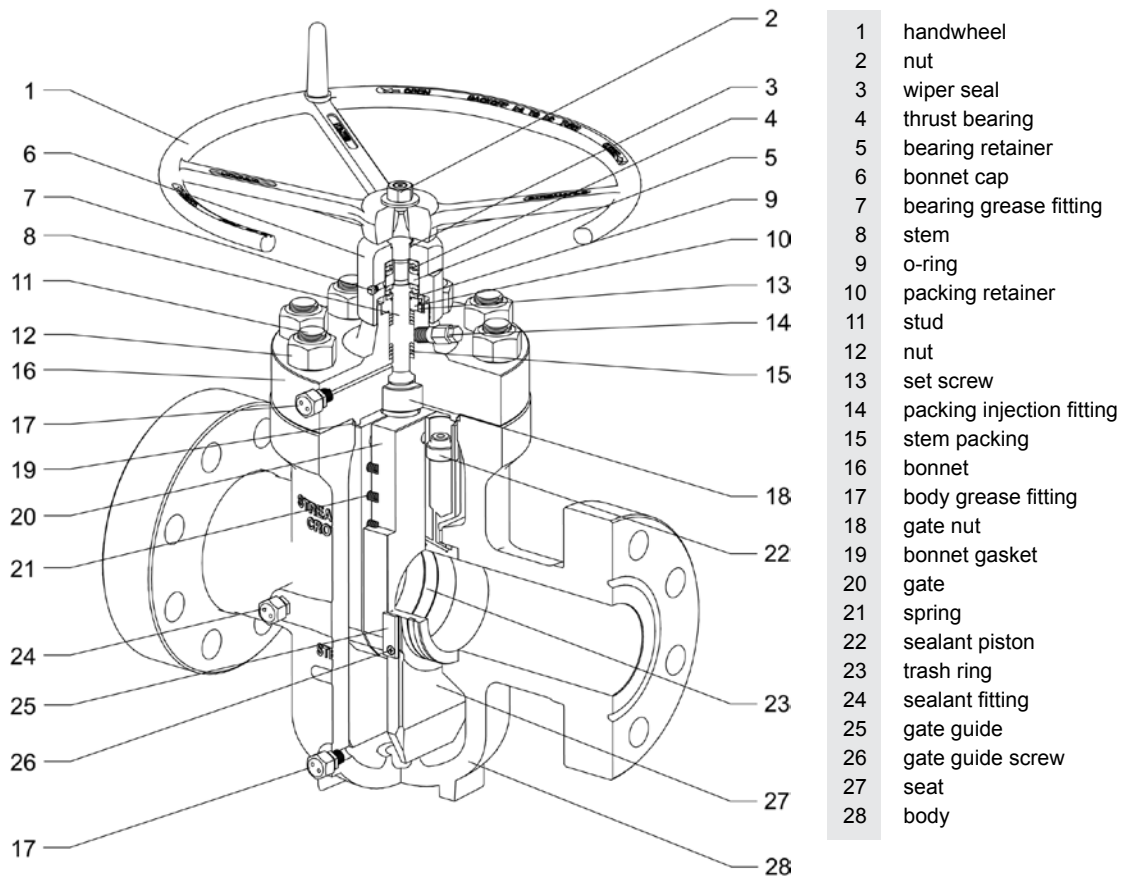


Crown Model B Gate Valve



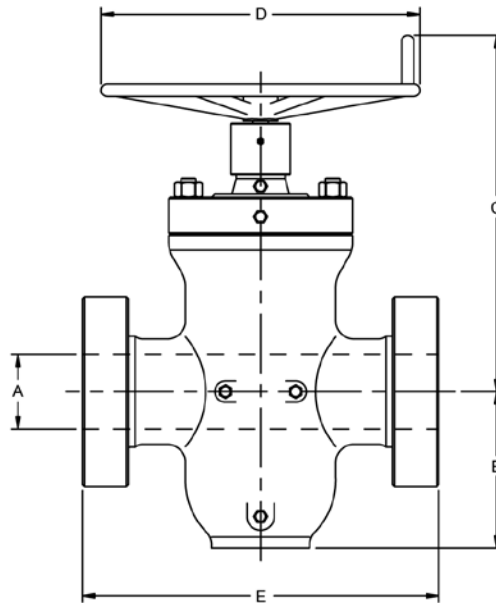
The Crown Model B gate valve is a bidirectional valve with a split gate design. Sealing is enhanced by an auto-seal system whereby internal pressure transmits sealing compound from reservoirs in the seats to grooves on the seat faces to prevent leaks. This valve is available from 2000 to 5000 psi working pressures in sizes from 5 1/8" to 7 1/16" x 6 3/8".

Design and Construction Features:

- Integral cast steel body.
- Interference fit seats are used to provide metal-to-metal seal between seat and body, and are fully skirted to protect the gate sealing surface.
- The metal-to-metal seal between gates and seats is enhanced with sealing compound. Pressure in the valve body acts on the piston in the seat reservoir transmitting the sealing compound to the seat sealing groove, providing automatic and continuous self sealing on the downstream seat.
- Parallel gates do not require stem to be under stress in the open or closed position and are spring loaded against seats providing continuous self cleaning action and low pressure seal.
- Trash ring is provided between the gates to keep foreign materials out of the body cavity.
- Non-rising stem has backseating capability allowing stem packing or bearings to be replaced under pressure.
- Packing injection fitting allows stem packing to be energized under pressure.
- Bidirectional design permits use in either direction.
- Body cavity is filled with grease to lubricate components and prevent accumulation of foreign materials or hydrates.
- Continuous full bore / thru-conduit flow with no discontinuities at sealing surfaces minimizes pressure drop and turbulence.



Crown Gate Valves



Dimensional Data

Size	psi (MPa)	A	B	C	D	E	N	Wt
5 1/8 (130 mm)	2000 (13.8)	5.12	10.75	27.12	20.0	22.12	29.5	650
	3000 (20.7)	5.12	11.06	27.12	20.0	24.12	29.5	825
	5000 (34.5)	5.12	11.25	27.12	26.0	28.62	29.5	1020
7 1/16 x 6 1/8 (179 mm x 155 mm)	2000 (13.8)	6.12	12.38	29.12	20.0	22.12	34.5	760
	3000 (20.7)	6.12	12.81	29.12	20.0	24.12	34.5	980
	5000 (34.5)	6.12	12.81	29.12	26.0	29.00	34.5	1165
7 1/16 x 6 3/8 (179 mm x 162 mm)	2000 (13.8)	6.38	12.38	29.12	20.0	22.12	35.5	755
	3000 (20.7)	6.38	12.81	29.12	20.0	24.12	35.5	975
	5000 (34.5)	6.38	12.81	29.12	26.0	29.00	35.5	1160

Dimensions in inches

N = number of turns required to open

Wt = lbs

Trim Chart

Service	Trim	Matl Class	Body & Bonnet	Bonnet Seal	Gate (3)	Seat (3)	Stem
general oilfield oil and gas	T-21	AA	alloy steel	CS	alloy steel	alloy steel	alloy steel
general oilfield low temp -50 °F	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	13 Cr SS	17-4 PH
corrosive with high CO ₂	T-23	CC	13 Cr SS	SS	13 Cr SS	13 Cr SS	17-4 PH
SOG low temp -50 °F	LD	DD-NL	alloy steel	CS	alloy steel	alloy steel	alloy steel
SOG	T-24	DD-NL	alloy steel	SS	alloy steel	alloy steel	alloy steel
SOG low temp -50 °F	T-37	DD-NL	alloy steel	SS	alloy steel	alloy steel	alloy steel
SOG low temp -50 °F	T-37N	DD-NL	alloy steel	SS	alloy steel	alloy steel	CRA
SOG low temp -50 °F	T-37Z	DD-0.5/ZZ	alloy steel	SS	alloy steel	alloy steel	17-4 PH
slight CO ₂ corrosion and SOG	T-25	EE-0.5/ZZ	alloy steel	SS	13 Cr SS	13 Cr SS	17-4 PH
waterflood	T-27	EE-0.5/ZZ	alloy steel (2)	SS	316 SS	316 SS	17-4 PH
slight CO ₂ corrosion and SOG	T-25N	EE-NL	alloy steel	SS	13 Cr SS	13 Cr SS	CRA
waterflood	T-27N	EE-15.0	alloy steel (2)	SS	316 SS	316 SS	CRA
corrosive with high CO ₂ and SOG	T-26	FF-0.5/ZZ	13 Cr SS	SS	13 Cr SS	13 Cr SS	17-4 PH
corrosive with high CO ₂ and SOG	T-26N	FF-NL	13 Cr SS	SS	13 Cr SS	13 Cr SS	CRA
extremely corrosive	T-78	HH-NL	CRA (1)	CRA	CRA	CRA	CRA

SOG Sour Oil and Gas H₂S NACE MR0175

(1) or Alloy Steel Clad 625

(2) plastic coating

(3) hardfaced or surface hardened

Materials subject to change without notice. Special trims available.