

BI-DIRECTIONAL KNIFE GATE VALVE

The Series 11 (EB) model knife gate is a bi-directional wafer type valve designed for general industrial service applications. The design of the body and seat assures non-clogging shut off on suspended solids in industries such as:

- Wastewater treatment plants
- Sludge Handling and storm tanks
- Biogas plants
- Chemical plants
- Food and Beverage
- Agriculture
- etc.

Product description

- Bi-directional wafer type knife gate valve
- Size range of DN 2in-48in (larger sizes upon request). See Dimension Charts for pressure rating
- Non-rising stem as standard. Rising stem also available
- Standard flange connection: EN-1092 PN 10. 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 and Certificates Compliance - Knife Gate Valves – Catalogues and Datasheets

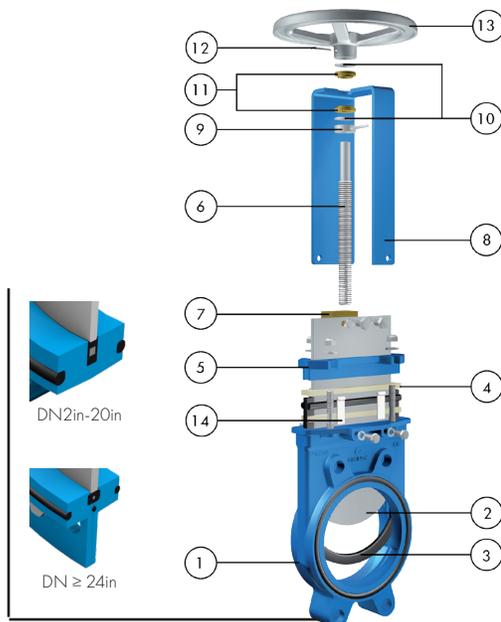
Features

- Wafer monoblock cast design up to DN 20in with special seal housing machining for a perfect adjustment of the body with the gate and the seal, reducing the operation torque, maintaining tightness and avoiding any build-up
- Two-part bolted body design from DN 24in and above
- Full port design for greater flow capacity and minimal pressure drop
- Suitable for dead-end service up to DN 20in to the full rating
- Stainless steel gate polished both sides to avoid jamming and seat damage
- Standard EPDM seat with metallic core
- 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
- Other options: V-ports, special materials, fabricated valves, etc.
- 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

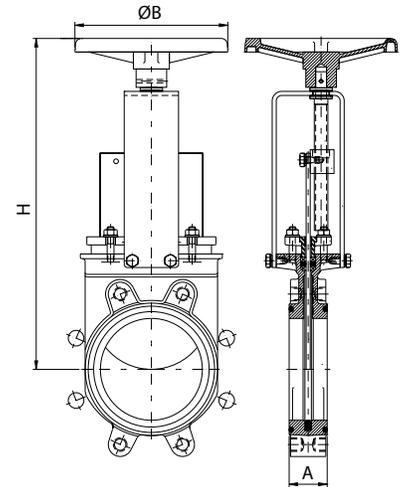
Part	Description
1	Body EN-GJS400
2	Gate AISI 304
3	Seat EPDM / NBR
4	Packing PTFE Impreg. Synth. Fibre (ST) + EPDM O-ring
5	Gland follower EN-GJS400
6	Stem Stainless Steel
7	Stem nut Brass
8	Yoke Epoxy-coated Carbon Steel
9	Axial fixing bush AISI 304
10	Friction washer PET + solid lubricant
11	Bushing Bronze
12	Spring pin AISI 420 (ISO 8752)
13	Handwheel DN≤12.20in: Aluminium (AlSi12); DN≥16.70in: EN-GJS400
14	Slider (up to DN300) Nylon



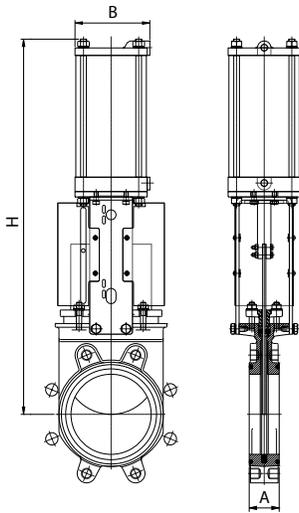
Handwheel Rising Non Stem

DN (in)	W. pressure	A (in)	ØB (in)	H (in)	Weight (lbs.)
2	230 psi	1,70	8,86	12,28	18
2,5	230 psi	1,81	8,86	13,34	20
3	230 psi	1,81	8,86	14,33	23
4	230 psi	2,05	8,86	15,94	27
5	230 psi	2,20	8,86	17,28	31
6	150 psi	2,20	8,86	19,09	36
8	150 psi	2,36	12,20	23,42	64
10	150 psi	2,68	12,20	27,36	93
12	90 psi	3,07	12,20	31,30	126
14	90 psi	3,07	16,14	37,20	201
16	90 psi	4,02	16,14	41,30	247
18	75 psi	4,49	21,65	44,92	369
20	60 psi	5,00	21,65	49,37	424
24	60 psi	4,33	21,65	57,44	596

A: EN558 series 20 up to DN 20in, for DN 24in and above acc. ORBINOX standard



Pneumatic Cylinder



DN (in)	W. pressure	A (in)	B (in)	H (in)	Connect.	Weight (lbs.)
2	230 psi	1,70	4,53	16,22	1/4" G	20
2,5	230 psi	1,81	4,53	17,87	1/4" G	23
3	230 psi	1,81	4,53	19,56	1/4" G	27
4	230 psi	2,05	4,53	21,96	1/4" G	29
5	230 psi	2,20	5,51	24,88	1/4" G	45
6	150 psi	2,20	5,51	27,67	1/4" G	49
8	150 psi	2,36	6,89	34,33	1/4" G	86
10	150 psi	2,68	8,66	41,02	3/8" G	128
12	90 psi	3,07	8,66	46,55	3/8" G	164
14	90 psi	3,07	10,90	54,09	3/8" G	287
16	90 psi	4,02	10,90	59,40	3/8" G	340
18	75 psi	4,49	15,03	66,45	1/2" G	494
20	60 psi	5,00	15,03	72,36	1/2" G	556
24	60 psi	4,33	15,03	82,59	1/2" G	754
28	30 psi	4,33	17,48	96,88	3/4" G	1058
32	30 psi	4,33	17,48	106,45	3/4" G	1290

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Electric Actuator Rising Stem

DN (in)	W. pressure	A (in)	C (in)	ØB (in)	H (in)	D (in)	E (in)	F (in)	G (in)	Torque (ft.LBS)	Weight (lbs.)
2	230 psi	1,70	14,84	6,30	20,94	10,43	9,80	2,44	9,37	7.4	146
2,5	230 psi	1,81	15,9	6,30	23,62	10,43	9,80	2,44	9,37	7.4	148
3	230 psi	1,81	16,88	6,30	26,73	10,43	9,80	2,44	9,37	7.4	153
4	230 psi	2,05	18,5	6,30	26,18	10,43	9,80	2,44	9,37	7.4	155
5	230 psi	2,20	19,84	6,30	27,55	10,43	9,80	2,44	9,37	11.1	161
6	150 psi	2,20	21,65	6,30	44,09	10,43	9,80	2,44	9,37	14.8	166
8	150 psi	2,36	25,86	6,30	48,70	10,43	9,80	2,44	9,37	22.2	192
10	150 psi	2,68	29,8	6,30	52,63	10,43	9,80	2,44	9,37	33.3	223
12	90 psi	3,07	33,34	6,30	56,18	10,43	9,80	2,44	9,37	29.50	258
14	90 psi	3,07	37,59	7,87	60,43	11,14	10,00	2,55	9,76	51.8	272
16	90 psi	4,02	40,94	7,87	63,77	11,14	10,00	2,55	9,76	66.38	320
18	75 psi	4,49	44,44	7,87	67,87	11,14	10,00	2,55	9,76	81.4	439
20	60 psi	5,00	48,74	7,87	72,16	11,14	10,00	3,58	9,76	70.06	497
24	60 psi	4,33	54,17	12,40	82,40	15,31	13,22	3,58	11,25	103.26	728
28	30 psi	4,33	65,35	12,40	110,23	15,31	13,22	3,58	11,25	88.50	-
32	30 psi	4,33	72,79	12,40	117,67	15,31	13,22	3,58	11,25	132.76	-
36	30 psi	4,33	82,08	12,40	126,96	15,31	13,22	3,58	11,25	163.74	-
40	30 psi	4,33	99,02	15,74	144,49	15,31	13,34	3,58	11,25	221.27	-
48	30 psi	5,9	118,54	20,00	174,40	16,93	14,37	8,00	12,99	354.03	-

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Maximum pressure torque in clean water at room temperature

