

HOPPER SHAPE KNIFE GATE VALVE

The Series 14 (XC) model knife gate is a uni-directional wafer valve designed for industrial bulk handling service applications (powdered and granular products). The special design of the body allows for easy passage of the fluid and makes it ideal for use as silo outlet valve. Widely used in industries such as:

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

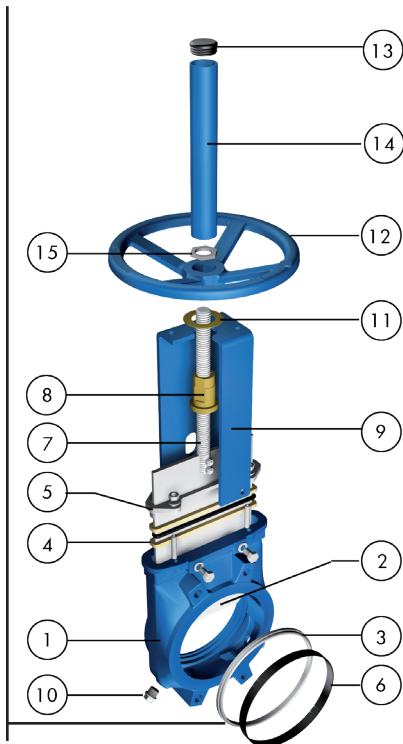
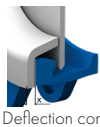
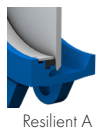
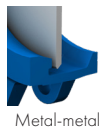
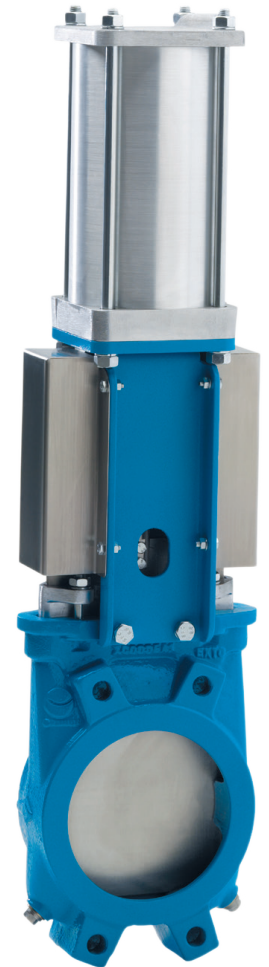
Valve is usually installed under silos or hoppers in vertical pipes with the seat in the upstream side of the valve in order to protect it from the solids flow. This set up helps to protect the seat from premature wear and gate jamming due to solid build-up

Product description

- Uni-directional wafer type knife gate valve
- Size range of DN 2in-24in (larger upon request). See Dimension Charts for pressure rating
- Rising & non-rising stem configurations available
- Standard flange connection: EN 1092 PN 10 and ASME B 16.5 (class 150). Others available 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 cast monoblock body with internal cast-in gate wedges and guides for tighter shut-off as well as special cast gate supports for permanent contact between seat and gate when the valve is installed in flow apposite direction
- Wide face-to-face distance and integrated flushing corners to avoid any solids build up that would prevent the valve from closing, as well as, standard flush ports for body cleaning
- Stainless steel rectangular shaped gate, polished both sides to avoid jamming and seat damage
- Standard EPDM resilient seat. Metal-to-metal seat, as well as high performance rings and deflection cones available
- 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: bonnets, flushing 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

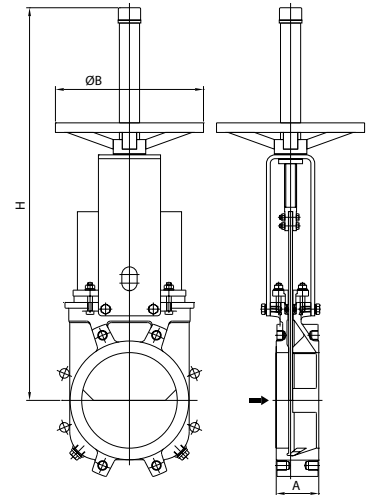
Part	Description
1	Body EN-GJL250 / CF8M ¹
2	Gate AISI 304 / AISI 316 ¹
3	Seat Metal-Metal / EPDM / NBR
4	Packing PTFE Impreg. Synth. Fibre (ST) + EPDM O-ring
5	Gland follower Al. (DN 2in - 12in) / EN-GJS400 (DN 14in - 48in) / CF8M ¹
6	Seat retainer ring AISI 304 / AISI 316 ¹
7	Stem Stainless Steel
8	Stem nut Brass
9	Yoke Epoxy-coated Carbon Steel
10	Cleaning Carbon steel / Stainless steel ¹
11	Friction washer Brass
12	Handwheel EN-GJS400
13	Cap Plastic
14	Stem protector Epoxy-coated Carbon Steel
15	Nut Zinc Plated Carbon Steel

¹ Stainless steel configuration

Handwheel Rising Stem

DN (in)	W. pressure *	A (in)	ØB (in)	H (in)	Weight (lbs.)
2	150 psi	1,81	8,86	16,53	20
2,5	150 psi	1,81	8,86	17,71	21
3	150 psi	2,52	8,86	18,70	27
4	150 psi	2,52	8,86	20,47	31
5	150 psi	2,75	8,86	23,62	34
6	150 psi	2,99	8,86	25,67	38
8	150 psi	3,50	12,20	32,36	75
10	150 psi	4,48	12,20	39,84	124
12	90 psi	4,48	12,20	43,38	146
14	90 psi	5,00	16,14	51,37	245
16	90 psi	5,51	16,14	54,53	327
18	75 psi	5,98	21,65	62,28	435
20	60 psi	5,98	21,65	65,82	459
24	60 psi	7,00	21,65	77,24	642

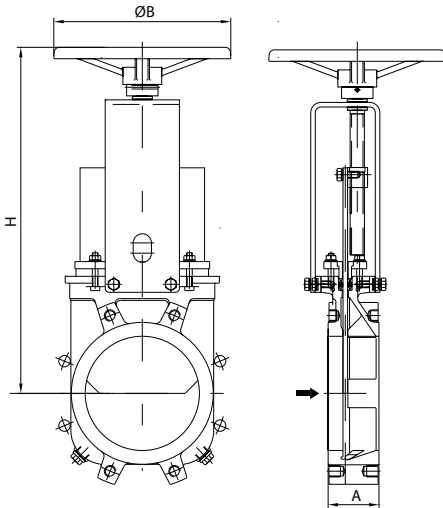
* For specific tightness requirements, contact ORBINOX technical department



Handwheel Non-Rising Stem

DN (in)	W. pressure *	A (in)	ØB (in)	H (in)	Weight (lbs.)
2	150 psi	1,81	8,86	12,28	16
2,5	150 psi	1,81	8,86	13,34	20
3	150 psi	2,52	8,86	14,33	25
4	150 psi	2,52	8,86	15,94	29
5	150 psi	2,75	8,86	17,28	31
6	150 psi	2,99	8,86	19,09	36
8	150 psi	3,50	12,20	23,42	69
10	150 psi	4,48	12,20	26,97	109
12	90 psi	4,48	12,20	30,51	128
14	90 psi	5,00	16,14	36,50	236
16	90 psi	5,51	16,14	39,65	314
18	75 psi	5,98	21,65	44,44	-
20	60 psi	5,98	21,65	47,99	-
24	60 psi	7,00	21,65	55,08	-

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Pneumatic Cylinder

DN (in)	W. pressure *	A (in)	B (in)	H (in)	Connect.	Weight (lbs.)
2	150 psi	1,81	4,53	16,22	1/4" G	18
2,5	150 psi	1,81	4,53	17,87	1/4" G	23
3	150 psi	2,52	4,53	19,56	1/4" G	27
4	150 psi	2,52	4,53	21,96	1/4" G	31
5	150 psi	2,75	5,51	24,88	1/4" G	42
6	150 psi	2,99	5,51	27,68	1/4" G	49
8	150 psi	3,50	6,89	34,33	1/4" G	91
10	150 psi	4,48	8,66	40,62	3/8" G	153
12	90 psi	4,48	8,66	46,14	3/8" G	177
14	90 psi	5,00	10,90	53,89	3/8" G	320
16	90 psi	5,51	10,90	59,01	3/8" G	406
18	75 psi	5,98	15,03	66,85	1/2" G	565
20	60 psi	5,98	15,03	72,36	1/2" G	594
24	60 psi	7,00	15,03	83,38	1/2" G	788

* For specific tightness requirements, contact ORBINOX technical department

