

POLYURETHANE-LINED KNIFE GATE VALVE

The Series 56 (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:

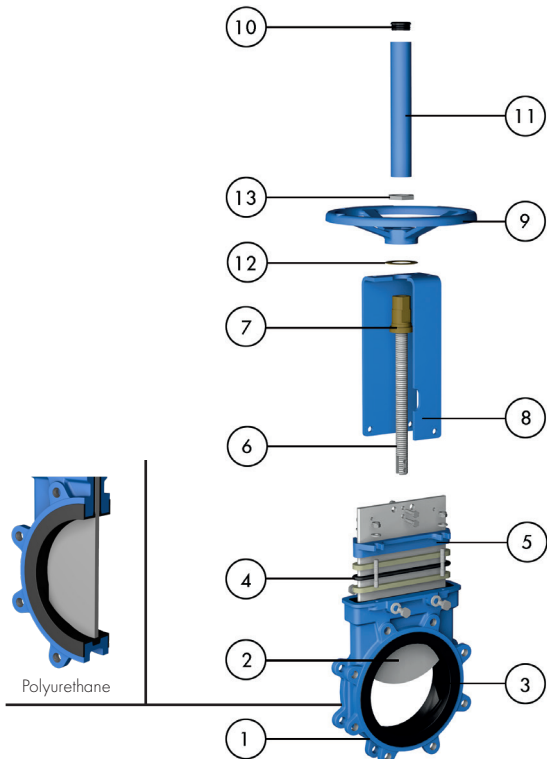
- Mining
- Pulp and Paper
- Power plants
- Chemical plants
- Food and Beverage
- Etc.

Product description

- Bi-directional lug type knife gate valve
- Size range of DN2in-24in (larger sizes upon request). See Dimension Charts for pressure rating
- Rising stem as standard. Non rising stem also available
- Standard flange connection: ASME B16.5 (class 150), EN 1092 and AS 2129 Table D & E. Others available 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 & 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. Only in EU
- Actuation accessories: limit & proximity switches, mechanical stops, positioners, solenoid valves, manual overrides, locking devices, fail safe systems, stem extensions and floor stands

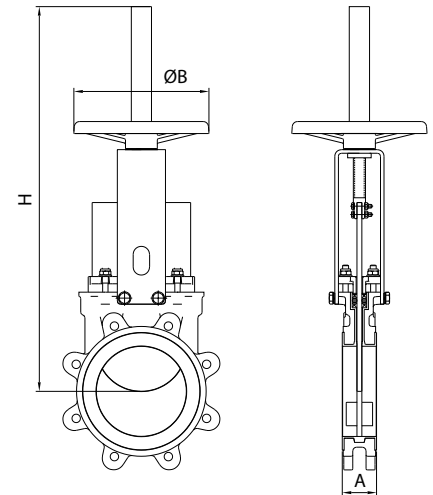


STANDARD PARTS LIST

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

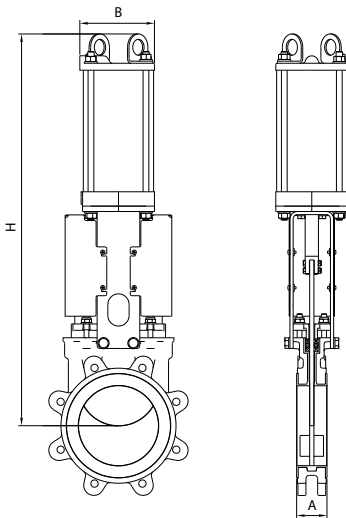
DN	Pressure	A (in)	ØB (in)	H (in)	Weight (lbs.)
2	150 psi	1,89	8,86	16,93	20
2,5	150 psi	1,89	8,86	17,72	22
3	150 psi	2,01	8,86	18,70	24
4	150 psi	2,01	8,86	20,47	28
5	150 psi	2,24	8,86	23,62	40
6	150 psi	2,24	8,86	25,67	45
8	150 psi	2,76	12,20	32,36	71
10	150 psi	2,76	12,20	40,24	104
12	150 psi	2,99	16,14	44,17	143
14	150 psi	2,99	16,14	52,09	210
16	150 psi	3,50	16,14	56,18	269
18	150 psi	3,50	21,65	62,76	353
20	150 psi	4,49	21,65	67,20	445
24	150 psi	4,49	21,65	79,61	640



Pneumatic Cylinder

DN (in)	Pressure	A (in)	B (in)	H (in)	Connect.	Weight (lbs.)
2	150psi	1,89	4,53	16,93	1/4" G	24
2,5	150psi	1,89	4,53	17,87	1/4" G	26
3	150psi	2,01	4,53	19,57	1/4" G	29
4	150psi	2,01	4,53	21,97	1/4" G	33
5	150psi	2,24	5,51	24,88	1/4" G	51
6	150psi	2,24	5,51	27,87	1/4" G	60
8	150psi	2,76	6,89	34,33	1/4" G	101
10	150psi	2,76	8,66	41,02	3/8" G	154
12	150psi	2,99	8,66	46,93	3/8" G	196
14	150psi	2,99	10,91	54,61	3/8" G	298
16	150psi	3,50	10,91	60,67	3/8" G	357
18	150psi	3,50	15,04	67,32	1/2" G	467
20	150psi	4,49	15,04	73,74	1/2" G	639
24	150psi	4,49	15,04	85,75	1/2" G	827

Note: pneumatic cylinder sizing for sizes DN 12in and above are based on Series 10 (EX) pressure ratings



Electric Actuator

DN (in)	Pressure	A (in)	C (in)	ØB (in)	H (in)	D (in)	E (in)	F (in)	G (in)	Torque (ft.LBS)
2	150 psi	1,89	14,84	6,30	21,54	10,43	9,80	2,44	9,37	7,4
2,5	150 psi	1,89	15,91	6,30	22,60	10,43	9,80	2,44	9,37	7,4
3	150 psi	2,01	16,89	6,30	23,58	10,43	9,80	2,44	9,37	7,4
4	150 psi	2,01	18,50	6,30	25,20	10,43	9,80	2,44	9,37	7,4
5	150 psi	2,24	19,84	6,30	26,54	10,43	9,80	2,44	9,37	11,06
6	150 psi	2,24	21,85	6,30	41,54	10,43	9,80	2,44	9,37	14,8
8	150 psi	2,76	26,34	6,30	46,02	10,43	9,80	2,44	9,37	22,2
10	150 psi	2,76	30,28	6,30	49,96	10,43	9,80	2,44	9,37	33,3
12	150 psi	2,99	34,21	6,30	53,90	10,43	9,80	2,44	9,37	29,5
14	150 psi	2,99	37,01	7,87	56,69	11,14	10,00	2,56	9,76	51,8
16	150 psi	3,50	41,10	7,87	60,79	11,14	10,00	2,56	9,76	66,38
18	150 psi	3,50	46,14	7,87	65,83	11,14	10,00	2,56	9,76	81,4
20	150 psi	4,49	50,39	7,87	70,08	11,14	10,00	2,56	9,76	70,06
24	150 psi	4,49	61,61	12,40	81,30	15,31	13,23	3,58	11,26	103,26

Note: torque values for sizes DN 12in and above are calculated based on Series 10 (EX) pressure ratings. For full differential pressure, check with ORBINOX representative

