive wear which may result in early failure of valve.

Such movements can be precluded by sizing the valve to a flow rate which forces the closure member not to move.

2. The swing check valve can also be mounted to the vertical position, provided the disc should not reach the valve position. However, the closing moment of disc by weight is very low in fully-opened position, so the valve tends to close late.

In order to overcome such slow response to flow retardation, the disc may be supplied with a lever-mounted weight or with spring loaded.

STANDARD MATERIAL SPECIFICATIONS

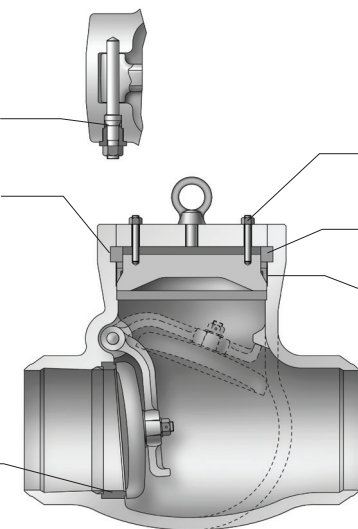
NO.	PART NAME	MATERIAL	
1	BODY	A216 - WCB	A217 - WC6
2	BONNET	A216 - WCB	A217 - WC6
3	DISC	A216 - WCB+STL	A217 - WC6+STL
4	ARM	A216 - WCB	A217 - WC6
5	ROD PIN	A479 - 410	A479 - 410
6	BODY SEAT RING	A576 - 1020+STL(S20C)	A182 - F11+STL
7	PLLG BOLT	A307 - B	A479 - 304
8	GASKET	SOFT STEEL	304 S.S
9	PLUG GASKET	GRAPHITE	304 S.S
10	BONNET BOLT	A193 - B7	A193 - B16
11	BONNET NUT	A194 - 2H	A194 - 4
12	DISC NUT	A194 - 8	A194 - 8
13	PIN	304 S.S	304 S.S
14	WASHER	A240 - 304	A240 - 304
15	BONNET CLAMP	A576 - 1045	A576 - 1045
16	RETAINER	A576 - 1045+Cr	A240 - 304
17	ADAPTER RING	A576 - 1045+Cr	A240 - 304
18	SEALING BOLT	A479 - 410	A479 - 410
19	SEALING NUT	A194 - 2H	A194 - 2H
20	EYE BOLT	A307 - B	A307 - B

The sealing mechanism through spindle is the same construction as the pressure seal bonnet.

By inserting knockout pin into a drilled hole, segmental thrust ring can be easily driven out of the retaining groove.

The gasket can be removed freely without any damage to the sealed area of the body. The bonnet joint shall remain tight under all operating conditions as the sealing pressure is always much greater than the fluid pressure in the line, thereby eliminating any leakage. The higher internal pressure, the greater sealing pressure.

Seat rings are stellite faced and securely welded in place.



Inner row of studs establish the initial seal of the pressure seal joint.

Segmental thrust ring absorbs all the thrusts applied by internal pressure.

A hardened stainless steel protective ring prevents deformation of the top portion of the soft metallic gasket.

To ensure a secure connection between the arm and the disc nut, split pin is used.

DESIGN DATA FEATURES

1. Comply with the following standards; ASME B16.25, B16.34, MSS-SP-25, API 600 Style A.
2. The butt-welded end details of PK standard product shall be prepared in accordance with ASME B16.25

DIMENSION AND WEIGHT

CLASS 600

UNIT : mm

SIZE	2	3	4	6	8	10	12	14	16	18
L	292.1	355.6	431.8	558.8	660.4	787.4	838.2	889.0	990.6	1092.2
L1	177.8	254.0	304.8	457.2	584.2	711.2	812.8	889.0	990.6	1092.2
H	214	248	287	350	410	465	510	535	574	722
WEIGHT(kg)	34	43	48	106	217	369	503	588	798	1277

CLASS 900

UNIT : mm

SIZE	2	3	4	6	8	10	12	18	20	24
L	368.3	381.0	457.2	609.6	736.6	838.2	965.2	1219.2	1320.8	-
L1	215.9	304.8	355.6	508.0	660.4	787.4	914.4	1219.2	1320.8	1549.4
H	243	242	300	362	420	480	628	746	888	1070
WEIGHT(kg)	31	46	72	232	318	660	606	2650	3060	4010

CLASS 1500

UNIT : mm

SIZE	2	3	4	6	8	10	12	14	16	20
L	368.3	469.9	546.1	704.9	831.9	990.6	1130.3	1257.3	1384.3	1663.7
L1	215.9	304.8	406.4	558.8	711.2	863.6	990.6	1066.8	1193.8	1473.2
H	243	300	340	378	435	505	605	656	668	808
WEIGHT(kg)	34	52	90	181	346	546	828	1200	1941	3228

CLASS 2500

UNIT : mm

SIZE	2	3	4	6	8	10	12	14	18
L	450.9	577.9	673.1	914.4	1022.4	1270.0	1422.4	-	-
L1	279.4	368.3	457.2	609.6	762.0	914.4	1041.4	1117.6	1397.0
H	246	310	345	400	451	542	718	679	827
WEIGHT(kg)	32	56	92	219	460	713	1446	1568	2500