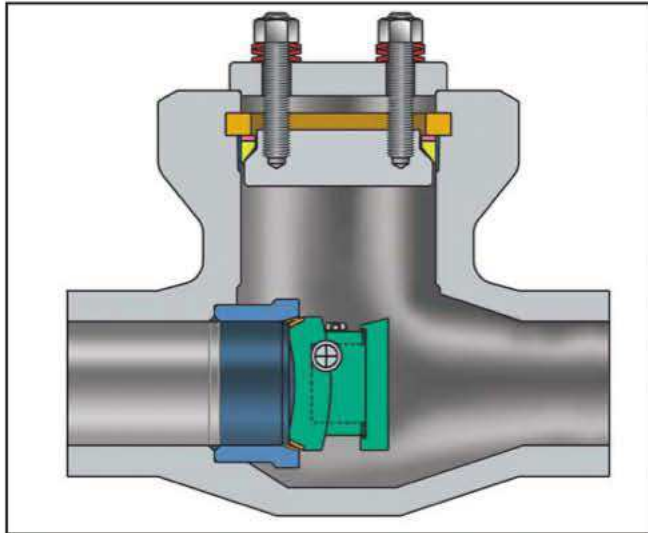


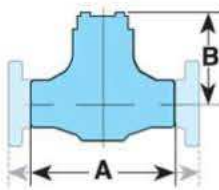


PRESSURE SEAL TILTING DISC CHECK VALVES CARBON, ALLOY OR STAINLESS STEEL ASME CLASSES 600–2500, 2–24" (50–600 mm)



CAUTION: Tilting disc check valves can be installed horizontally or vertically according to the design specifications. For other than horizontal line orientations see pgs. 50-51, or contact Velan Engineering.

CLASS	FIG. NO.
600	2344P/2344K
900	7344P/7344K
1500	3344P/3344K
2500	4344P/4344K



Flange dimensions are in accordance with ASME B16.5. Flanges are welded on.

STANDARD MATERIALS

PART	MATERIAL				
Body ⁽¹⁾	A 105 or A 216 Gr. WCB	A 182 Gr. F11 or A 217Gr. WC6	A 182 Gr. F22	A 182 Gr. F91	A 182 Gr. F316
Cover ⁽¹⁾	A 105 or A 216 Gr. WCB	A 182 Gr. F11 or A 217 Gr. WC6	A 182 Gr. F22 or A 217 Gr. WC9	A 182 Gr. F91	A 182 Gr. F316 or A 351 Gr. CF8M
Seat ⁽¹⁾⁽²⁾	A 105 or A 216 Gr. WCB	A 182 Gr. F11 or A 217 Gr. WC6	A 182 Gr. F22 or A 217 Gr. WC9	A 182 Gr. F91	A 182 Gr. F316 or A 351 Gr. CF8M
Disc ⁽¹⁾⁽²⁾	A 105 or A 216 Gr. WCB	A 182 Gr. F11 or A 217 Gr. WC6	A 182 Gr. F22 or A 217 Gr. WC9	A 182 Gr. F91	A 182 Gr. F316 or A 351 Gr. CF8M
Hanger	Stainless				
Hex head bolt	Alloy steel				Stainless
Lock washer	Stainless				
Hinge pin	Gr. 410				Gr. 630 or Gr. 660
Bushing	Stellite 6				
Gasket ⁽¹⁾	Soft carbon steel - silver plated or Graphite/SS 316				
Gasket retainer	A 182 Gr. F6a Cl.4				
Spacer ring	Gr. 4140 option Ni or Cad plated or SS				
Cover plate	Carbon steel				
Cover stud	Gr. B7				
Cover nut	Gr. 2H				

(1) Other materials available, including Graphite. (2) Stellite.

FLOW COEFFICIENT CV*

SIZE in (mm)	CLASS				SIZE in (mm)	CLASS			
	600	900	1500	2500		600	900	1500	2500
2 (50)	55	55	55	55	12 (300)	2650	2650	2650	1600
2½ (65)	130	130	130	55	14 (350)	2650	2650	2650	1600
3 (80)	200	200	200	200	16 (400)	4150	4150	4150	2650
4 (100)	235	235	235	200	18 (450)	5350	5350	5350	3600
6 (150)	700	700	700	430	20 (500)	6000	6000	6000	3600
8 (200)	1100	1100	1100	700	24 (600)	8750	8750	8750	5800
10 (250)	1600	1600	1600	1100					

* Kv = Cv x 0.85 Note: for cast valve Cv values, contact Velan.

DESIGN FEATURES:

- **Advanced pressure seal design.**
(See page 10 for details.)
- **Unique cage unit.**
Entire seat-hinge-pin-disc assembly can be tested outside the valve before seal welding into the body. Eliminates pin seal leakage.
- **Easy in-line service.**
- **Efficient operation.**
The hinge pin located near the center of gravity allows the conical seating face of the disc to move out and into the seat rapidly without sliding or wear. The disc pivots through a small arc preventing back flow and "water hammer".
- **Superior tightness**
Conical, lapped-in hardfaced seating is self-aligning. Valve can be used even in vertical piping with flow up.

DIMENSIONS – BUTT WELD END

SIZE in mm	ASME 600 (PN 100)			ASME 900 (PN 150)			ASME 1500 (PN 250)			ASME 2500 (PN 420)		
	A	B	lb ⁽⁴⁾ kg	A	B	lb ⁽⁴⁾ kg	A	B	lb ⁽⁴⁾ kg	A	B	lb ⁽⁴⁾ kg
2	8.50 ⁽³⁾	7.75	75	10.00 ⁽³⁾	7.75	75	8.50	5.75	75	11.00	5.63	100
50	216	197	34	254	197	34	216	146	34	279	143	45
2½	8.50	7.75	75	10.00	7.75	75	10.00	7.75	75	10.00 ⁽³⁾	5.75	100
65	216	197	34	254	197	34	254	197	34	254	146	45
3	10.00	7.75	100	12.00	7.75	100	12.00	7.75	100	14.50	7.81	125
80	254	197	45	305	197	45	305	197	45	368	198	57
4	12.00	9.50	150	14.00	9.50	150	16.00	9.50	150	18.00	9.38	175
100	305	241	68	356	241	68	406	241	68	457	238	79
6	18.00	14.75	500	20.00	14.75	500	22.00	14.75	500	24.00	15.50	575
150	457	375	227	508	375	227	559	375	227	610	394	261
8	23.00	17.50	800	26.00	17.50	800	28.00	17.50	800	30.00	18.00	1000
200	584	445	363	660	445	363	711	445	363	762	457	454
10	28.00	19.88	1300	31.00	19.88	1300	34.00	19.88	1350	36.00	19.25	1500
250	711	505	590	787	505	590	864	505	612	914	489	680
12	32.00	23.88	3000	36.00	23.88	3000	39.00	23.88	3000	41.00	23.75	3300
300	813	607	1361	914	607	1361	991	607	1361	1041	603	1497
14	35.00	23.88	3000	39.00	23.88	3000	42.00	23.88	3000	41.00	23.13	3300
350	889	607	1361	991	607	1361	1067	607	1361	1041	588	1497
16	39.00	23.50	3500	43.00	23.50	3500	47.00	23.50	4000	49.00	30.00	4500
400	991	597	1588	1092	597	1588	1194	597	1814	1245	762	2041
18	43.00	22.18	4000	43.00 ⁽³⁾	23.00	4000	43.00 ⁽³⁾	23.00	4500	44.00	25.68	4900
450	1092	563	1814	1092	584	1814	1092	584	2041	1118	652	2223
20	47.00	23.25	5000	47.00 ⁽³⁾	23.25	5000	47.00 ⁽³⁾	23.25	5300	48.00	28.38	7500
500	1194	591	2268	1194	591	2268	1194	591	2404	1219	721	3402
24	55.00	29.25	7200	55.00 ⁽³⁾	29.25	7200	55.00 ⁽³⁾	29.25	7200	—	—	—
600	1397	743	3266	1397	743	3266	1397	743	3266	—	—	—

(3) The following valves do not meet the ASME B16.10 end to end dimensions.

(4) Weights shown are for forged valves. For weights of cast steel valves, please contact Velan's Engineering Dept.