



**BIDIRECTIONAL
TIGHT**

BUBBLE TIGHTNESS

**REPLACEABLE
SEATS**

SERVICE

Slurry knife gate valve is a new soft seated linear motion shut off valve with beautiful appearance, light weight and compact construction that is easy for installation. It is in full bore design with small flow resistance and can achieve full flow path to pipe when the gate is full open. It can be equipped together with manual actuator or pneumatic actuator is also available for remote control with inductive switch. The knife arc shape design at gate bottom provides strong cutting force. The seat is whole die casting in rubber mould and reaches bidirectional bubble tightness. The valve is without cavity, particularly suitable for slurry application.

STANDARD

Design Standard: ASME B16.34, JB/T8691-1988

Face to Face Dimension Standard: MSS SP-81

TECHNICAL PARAMETERS

Nominal Diameter Range : DN50~DN600 (2"~24")

Nominal Pressure Ratings: DINEN1092PN10/PN16/ ANSI B16.5 150

Max. Working Pressure: 10.3bar or 150psi (DN50-DN600)

Connection Type: Lugged

Seat Materials: NBR, EPDM, natural rubber

Applied Temperature: -20~+70°C, -20°C~120°C

Applied Medium: Slurry, water, other liquids

Leakage: Each Linuo valve undergoes pressure testing. The Linuo slurry knife gate valve design with two seats is capable of zero leakage in bidirectional tightness as per MSS SP81.

SPECIAL FEATURES

Gate

Gate bottom is in arc shape design with strong cutting force. The gate is hard chromium plated after precision grinding for smoothness which will be with high abrasive resistance and corrosive resistance.

Internal Located Stuffing Box

The stuffing box is in internal located design, with better sealing performance.

Body

Body is in two-piece design without cavity, preventing solids from entering into cavity and caused valve jam, which is more suitable for slurry medium application.

Seat

Resilient and abrasion resistant rubber seat is die casting in unique rubber mould with metal supporting ring, for long term service.

The soft seat is easy for installation, can be taken off directly. And the seats are replaceable.

Various seats are available as below:

NBR: -20~+120°C

EPDM: -20~+120°C

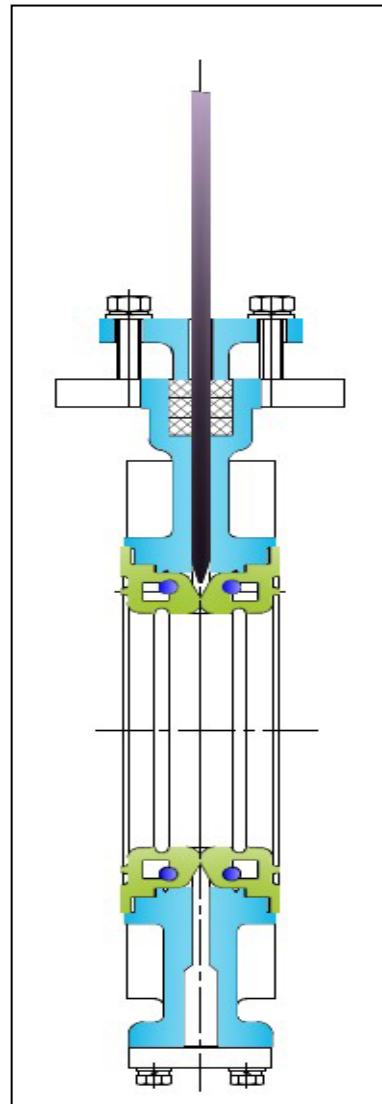
Nature Rubber: -20~+70°C

Bottom with Discharge Device

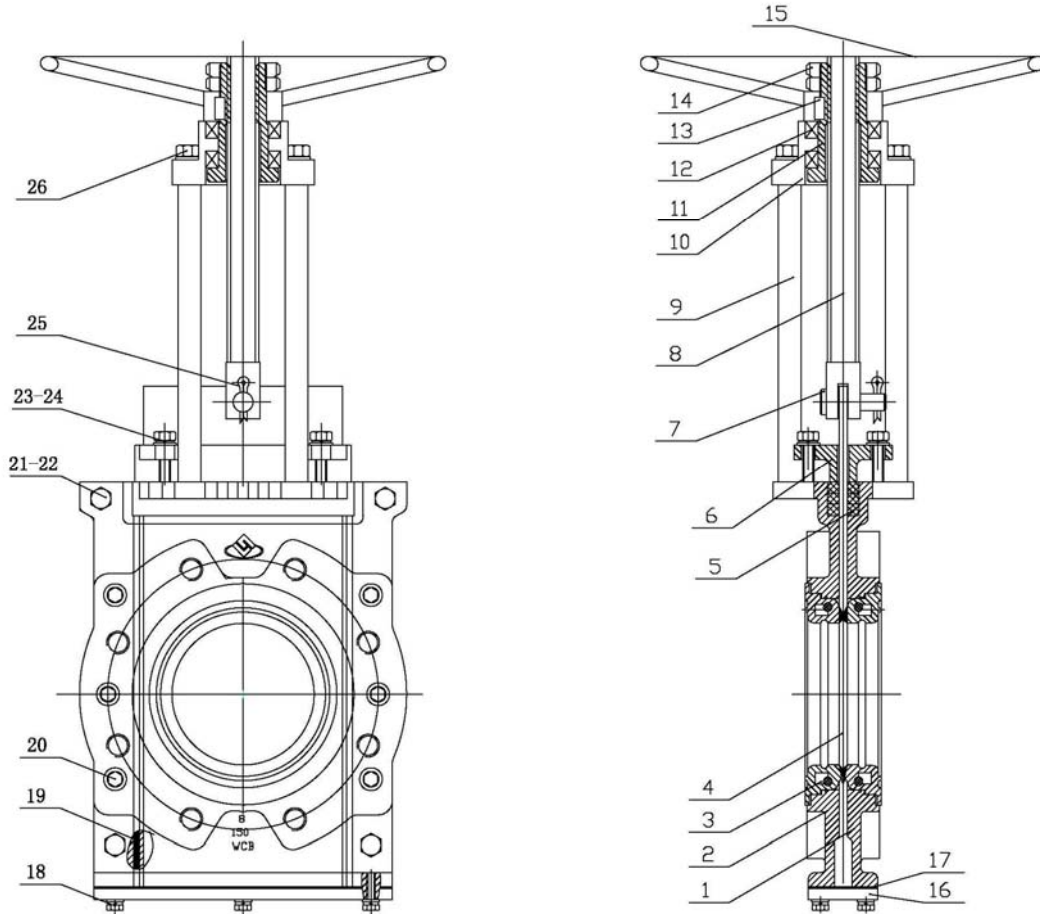
Valve is with discharged device at the base of the valve.

The back cover can be easily removed off for routine cleaning.

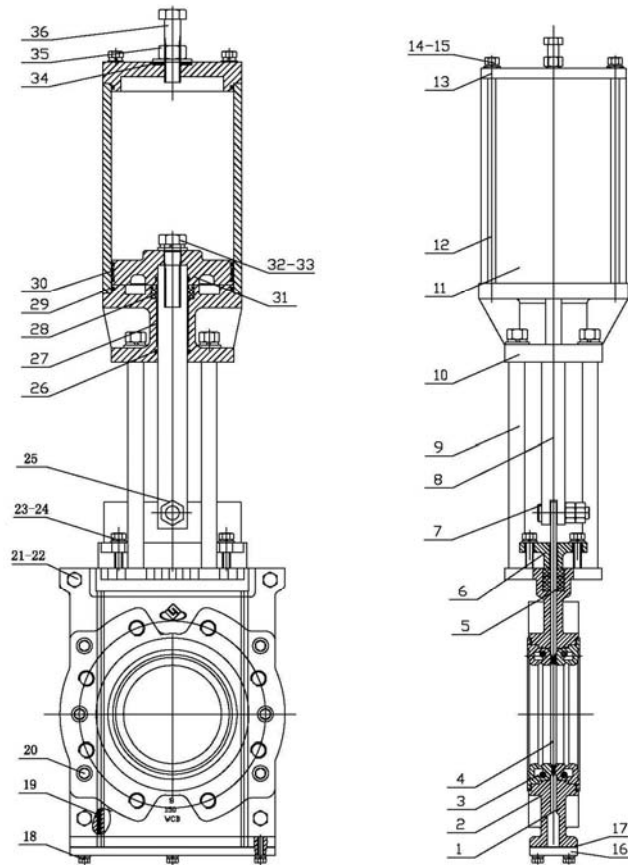
Customer can also outfit the valve with their own purge system.



VALVE STRUCTURE AND PARTS LIST

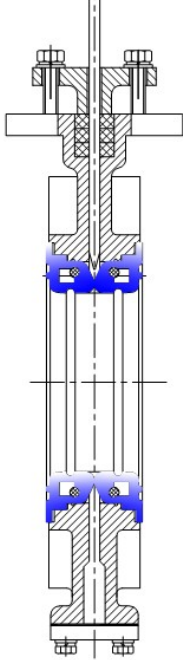


No.	Parts	Qty	Material	No.	Parts	Qty	Material
1	Upper Body	1	WCB,CF8,CF8M	14	Round Nut	2	45#+ENP
2	Lower Body	1	WCB,CF8,CF8M	15	Hand wheel	1	Ductile Iron
3	Seat	2	EPDM,NBR, Rubber	16	Bottom Cap	1	WCB,CF8.CF8M
4	Gate	1	410,304,316,+HCr	17	Sealing Gasket	1	NBR
5	Packing	1set	PTFE	18	Hexagon Bolt	/	304
6	Gland	1	WCB,CF8,CF8M	19	Sealing Rope	1	NBR
7	Pin	1	304	20	Socket Head Cap Screw	/	304
8	Stem	1	304	21	Hexagon Bolt	/	304
9	Manual Pillar	4	304,45#+Cr	22	Hexagon Nut	/	304
10	Square Plate	1	WCB, ZL102	23	Stud	/	304
11	Nut	1	H59	24	Hexagon Nut	/	304
12	Bearing	2	GCR6	25	Cotter	1	Stainless Steel
13	Flat Key	1	45#	26	Hexagon Nut	/	304



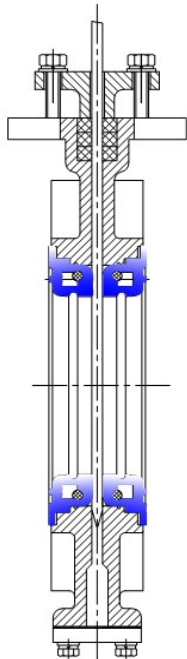
No.	Parts	Qty	Material	No.	Parts	Qty	Material
1	Body	1	WCB,CF8,CF8M	19	Sealing Rope	1	NBR
2	Body	1	WCB,CF8,CF8M	20	Socket Head Cap Screw	/	304
3	Seat	2	EPDM,NBR, Rubber	21	Hexagon Bolt	/	304
4	Gate	1	410,304,316,+HCr	22	Hexagon Nut	/	304
5	Packing	1set	PTFE	23	Stud	/	304
6	Gland	1	WCB,CF8,CF8M	24	Hexagon Nut	/	304
7	Pin	1	304	25	Hexagon Nut	2	304
8	Cylinder Rod	1	45#+Cr	26	O ring	2	NBR
9	Pneumatic Pillar	4	304,45#+Cr	27	Boundary Lub. Bearing	1	Composite
10	Lower Cylinder Cover	1	Q235, ZL102	28	Y ring	1	Polyurethane
11	Cylinder	1	Aluminum Alloy, Q235	29	O ring	4	NBR
12	Double Headed Screw	/	Q235+Galvanize	30	Guiding Ring	1	RTFE
13	Upper Cylinder Cover	1	Q235, ZL102	31	Piston	1	ZL102, Q235
14	Hexagon Nut	/	304	32	Hexagon Bolt	1	45
15	Spring Washer	/	65Mn	33	Spring Washer	1	65Mn
16	Bottom Cap	1	WCB, CF8, CF8M	34	Sealing Gasket	1	PTFE
17	Sealing Gasket	1	NBR	35	Hexagon Nut	1	304
18	Hexagon Bolt	/	304	36	Adjustable Bolt	1	304

VALVE IN FULL OPEN OR CLOSE POSITION



Full Open

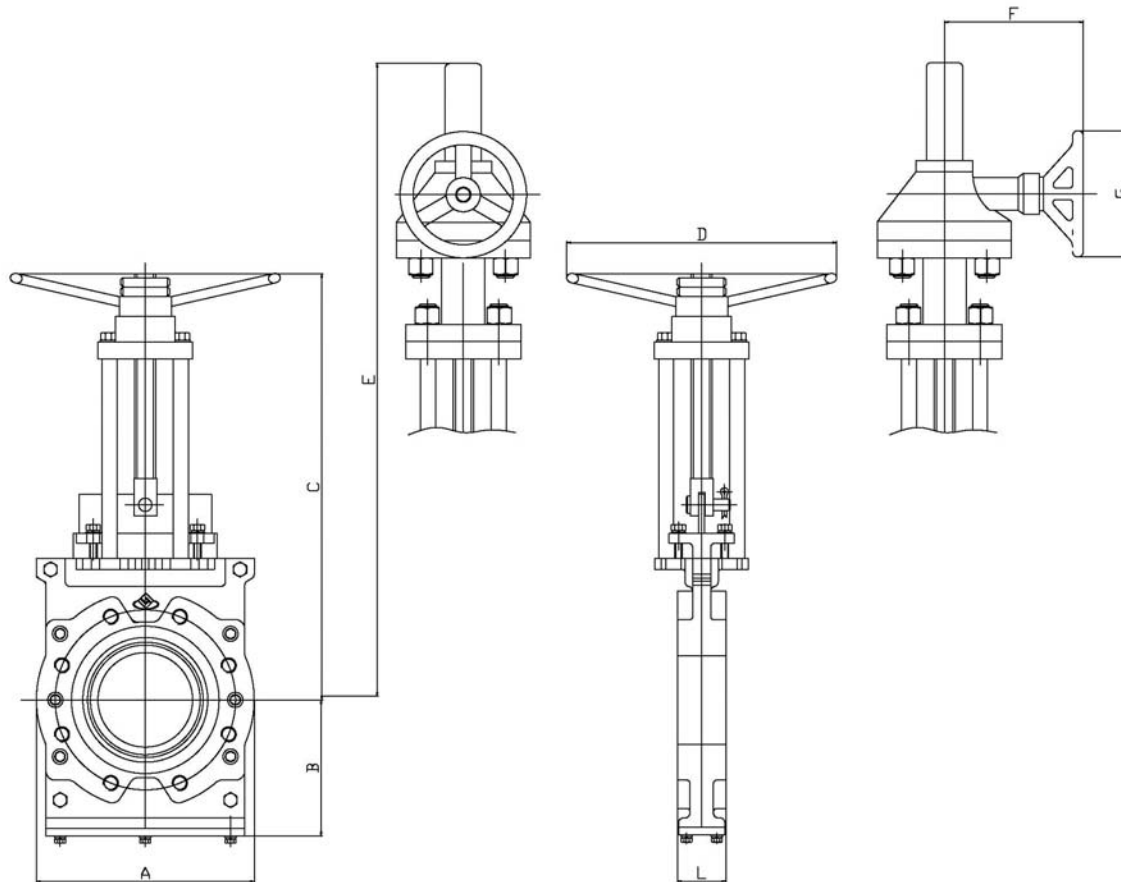
When valve is open, the gate draws back into body cavity, two seats will be pushed together closely to form a smooth flow path to prevent slurry from entering into body cavity and accumulating in the cavity which will lead to high gate friction.



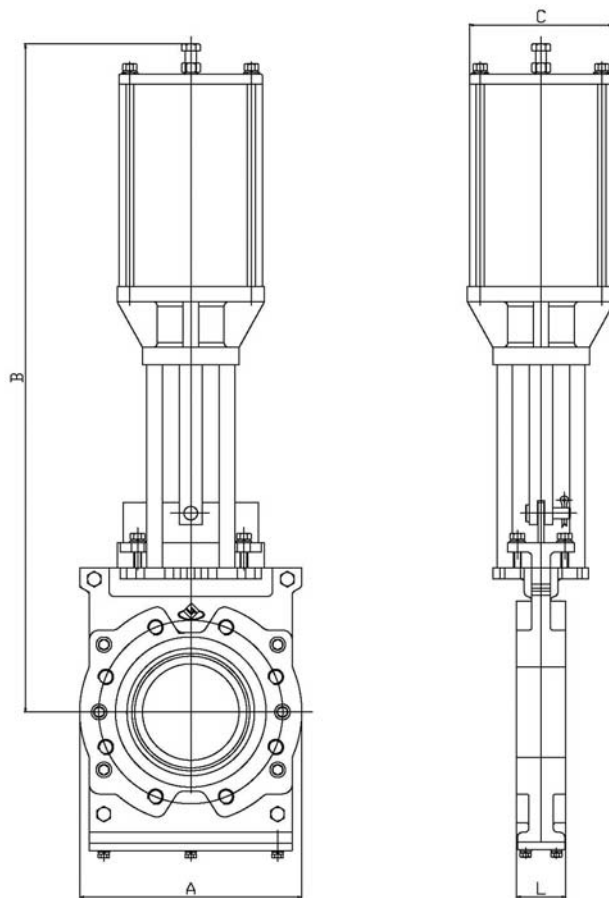
Full Close

The valve is fully closed when the gate completely contacts with the sealing seat. The gate goes down and penetrates into two seats with its knife end to ensure bidirectional bubble tightness.

OUTLINE DIMENSION



Nominal Dim. (mm)	L	A	B	C (Full Open/Full Close)	E (Full Open/Full Close)	D	F	G
DN50	48	165	110	510/450	/	Φ200	/	/
DN80	51	200	125	580/485	/	Φ250	/	/
DN100	51	230	150	670/450	/	Φ250	/	/
DN150	57	285	190	780/610	/	Φ315	/	/
DN200	70	345	220	885/660	/	Φ355	/	/
DN250	70	405	255	1060/780	/	Φ400	/	/
DN300	76	485	300	/	1450/1105	/	Φ260	Φ460
DN350	76	520	320	/	1655/1275	/	Φ260	Φ460
DN400	89	600	360	/	1755/1325	/	Φ260	Φ460
DN450	89	670	390	/	1800/1230	/	340	Φ460
DN500	114	705	450	/	1950/1390	/	340	Φ460



Nominal Dim. (mm)	L	A	B	C
DN50	48	165	550	120
DN80	51	200	640	120
DN100	51	230	680	145
DN150	57	285	850	180
DN200	70	345	980	225
DN250	70	405	1250	225
DN300	76	485	1350	275
DN350	76	520	1580	330
DN400	89	600	1855	380
DN450	89	670	2000	500
DN500	114	705	2180	550