

JFS

BEIJING JOINT FLOW SYSTEM CO.



Gate Valve



KNIFE GATE VALVE

The Knife Gate Valve is a lined valve with a Ductile Iron or WCB body and the corrosion resistance of stainless steel wetted parts. This valve is designed for pulp and paper, chemicals, mining and petroleum industries to handle dense mixtures of stock and slurries.

FEATURE

- Available in sizes from 2" through 36"
- Pressure Rating: 1.0 MPa as standard
Class 150 as standard
1.6 MPa available on request
- When open, the knife gate is fully withdrawn from the slurry flow
- Low maintenance requirements
- The knife gate helps medium cutoff and residue discharge so that the valve can be working without blocking
- The wedge type limit block can provide sealing force to achieve reliable sealing
- The guide nail can provide good guiding function
- The anti-abrasive bushings of different material can be provided so as to prolong service life of the valve

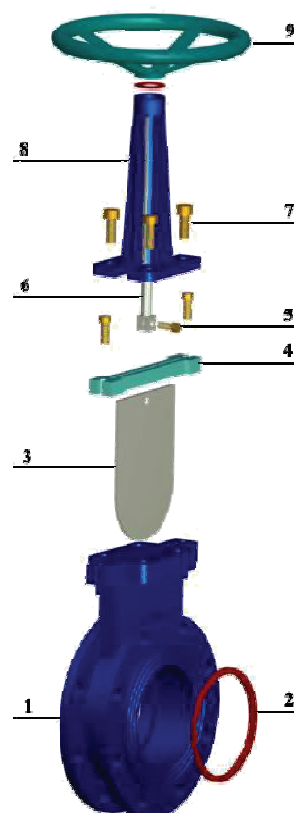
PARTS LIST & MATERIAL

No.	Parts Name	Material
1	Body	Carbon Steel/Stainless Steel
2	Seat	EPDM/PTFE/Stainless Steel
3	Gate	Stainless Steel
4	Gland	Carbon Steel/Stainless Steel
5	Pin	Stainless Steel
6	Stem	Stainless Steel
7	Bolts & Nuts	Carbon Steel
8	Support	Carbon Steel/Stainless Steel
9	Hand Wheel	Carbon Steel

*More material specifications are available on request.

OPTIONAL FEATURE

- Actuator options: Hand-wheel/Bevel gear/Pneumatic/hydraulic/Electric
- Seat material options: Soft seal/Double-direction soft seal/Hard seal/Flexible seal
- Connection options: Wafer type/Lug type
- Structure options: Rising stem/Non-rising stem



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DESIGN FEATURE

BODY

- Wafer type carbon steel body as standard.
- Internal cast-in gate wedges and guides allows for tight shut-off.
- Full port design for greater flow capacity and minimal pressure drop.
- Internal design avoids any build up of solids that would prevent valve from closing.

GATE

- Stainless steel gate as standard.
- Gate is polished on both sides to avoid jamming and seat damage.
- Bottom of the gate edge is machined to a bevel to cut through solids for a tight seal in the closed position.

SEAT (resilient)

- Unique design that mechanically locks the seat in the internal of the valve body with a stainless steel retainer ring.
- Standard EPDM also available in different materials such as PTFE etc.

SEAT (metal to metal)

- Hard Steel or stainless steel is available.

PACKING

- Long-life packing with several layers of braided fibre plus an EPDM o-ring with an easy access packing gland ensuring a tight seal.

STEM

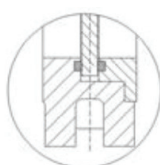
- The standard stainless steel stem offers a long corrosion resistant life.

EPOXY COATING

- The epoxy coating on all carbon steel valve body and components is electro-statically applied making the valves to be corrosion resistant with a high quality finished surface.



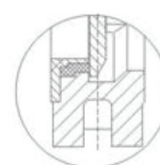
Soft seal



Double-direction soft seal



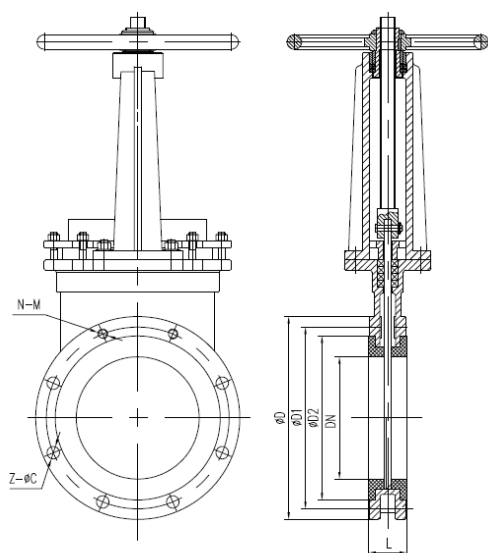
Hard seal



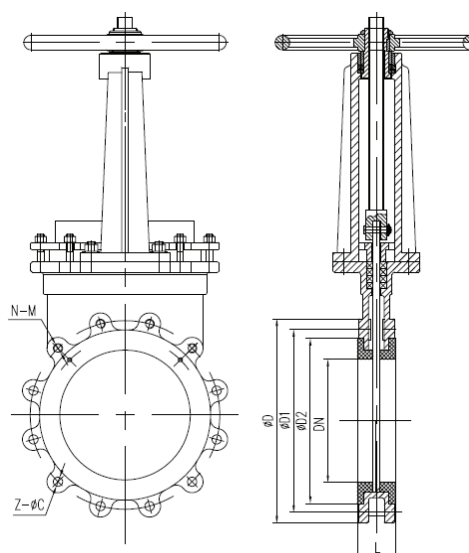
Flexible seal

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DIMENSION



Wafer type



Lug type

DN	NPS	L		H≈	Est. Weight (kg)		
		1.0/1.6MPa	150lb		1.0MPa	1.6MPa	150lb
50	2"	43	48	285	8	8.5	11
65	2-1/2"	46	48	298	10	10.7	12
80	3"	46	51	315	12	13	15
100	4"	52	51	365	14	15	16
125	5"	56	57	400	22	23.5	30
150	6"	56	57	475	29	31	49
200	8"	60	70	540	38	40.7	58
250	10"	68	70	630	66	70	95
300	12"	78	76	780	100	107	130
350	14"	78	76	885	119	129	149
400	16"	102	89	990	195	215	225
450	18"	114	89	1100	285	305	345
500	20"	127	114	1200	389	410	440
600	24"	154	114	1450	529	550	590
700	28"	165	-	1700	790	820	-
800	32"	190	-	2000	850	950	-
900	36"	203	-	2300	900	1020	-
1000	40"	216	-	2500	1050	1120	-
1200	48"	254	-	2800	1300	1480	-

*Flange dimensions (D, D₁, D₂, N-M, Z-C) refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.