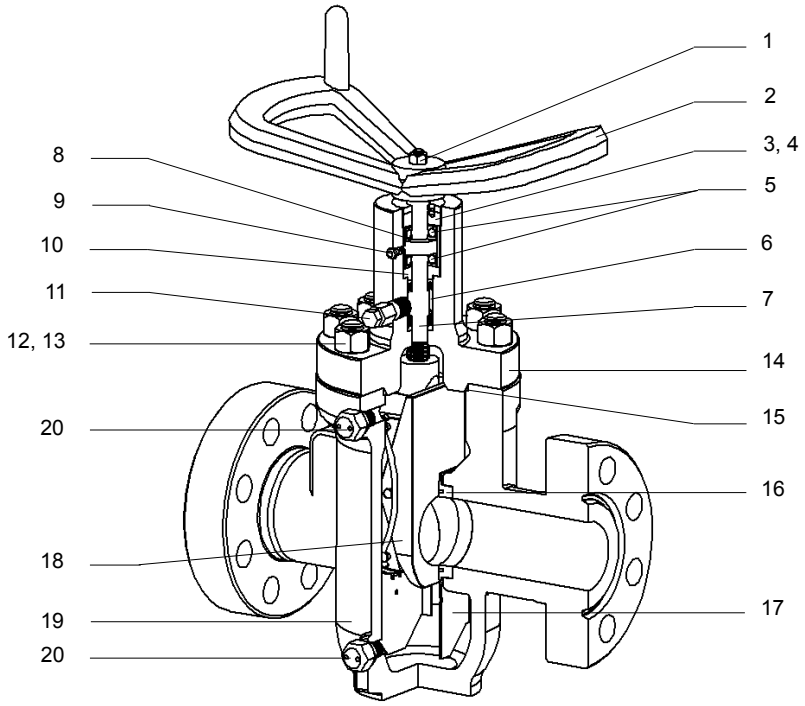
Crown Model A Gate Valve



Parts List

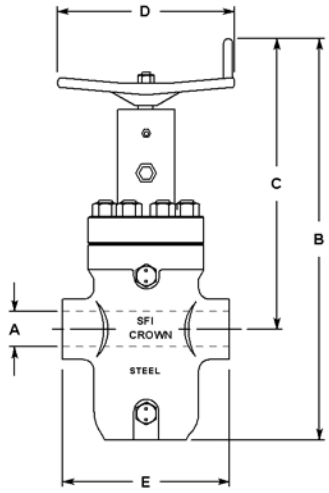
1	nut
2	handwheel
3	bearing retainer lock nut
4	bearing retainer nut
5	thrust bearing
6	stem packing
7	stem
8	bearing spacer sleeve
9	bearing grease fitting
10	packing retainer bushing
11	packing injection fitting
12	nut
13	stud
14	bonnet
15	bonnet gasket
16	seat
17	gate guide
18	gate assembly
19	body
20	body grease fitting

The Crown Model A gate valve utilizes an expanding gate to provide a positive mechanical seal in a wide variety of applications. This valve is available for 2000, 3000 or 5000 psi working pressures and can be supplied in sizes up to $4^{1}/_{16}$" flanged or threaded.

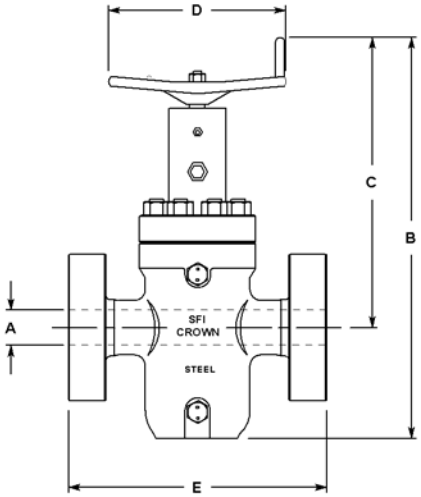
Main Design and Construction Features:

- Integral cast steel body and one-piece bonnet.
- Non-rising stem design.
- Parallel expanding gate provides a tight mechanical metal seal between the seats, protecting body and operating components from flow in both open and closed positions.
- PTFE ring in each seat ensures an initial seal between seats and gate in addition to the metal-to-metal seal generated by full expansion of the gate.
- Valve does not rely on line pressure for sealing.
- Roller thrust bearings minimize valve operating torque.
- External bearing grease fitting allows easy lubrication of stem bearings.
- Packing injection fitting allows the stem packing to be energized under pressure.
- Body cavity is filled with grease to allow easier operation, corrosion resistance and longer life. Two safety-capped grease fittings are provided on the body so that grease may be added at any time.
- Continuous full bore / thru conduit flow at sealing surfaces minimizes pressure drop and turbulence.

Crown Gate Valves



Threaded Valves



Flanged End Valves

Dimensional Data

psi (MPa)	Size	(mm)	A	B	C	D	E threaded	E flanged	N	Wt threaded	Wt flanged
2000 (13.8)	2 1/16	(52)	2.06	23.62	18.69	11.0	9.83	11.62	13.0	85	100
	2 9/16	(65)	2.56	25.56	19.94	12.5	11.60	13.12	15.5	125	140
	3 1/8	(79)	3.19	29.25	22.12	12.5	11.69	14.12	20.0	180	200
	4 1/16	(103)	4.12	34.62	25.69	16.0	-	17.12	24.5	-	390
3000 (20.7)	2 1/16	(52)	2.06	24.25	18.94	12.5	9.83	14.62	13.0	115	160
	2 9/16	(65)	2.56	26.00	19.81	12.5	12.25	16.62	15.5	145	220
	3 1/8	(79)	3.19	30.06	22.62	16.0	11.69	17.12	20.0	225	280
	4 1/16	(103)	4.12	35.31	26.19	20.0	-	20.12	24.5	-	490
5000 (34.5)	2 1/16	(52)	2.06	24.25	18.94	12.5	9.83	14.62	13.0	115	160
	2 9/16	(65)	2.56	26.00	19.81	12.5	12.25	16.62	15.5	145	220
	3 1/8	(79)	3.19	30.00	22.62	16.0	11.69	18.62	20.0	225	320
	4 1/16	(103)	4.12	35.50	26.19	20.0	-	21.62	24.5	-	600

Dimensions in inches
N = number of turns required to open
Wt = lbs

Trim Chart

Service	Trim	Matl Class	Body & Bonnet	Bonnet Seal	Gate	Seat	Stem
general oilfield oil and gas	T-21	AA	alloy steel	CS	alloy steel	alloy steel	alloy steel
general oilfield low temp -50 ºF	T-36	AA	alloy steel	CS	alloy steel	alloy steel	alloy steel
general with slight CO_2 corrosion	T-22	BB	alloy steel	SS	13 Cr SS	17-4 PH	17-4 PH
corrosive with high CO_2	T-23	CC	13 Cr SS	SS	13 Cr SS HF	17-4 PH	17-4 PH
SOG low temp -50 ºF	LD	DD-NL	alloy steel	CS	alloy steel SH	alloy steel	alloy steel
SOG	T-24	DD-NL	alloy steel	SS	alloy steel HF	17-4 PH	alloy steel
SOG low temp -50 ºF	T-37	DD-NL	alloy steel	SS	alloy steel HF	17-4 PH	alloy steel
SOG low temp -50 ºF	T-37N	DD-NL	alloy steel	SS	alloy steel HF	17-4 PH	CRA
SOG low temp -50 ºF	T-37Z	DD-0.5/ZZ	alloy steel	SS	alloy steel HF	17-4 PH	17-4 PH
slight CO_2 corrosion and SOG	T-25	EE-0.5/ZZ	alloy steel	SS	13 Cr SS HF	17-4 PH	17-4 PH
waterflood	T-27	EE-0.5/ZZ	alloy steel (2)	SS	316 SS HF	17-4 PH	17-4 PH
slight CO_2 corrosion and SOG	T-25N	EE-NL	alloy steel	SS	13 Cr SS HF	17-4 PH	CRA
waterflood	T-27N	EE-15.0	alloy steel (2)	SS	316 SS HF	17-4 PH	CRA
corrosive with high CO_2 and SOG	T-26	FF-0.5/ZZ	13 Cr SS	SS	13 Cr SS HF	17-4 PH	17-4 PH
corrosive with high CO_2 and SOG	T-26N	FF-NL	13 Cr SS	SS	13 Cr SS HF	17-4 PH	CRA
extremely corrosive	T-78	HH-NL	CRA (1)	CRA	CRA HF	CRA	CRA

SOG Sour Oil and Gas H_2S NACE MR0175
(1) or Alloy Steel Clad 625
(2) PTFE base or ENC coating

Materials subject to change without notice. Special trims available.