

KNIFE GATE VALVES



AKAY INDUSTRIES PVT LTD

UNI-DIRECTIONAL KNIFE GATE VALVES

- The gate knife edge slices through slurries, solids.
- Standard integral metal seat & optional replaceable zero leakage resilient seats.
- Compact & lightweight design, thin profile & minimal weight for easy installation & reduces pipeline stress.
- High flow rates with low pressure drops.
- Smooth operation due to guided gate & proper packing system, required minimal actuation force.
- Actuation options: Can be operated manually or pneumatic , electric or hydraulic actuators.

Akay Uni-directional knife gate valves are designed according to MSS-SP-81 for industrial service applications. Metal or resilient seat options available with metal to metal seat for high temperature or abrasive media, and resilient seat provide bubble-tight shut-off. These valves are designed to control the flow of abrasive, corrosive, or viscous media often containing suspended solids (like slurries, pulp or wastewater) in one specific direction.

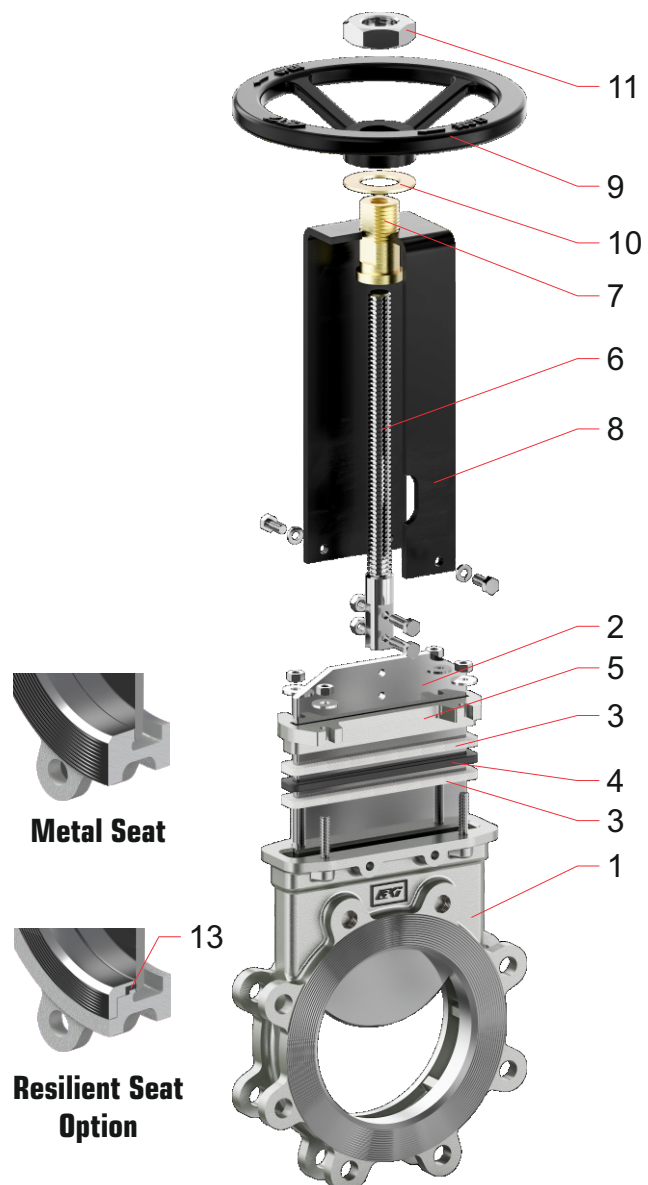
Designed for applications such as:

- Pulp & Paper industry
- Power plants.
- Wastewater treatment
- Chemical plants.
- Mining.
- Food and Beverage.

Size Range : DN50 - DN600
End Connection : ASME B16.5 CL.150
Pressure Rating : PN10 / 150 psi
Standard Compliance : DESIGN : MSS SP 81
 FACE TO FACE : MSS SP 81
 WALL THICKNESS : ASME B 16.34
 TESTING : MSS SP 81 / MSS SP 151

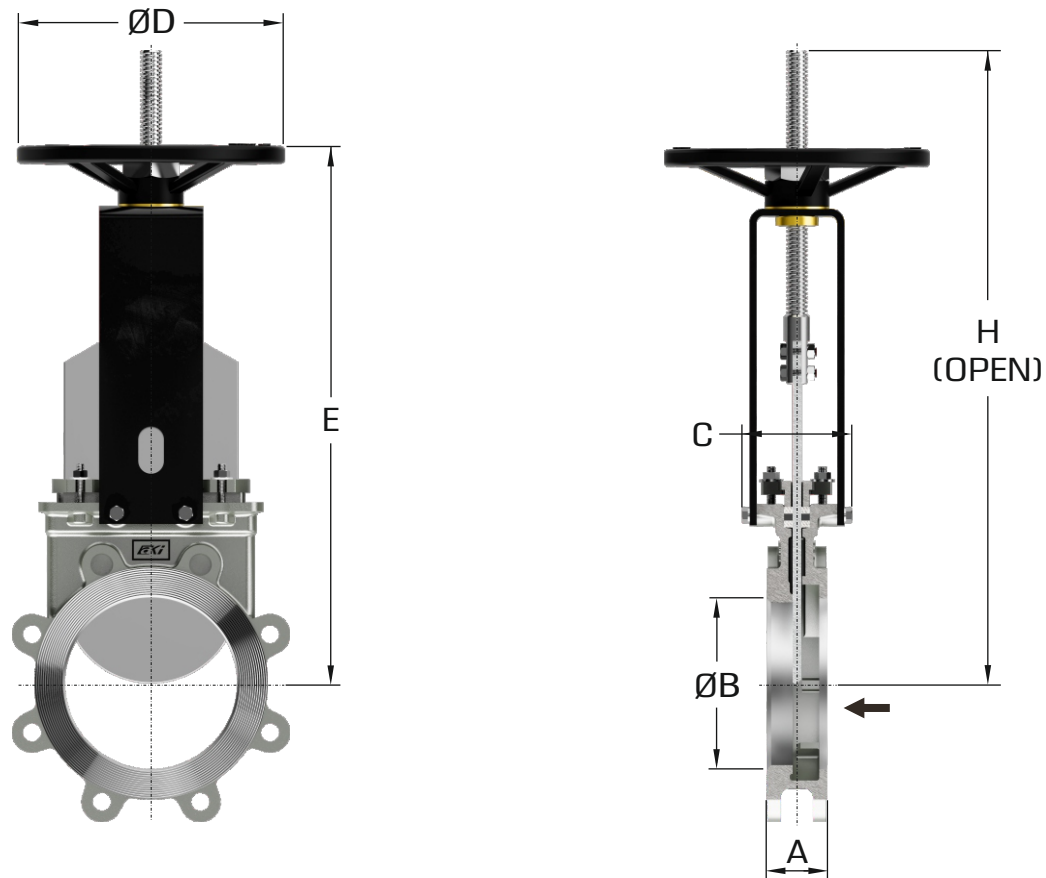
Part List

NO	QTY	PART NAME	MATERIAL
1	1	BODY	CF8 / CF8M
2	1	GATE	304 / 316
3	1	PACKING	PTFE
4	1	O-RING SEAL	EPDM/NITRILE/VITON
5	2	GLAND	CF8 / CF8M
6	1	STEM	304 / 316
7	1	STEM NUT	BRASS
8	1	YOKE	CS/304 / 316
9	1	HANDWHEEL	CI / MS FABRICATED
10	1	FRICTION WASHER	BRASS
11	1	LOCK NUT	STEEL / 304 / 306
12	1	FASTENERS	STEEL / 304 / 306
13	1	SEAT	EPDM/NITRILE/VITON



“BETTER... BY DESIGN!”

ENGINEERING DATA



Dimensions :

VALVE SIZE	A	$\varnothing B$	C	$\varnothing D$	E	H	WEIGHT kg (APPROX)
DN50	48	50	100	225	328	410	8
DN80	51	80	100	225	370	465	11
DN100	51	100	100	225	430	510	14
DN125	57	125	100	225	465	585	18
DN150	57	150	100	225	495	660	22
DN200	70	200	128	310	625	840	35
DN250	70	250	128	310	762	1010	55
DN300	76	300	128	410	825	1100	70
DN350	76	350	200	410	1035	1305	105
DN400	89	400	200	410	1075	1410	130
DN450	89	450	210	550	1260	1675	170
DN500	114	500	210	550	1300	1780	215
DN600	114	600	210	550	1350	1990	310

Note: Size DN 350 & above are recommended with bevel gear operator.

“BETTER... BY DESIGN!”

BI-DIRECTIONAL KNIFE GATE VALVES

- Smooth flow non-clogging full port design.
- Bi-directional sealing - shut off against pressure from either side.
- Compact structure ideal for limited space applications.
- Bubble-tight shut-off in both directions.
- Steel reinforcement increases strength of U-Seal and provides long lasting resilience.
- Can be installed in horizontal or vertical position.

Akay Bi-directional knife gate valves are designed to handle flow in both directions and provide a tight shut-off in either direction. Its design provides a completely flat seat with no internal cavities, preventing any build up of solids in the seal area. These valves are commonly used in industries handling slurries, viscous fluids, and solid-laden flows.

Designed for applications such as:

- Pulp & Paper industry
- Food and Beverage.
- Pumping.
- Water treatment (clean & waste)
- Chemical plants.
- Mining.
- Power plants.

Size Range : DN50 - DN600

End Connection : ASME B16.5 CL.150

Pressure Rating : PN10 / 150 psi

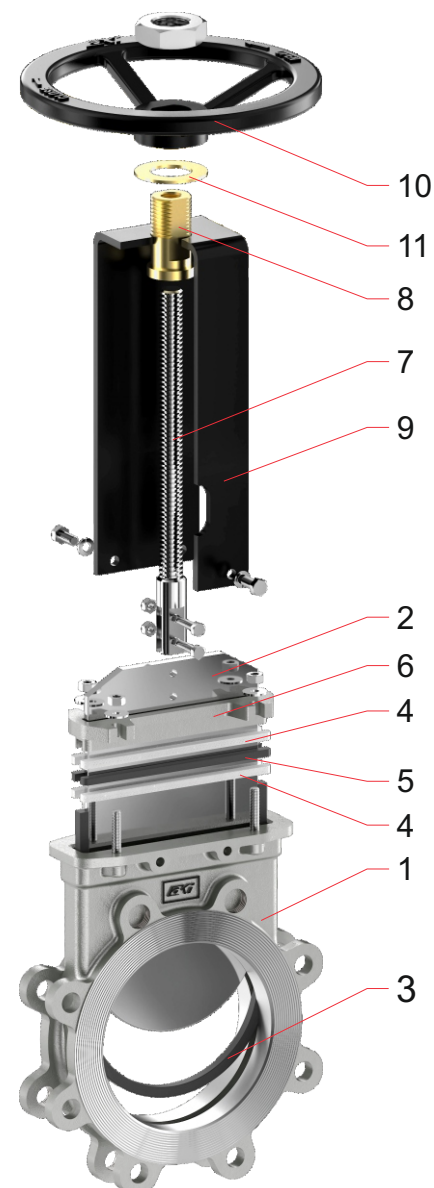
Standard Compliance : DESIGN : MSS SP 81
FACE TO FACE : MSS SP 81
WALL THICKNESS : ASME B 16.34
TESTING : MSS SP 81 / MSS SP 151

Seat Options :

SEAT MATERIAL	TEMPERATURE (°C)	APPLICATION
EPDM	120	Acids & Oils
Nitrile	90	Petroleum Products
Viton	200	Chemicals
Silicon	200	Food & Pharmaceutical

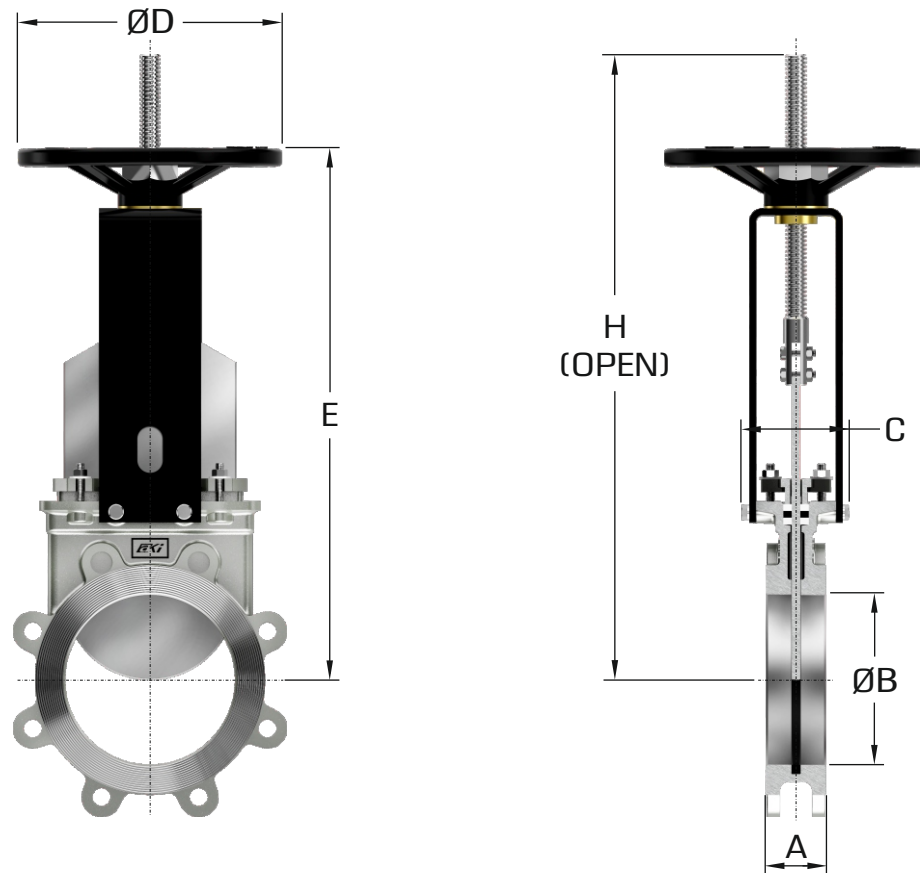
Part List

NO	QTY	PART NAME	MATERIAL
1	1	BODY	CF8 / CF8M
2	1	GATE	304 / 316
3	1	SEAT	EPDM/NITRILE/VITON
4	1	PACKING	PTFE
5	1	O-RING SEAL	EPDM/NITRILE/VITON
6	2	GLAND	CF8 / CF8M
7	1	STEM	304 / 316
8	1	STEM NUT	BRASS
9	1	YOKE	CS/304 / 316
10	1	HANDWHEEL	CI / MS FABRICATED
11	1	FRICTION WASHER	BRASS
12	1	FASTENERS	STEEL / 304 / 306



“BETTER... BY DESIGN!”

ENGINEERING DATA



Dimensions :

VALVE SIZE	A	$\varnothing B$	C	$\varnothing D$	E	H	WEIGHT kg
DN50	48	50	100	225	328	410	9
DN80	51	80	100	225	370	465	13
DN100	51	100	100	225	430	510	16
DN125	57	125	100	225	465	585	24
DN150	57	150	100	225	495	660	26
DN200	70	200	128	310	625	840	39
DN250	70	250	128	310	762	1010	65
DN300	76	300	128	410	825	1100	86
DN350	76	350	200	410	1035	1305	118
DN400	89	400	200	410	1075	1410	160
DN450	89	450	210	550	1260	1675	206
DN500	114	500	210	550	1300	1780	265
DN600	114	600	210	550	1350	1990	375

Note: Size DN 350 & above are recommended with bevel gear operator.

“BETTER... BY DESIGN!”

INDUSTRIAL VALVES



Ball Valve



Butterfly Valve



Knife Gate Valve



Piston Valve



AKAY INDUSTRIES PVT LTD

CTS No: 611-612-1, STATION ROAD HUBLI - 580020 KARNATAKA - INDIA

TEL.: +91 (0) 836 2486001 / 02 • EMAIL: business@akayind.co.in • WEB: www.akayind.co.in