

## POLYURETHANE-LINED KNIFE GATE VALVE

The EP model knife gate valve is a polyurethane-lined bidirectional lug type valve designed for general industrial service applications with abrasive fluids. The design of the body and seat also assures non-clogging shut off on suspended solids in industries such as:

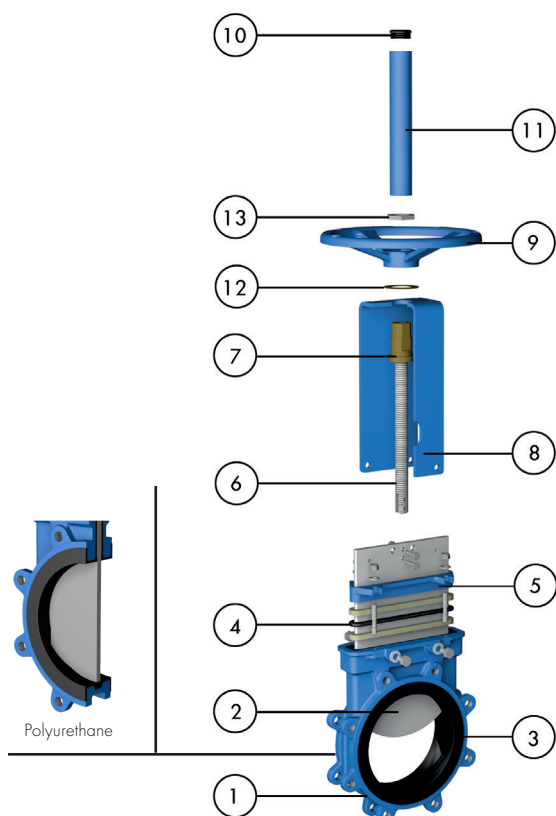
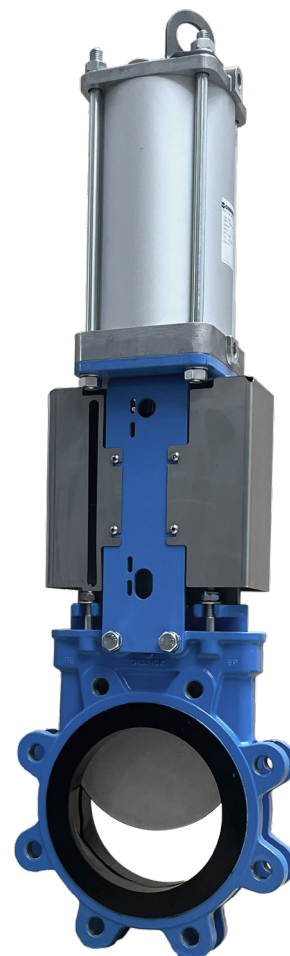
- Mining
- Pulp and Paper
- Power plants
- Chemical plants
- Food and Beverage
- Etc.

### Product description

- Bi-directional lug type knife gate valve
- Size range of DN50-600 (larger upon request). See Dimension Charts for pressure rating
- Rising stem as standard. Non rising stem also available
- Standard flange connection: EN-1092, ASME B16.5 (class 150) and AS 2129 Table D & E. Others upon request
- Manual (handwheel, chainwheel, lever and bevel gear), pneumatic (single and double-acting), electric and hydraulic actuation options available
- Directives: For specific EU Directives and other Certificates requirements, please see the Directives and Certificates Compliance - Knife Gate Valves – Catalogues and Datasheets

### Features

- Lug type monoblock ductile iron body with polyurethane lining
- Full bore design
- Stainless steel gate polished both sides to avoid jamming and seat damage
- Long life PTFE impregnated synthetic fibre plus EPDM o-ring packing with easy access and adjustable gland follower. Wide range of packing materials available
- RAL-5015 blue epoxy-coating on all cast iron/carbon steel components
- Automated valves provided with gate guards in accordance with EU Safety Standards
- Actuation accessories: limit & proximity switches, mechanical stops, positioners, solenoid valves, manual overrides, locking devices, fail safe systems, stem extensions and floor stands

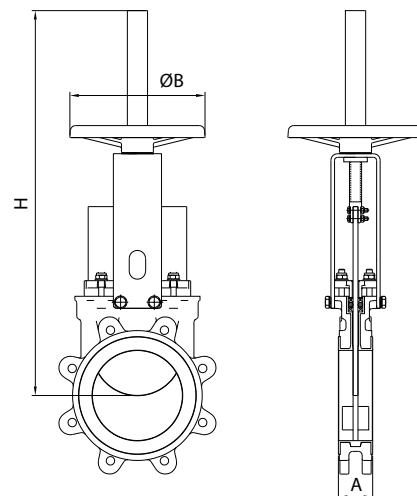


### STANDARD PARTS LIST

Part	Description
1	Body Ductile iron
2	Gate AISI 304
3	Seat Polyurethane
4	Packing PTFE Impreg. Synth. Fibre (ST) + EPDM O-ring
5	Gland follower A216 WCB
6	Stem Stainless Steel
7	Stem nut Brass
8	Yoke Epoxy-coated Carbon Steel
9	Handwheel EN-GJS400
10	Cap Plastic
11	Stem protector Epoxy-coated Carbon Steel
12	Friction washer Brass
13	Nut Zinc Plated Carbon Steel

## Handwheel Rising Stem

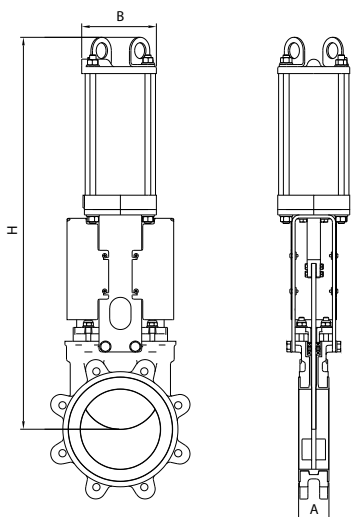
DN	Pressure	A	ØB	H	Weight (kg.)
50	10 bar	48	225	430	9
65	10 bar	48	225	450	10
80	10 bar	51	225	475	11
100	10 bar	51	225	520	12,5
125	10 bar	57	225	600	18
150	10 bar	57	225	652	20
200	10 bar	70	310	822	32
250	10 bar	70	310	1022	47
300	10 bar	76	410	1122	65
350	10 bar	76	410	1323	95
400	10 bar	89	410	1427	122
450	10 bar	89	550	1594	160
500	10 bar	114	550	1707	202
600	10 bar	114	550	2022	290



## Pneumatic Cylinder

DN	Pressure	A	B	H	Connect.	Weight (kg.)
50	10 bar	48	115	430	1/4" G	11
65	10 bar	48	115	454	1/4" G	12
80	10 bar	51	115	497	1/4" G	13
100	10 bar	51	115	558	1/4" G	15
125	10 bar	57	140	632	1/4" G	23
150	10 bar	57	140	708	1/4" G	27
200	10 bar	70	175	872	1/4" G	46
250	10 bar	70	220	1042	3/8" G	70
300	10 bar	76	220	1192	3/8" G	89
350	10 bar	76	277	1387	3/8" G	135
400	10 bar	89	277	1541	3/8" G	162
450	10 bar	89	382	1710	1/2" G	212
500	10 bar	114	382	1873	1/2" G	290
600	10 bar	114	382	2178	1/2" G	375

Note: pneumatic cylinder sizing for sizes DN 300mm and above are based on EX pressure ratings



## Electric Actuator

DN	Pressure	A	C	ØB	H	D	E	F	G	Torque (Nm)
50	10 bar	48	377	160	547	265	249	62	238	10
65	10 bar	48	404	160	574	265	249	62	238	10
80	10 bar	51	429	160	599	265	249	62	238	10
100	10 bar	51	470	160	640	265	249	62	238	10
125	10 bar	57	504	160	674	265	249	62	238	15
150	10 bar	57	555	160	1055	265	249	62	238	20
200	10 bar	70	669	160	1169	265	249	62	238	30
250	10 bar	70	769	160	1269	265	249	62	238	45
300	10 bar	76	869	160	1369	265	249	62	238	40
350	10 bar	76	940	200	1440	283	254	65	248	70
400	10 bar	89	1044	200	1544	283	254	65	248	90
450	10 bar	89	1172	200	1672	283	254	65	248	110
500	10 bar	114	1280	200	1780	283	254	65	248	95
600	10 bar	114	1565	315	2065	389	336	91	286	140

Note: torque values for sizes DN 300mm and above are calculated based on EX pressure ratings. For full differential pressure, check with ORBINOX representative

