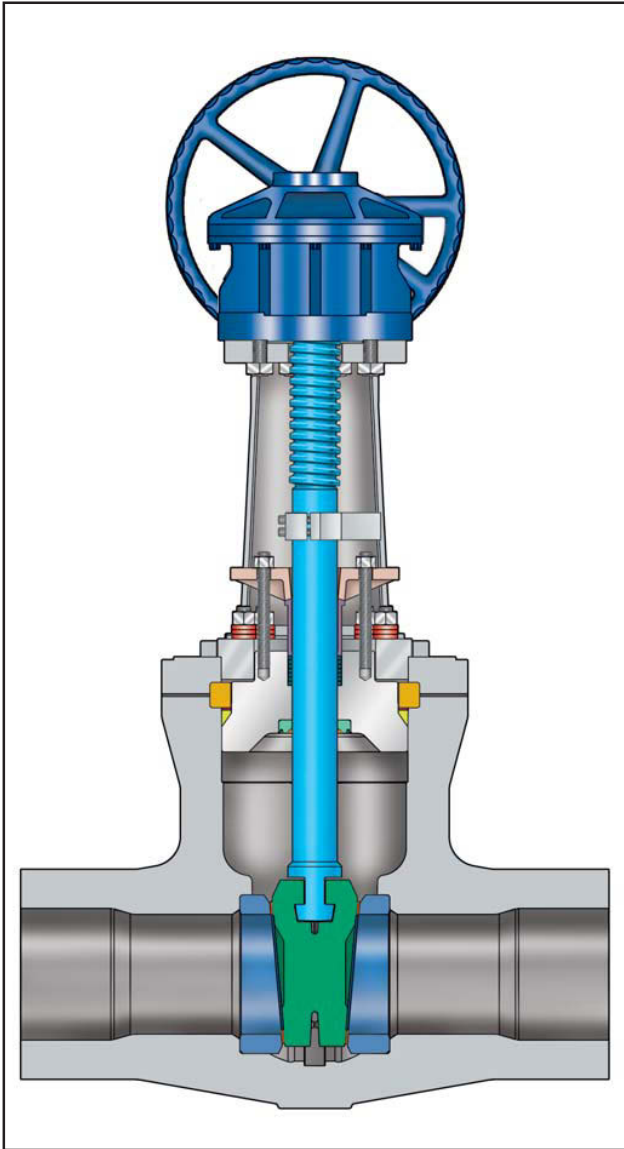




# PRESSURE SEAL FLEXIBLE WEDGE GATE VALVES CARBON, ALLOY OR STAINLESS STEEL

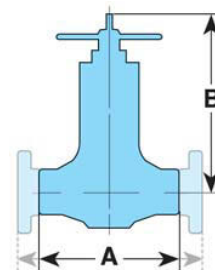
ASME CLASSES 600–2500, 2–24" (50–600 mm)  
ASME CLASS 4500, 2–8" (50–200 mm)



Velan pressure seal flexible wedge gate valves are ideal for high pressure steam (main steam isolation), liquid (feedwater isolation), catalytic reformers, hydrocrackers and other tough services.

## DESIGN FEATURES:

- **Velan pressure seal design.**  
*(See page 10 for details.)*
- **Velan flexible wedge offers** superior tightness of seats and freedom from sticking.
- **Wedge guiding** minimizes seat rubbing and scuffing resulting in long cycle life.
- **Designed to ASME B16.34.**
- **Body** made of superior strength forgings and optional cast steel.
- **Velan stem seal** offers tight seal with little to no maintenance over long periods of time.
- **Optional** live-loading of packing.
- **Non-rotating** stem.
- **Hardfaced** seating faces resist erosion.
- Other sizes and pressure classes available. Contact the company for specifications.



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

CLASS	FIGURE NUMBER	
	FORGED	CAST
600	2054P	2064K
900	7054P	7064K/7054K
1500	3054P	3064K/3054K
2500	4054P	4054K
4500	5054P	–

**FLOW COEFFICIENT CV\***

SIZE in mm	CLASS					
	600		900		1500	2500
	FORGED 2054P	CAST 2064K	FORGED 7054P	CAST 7054K	FORGED 3054P	FORGED 4054P
2 50	260	260	260	—	260	140
2½ 65	260	420	260	—	260	200
3 80	460	625	460	—	460	300
4 10	825	1150	825	—	825	460
6 150	1950	2650	1950	—	1950	1300
8 200	3150	4850	3150	—	3150	2100
10 250	5400	7750	5400	5500	4700	3150
12 300	7300	11500	7300	7750	7300	4850
14 350	8200	13000	8200	9450	8200	4850
16 400	14000	17500	13500	12500	11000	7750
18 450	16500	22000	16500	16000	14000	8600
20 500	20000	27000	20000	20000	17500	11500
24 600	30000	33000	30000	30000	26000	14250

\*  $K_v = C_v \times 0.85$

**STANDARD MATERIALS**

PART	MATERIAL <sup>(5)</sup>				
Body <sup>(1)(4)</sup>	A 105 or A 216 Gr. WCB	A 182 Gr. F11 or A 217 Gr. WC6	A 182 Gr. F22	A 182 Gr. F91	A 182 Gr. F316
Bonnet <sup>(1)</sup>	A 182 Gr. F91				
Seat <sup>(1)(2)</sup>	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
Wedge <sup>(1)(2)</sup>	A 182 Gr. F91				
Stem <sup>(1)(3)</sup>	Gr. 410			Gr. 616 or Gr.660	Gr. 630 or Gr. 660
Yoke	Carbon steel				
Gasket <sup>(1)</sup>	Graphite / SS 316 or Soft carbon steel–silver plated				
Gasket retainer	A 182 Gr. F6a Cl. 4			Gr. 616 or Gr.660	Gr. 630 or Gr. 660
Spacer ring	Gr. 4140 option Ni or Cad plated or SS				
Packing ring <sup>(1)</sup>	Graphite				
Packing flange	Carbon steel				Stainless
Gland	Carbon steel	Stainless			
Gland stud	Gr. B7				
Gland nut	Gr. 2H				
Bonnet retainer	Carbon steel	Alloy Steel			Stainless
Torque arm	Carbon steel				
Yoke bolting	Gr. B7				
Yoke nut	Manganese bronze or Austenitic Ductile Iron A 439 Gr. D-2C				
Thrust bearing	Steel				
Handwheel <sup>(1)</sup>	Malleable iron or steel				

(1) Other materials available. (2) Stellite. (3) Hardened. (4) 600 Class is Cast, alternative Forged. Note: Consult Velan Engineering for cast equivalents in Class 1500 & 2500 for sizes above 8" (200 mm). (5) Velan reserves the right to make substitution of materials equal to or better than those listed in the Standard Materials Table.

**DIMENSIONS – BUTT WELD END**

SIZE in mm	ASME 600 (PN 100)			ASME 900 (PN 150)			ASME 1500 (PN 250)			ASME 2500 (PN 420)			ASME 4500 (PN 760)		
	A	B <sup>(5)</sup>	lb <sup>(6)</sup> kg	A	B <sup>(5)</sup>	lb <sup>(6)</sup> kg	A	B <sup>(5)</sup>	lb <sup>(6)</sup> kg	A	B <sup>(5)</sup>	lb <sup>(6)</sup> kg	A	B <sup>(5)</sup>	lb <sup>(6)</sup> kg
2 50	7.00 178	15.63 397	50 23	8.50 216	15.63 397	55 25	8.50 216	15.63 397	55 25	11.00 279	15.44 392	100 45	—	—	—
2½ 65	8.50 216	15.63 397	60 27	10.00 254	15.63 397	60 27	10.00 254	15.63 397	60 27	13.00 330	24.69 627	200 91	10 254	23 584	240 109
3 80	10.00 254	25.00 635	200 91	12.00 305	25.00 635	200 91	12.00 305	25.00 635	200 91	14.50 368	24.72 628	225 102	12 305	23 584	240 109
4 100	12.00 305	26.63 676	250 113	14.00 355	26.63 676	250 113	16.00 406	26.63 676	250 113	18.00 457	26.81 681	300 136	18 457	24 610	300 136
6 150	18.00 457	42.63 1083	800 363	20.00 508	42.63 1083	800 363	22.00 559	42.63 1083	800 363	24.00 610	41.06 1043	850 386	20 508	40 1016	850 386
8 200	23.00 584	47.13 1197	1300 590	26.00 660	47.13 1197	1300 590	28.00 711	47.13 1197	1300 590	30.00 762	48.13 1222	1500 680	30 762	47 1194	1750 794
10 250	28.00 711	53.81 1367	1500 680	31.00 787	53.81 1367	1500 680	34.00 864	53.81 1367	1500 680	36.00 914	52.50 1334	1750 795	—	—	—
12 300	32.00 813	66.19 1681	3300 1497	36.00 914	66.19 1681	3300 1497	39.00 991	66.19 1681	3300 1497	41.00 1041	61.62 1565	3500 1587	—	—	—
14 350	35.00 889	66.31 1684	3300 1497	39.00 990	66.31 1634	3300 1497	42.00 1067	66.31 1684	3300 1497	44.00 1118	61.62 1565	3700 1680	—	—	—
16 400	39.00 991	84.56 2148	3900 1769	43.00 1092	86.56 2148	3900 1769	47.00 1194	78.88 2003	4000 1814	49.00 <sup>(7)</sup> 1245	74.31 1887	4400 2000	—	—	—
18 450	43.00 1092	86.44 2196	5000 2268	43.00 <sup>(7)</sup> 1092	86.44 2196	5000 2268	43.00 <sup>(7)</sup> 1092	89.13 2264	5000 2268	44.00 <sup>(7)</sup> 1118	85.75 2178	7500 3402	—	—	—
20 500	47.00 1194	95.44 2424	7500 3402	47.00 <sup>(7)</sup> 1194	95.44 2424	7500 3402	47.00 <sup>(7)</sup> 1194	94.56 2402	7500 3402	48.00 1219	89.18 2265	8500 3856	—	—	—
24 600	55.00 1397	112.50 2858	10000 4536	55.00 <sup>(7)</sup> 1397	112.50 2858	10000 4536	55.00 <sup>(7)</sup> 1397	113.38 2880	10000 4536	55.00 1397	104.00 2642	14000 6350	—	—	—

(5) Dimension is center to top in open position.

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

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