

BI-DIRECTIONAL KNIFE GATE VALVE

The 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:

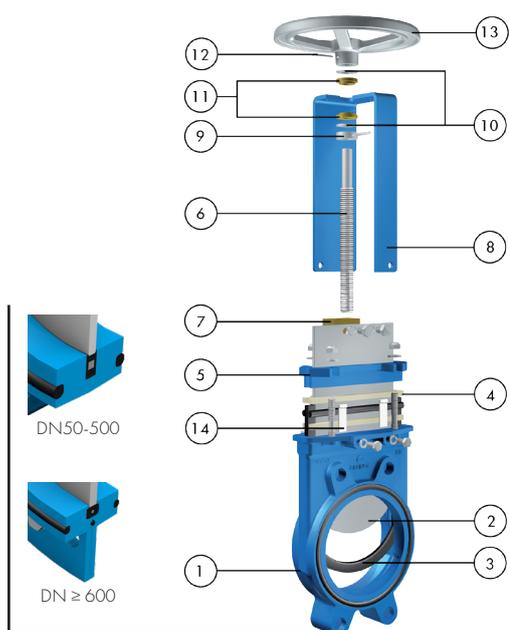
- Wastewater treatment plants
- Sludge Handling and storm tanks
- Biogas plants
- Chemical plants
- Food and Beverage
- Agriculture
- etc.

Product description

- Bi-directional wafer type knife gate valve
- Size range of DN50-1200 (larger upon request). See Dimension Charts for pressure rating
- Non-rising stem as standard. Rising stem also available
- Standard flange connection: EN-1092 PN10. Others upon request
- Manual (handwheel, chainwheel, lever and bevel gear), pneumatic (single and double-acting), electric and hydraulic actuation options available
- For EU Directives and other Certificates, please see the document: Directives and Certificates Compliance - Knife Gate Valves - Catalogues and Datasheets

Features

- Wafer monoblock cast design up to DN 500 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 600 and above
- Full port design for greater flow capacity and minimal pressure drop
- Suitable for dead-end service up to DN 500 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
- 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



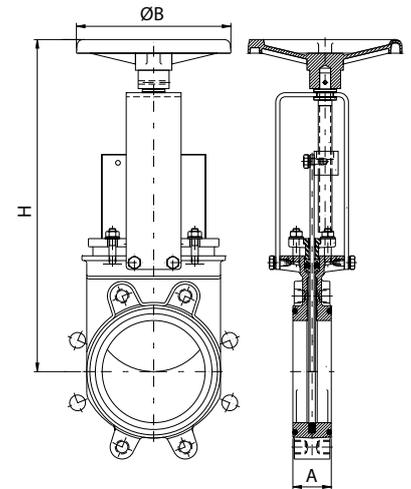
STANDARD PARTS LIST

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≤310: Aluminium (AlSi12); DN≥410 EN-GJS400
14	Slider (up to DN300) Nylon

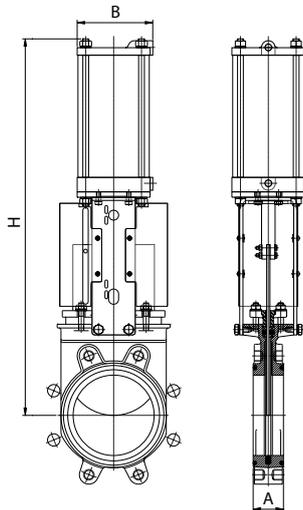
Handwheel Non-Rising Stem

DN	W. pressure	A	ØB	H	Weight (Kg.)
50	16 bar	43	225	312	8
65	16 bar	46	225	339	9
80	16 bar	46	225	364	10
100	16 bar	52	225	405	12
125	16 bar	56	225	439	14
150	10 bar	56	225	485	16
200	10 bar	60	310	595	29
250	10 bar	68	310	695	42
300	6 bar	78	310	785	57
350	6 bar	78	410	932	91
400	6 bar	102	410	1017	112
450	5 bar	114	550	1119	167
500	4 bar	127	550	1219	192
600	4 bar	110	550	1379	270

A: EN558 series 20 up to DN500, for DN600 and above acc. ORBINOX standard



Pneumatic Cylinder



DN	W. pressure	A	B	H	Connect.	Weight (Kg.)
50	16 bar	43	115	412	1/4" G	9
65	16 bar	46	115	454	1/4" G	10
80	16 bar	46	115	497	1/4" G	12
100	16 bar	52	115	558	1/4" G	13
125	16 bar	56	140	632	1/4" G	20
150	10 bar	56	140	703	1/4" G	22
200	10 bar	60	175	872	1/4" G	39
250	10 bar	68	220	1042	3/8" G	58
300	6 bar	78	220	1182	3/8" G	74
350	6 bar	78	277	1374	3/8" G	130
400	6 bar	102	277	1509	3/8" G	154
450	5 bar	114	382	1688	1/2" G	224
500	4 bar	127	382	1838	1/2" G	252
600	4 bar	110	382	2098	1/2" G	342
700	2 bar	110	444	2461	3/4" G	480
800	2 bar	110	444	2704	3/4" G	585

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Electric Actuator Rising Stem

DN	W. pressure	A	C	ØB	H	D	E	F	G	Torque (Nm)	Weight (Kg.)
50	16 bar	43	377	160	532	265	249	62	238	10	66
65	16 bar	46	404	160	600	265	249	62	238	10	67
80	16 bar	46	429	160	674	265	249	62	238	10	69
100	16 bar	52	470	160	665	265	249	62	238	10	70
125	16 bar	56	504	160	700	265	249	62	238	15	73
150	10 bar	56	550	160	1120	265	249	62	238	20	75
200	10 bar	60	657	160	1237	265	249	62	238	30	87
250	10 bar	68	757	160	1337	265	249	62	238	45	101
300	6 bar	78	847	160	1427	265	249	62	238	40	117
350	6 bar	78	955	200	1535	283	254	65	248	70	123
400	6 bar	102	1040	200	1620	283	254	65	248	90	145
450	5 bar	114	1129	200	1724	283	254	65	248	110	199
500	4 bar	127	1238	200	1833	283	254	65	248	95	225
600	4 bar	110	1376	315	2093	389	336	91	286	140	330
700	2 bar	110	1660	315	2800	389	336	91	285	120	-
800	2 bar	110	1849	315	2989	389	336	91	286	180	-
900	2 bar	110	2085	315	3225	389	336	91	286	220	-
1000	2 bar	110	2515	400	3670	389	339	91	286	300	-
1200	2 bar	150	3011	500	4430	430	365	200	330	480	-

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Maximum pressure torque in clean water at room temperature

