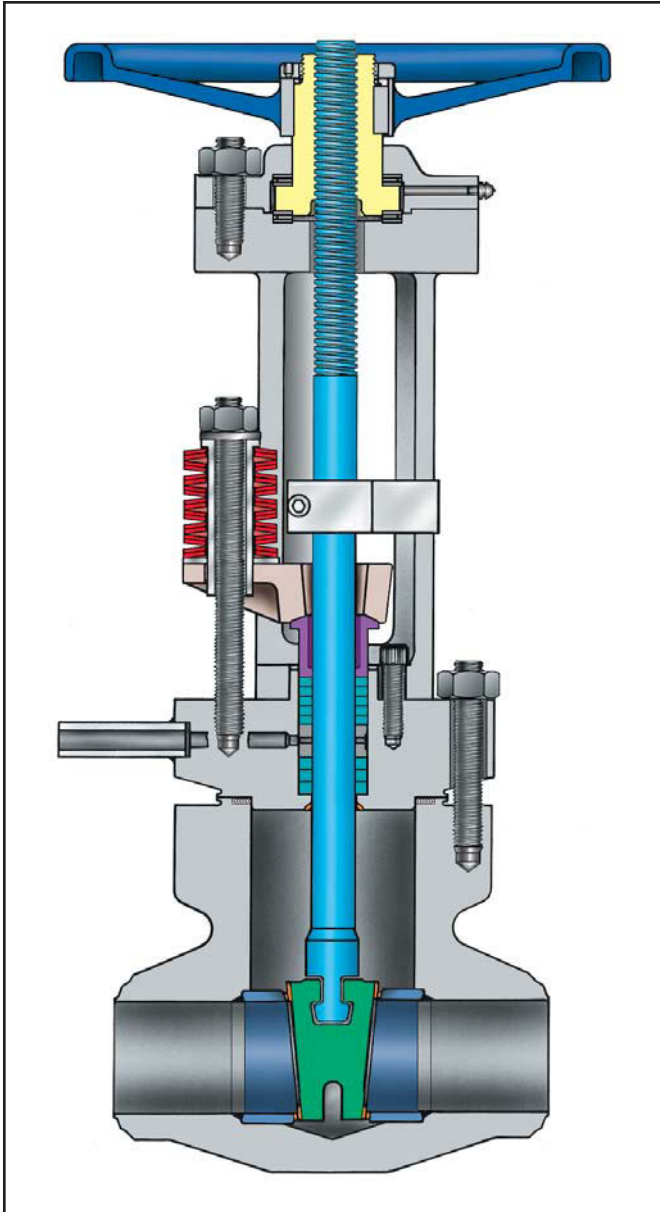




BOLTED BONNET FLEXIBLE WEDGE GATE VALVES CARBON, ALLOY OR STAINLESS STEEL

ASME CLASSES 150–900, 2 –24" (50–600 mm)
ASME CLASS 1500, 2½ –16" (65–400 mm)

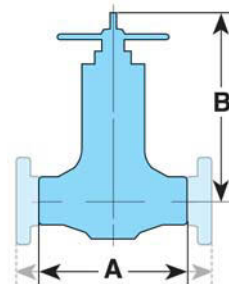


Velan bolted bonnet flexible wedge gate valves are ideal for high pressure steam, catalytic reformers, hydrocrackers and other tough services.

DESIGN FEATURES:

- **Stronger, leakproof bolted body bonnet joint** ensures joint tightness with a higher bolting torque. (See page 11 for details.)
- **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.
- **Forged cage unit design.**
- **Optional** live-loading of packing and leakoff (shown).
- **Non-rotating** stem.
- **Hardfaced** seating faces resist erosion.
- Available with provision for seal weld.
- Other sizes and pressure classes available. Contact the company for specifications.

CLASS	FIGURE NUMBER
150	0054B
300	1054B
600	2054B
900	7054B
1500	3054B



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

FLOW COEFFICIENT CV*

SIZE in mm	CLASS			
	150/300	600	900	1500
2½ 65	260	260	260	260
3 80	460	460	460	460
4 100	825	825	825	825
6 150	2300	2300	1950	1950
8 200	4150	4150	3150	3150
10 250	6700	6700	4700	4700
12 300	9700	9700	7300	7300
14 350	12000	12000	8600	8600
16 400	17500	15000	13500	11000
18 450	19000	19000	16500	—
20 500	24000	24000	20000	—
24 600	34000	33000	30000	—

* $K_v = C_v \times 0.85$

STANDARD MATERIALS

PART	MATERIAL			
Body ⁽¹⁾	A 105	A 182 Gr. F11	A 182 Gr. F22	A 182 Gr. F316
Bonnet ⁽¹⁾	A 105	A 182 Gr. F11	A 182 Gr. F22	A 182 Gr. F316
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. F316 or A 351 Gr. CF8M
Wedge ⁽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. F316 or A 351 Gr. CF8M
Stem ⁽¹⁾⁽³⁾	Gr. 410			Gr. 630 or Gr. 660
Yoke	Carbon steel			
Gasket ⁽¹⁾	Spiral wound stainless and graphite			
Body/bonnet stud	Gr. B7	Gr. B16		Gr. B8M or Gr. 630
Body/bonnet nut	Gr. 2H	Gr. 4 ⁽⁴⁾		Gr. 8M
Packing ring ⁽¹⁾	Graphite			
Packing flange	Carbon steel			Stainless
Gland	Carbon steel			
Gland stud	Gr. B7			Gr. B8M or Gr. 630
Gland nut	Gr. 2H			Gr. 8M
Torque arm	Carbon steel			
Yoke bolting	Gr. B7 or A 574			
Yoke nut	Manganese bronze or Austenitic Ductile Iron A 439 Gr. D-2C			
Thrust bearing	Steel			
Handwheel ⁽¹⁾	Malleable iron or steel			

(1) Other materials available. (2) Stellite. (3) Hardened. (4) Grade 7 is alternate.

DIMENSIONS – BUTT WELD END

SIZE in mm	ASME 150 (PN 20)			ASME 300 (PN 50)			ASME 600 (PN 100)			ASME 900 (PN 150)			ASME 1500 (PN 250)		
	A	B ⁽⁵⁾	lb kg	A	B ⁽⁵⁾	lb kg	A	B ⁽⁵⁾	lb kg	A	B ⁽⁵⁾	lb kg	A	B ⁽⁵⁾	lb kg
2 50	— —	— —	— —	— —	— —	— —	7.00 178	22.13 562	60 27	8.50 216	22.13 562	60 27	8.50 216	22.13 562	60 27
2½ 65	9.50 241	21.12 536	100 45	9.50 241	21.12 536	100 45	8.50 216	21.12 536	100 45	10.00 254	21.12 536	100 45	10.00 254	21.12 536	100 45
3 80	11.13 283	29.00 737	200 91	11.13 283	29.00 737	200 91	10.00 254	29.00 737	200 91	12.00 305	29.25 743	200 91	12.00 305	29.25 743	200 91
4 100	12.00 305	31.75 807	250 113	12.00 305	31.75 807	250 113	12.00 305	31.75 807	250 113	14.00 356	32.00 813	250 113	16.00 406	32.00 813	250 113
6 150	15.88 403	40.38 1026	580 263	15.88 403	40.38 1026	580 263	18.00 457	40.38 1026	580 263	20.00 508	47.75 1213	800 363	22.00 559	47.75 1213	800 363
8 200	16.50 419	50.00 1270	1000 454	16.50 419	50.00 1270	1000 454	23.00 584	50.00 1270	1000 454	26.00 660	58.63 1489	1300 590	28.00 711	58.63 1489	1300 590
10 250	18.00 457	61.19 1554	1400 635	18.00 457	61.19 1554	1400 635	28.00 711	61.19 1554	1400 635	31.00 787	63.00 1600	1900 862	34.00 864	63.00 1600	1900 862
12 300	19.75 502	68.00 1727	1800 816	19.75 502	68.00 1727	1800 816	32.00 813	68.00 1727	1800 816	36.00 914	65.88 1673	3300 1497	39.00 991	65.88 1673	3300 1497
14 350	22.50 572	79.50 2019	2200 998	30.00 762	79.50 2019	2200 998	35.00 889	79.50 2019	2200 998	39.00 991	74.00 1880	3500 1588	42.00 1067	79.25 2013	3500 1588
16 400	24.00 610	85.75 2178	3700 1678	33.00 838	85.75 2178	3700 1678	39.00 991	84.50 2146	3700 1678	43.00 1092	85.19 2164	3900 1769	47.00 1194	90.50 2299	4000 1814
18 450	36.00 914	82.81 2103	4500 2041	36.00 914	82.81 2103	4500 2041	43.00 1092	83.75 2127	4500 2041	43.00 ⁽⁶⁾ 1092	88.06 2237	5000 2268	— —	— —	— —
20 500	39.00 991	90.00 2286	5500 2495	39.00 991	90.00 2286	5500 2495	47.00 1194	97.00 2464	5500 2495	47.00 ⁽⁶⁾ 1194	97.00 2464	7500 3402	— —	— —	— —
24 600	45.00 1143	103.50 2629	8000 3629	45.00 1143	103.50 2629	8000 3629	55.00 1397	103.50 2629	8000 3629	55.00 ⁽⁶⁾ 1397	103.75 2635	10000 4536	— —	— —	— —

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

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