

HOPPER SHAPE KNIFE GATE VALVE

The 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
- Etc.
- Chemical plants
- Food and Beverage

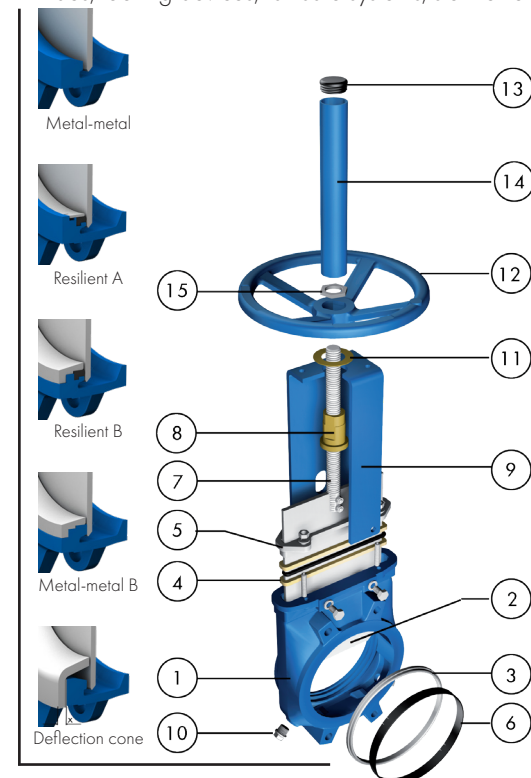
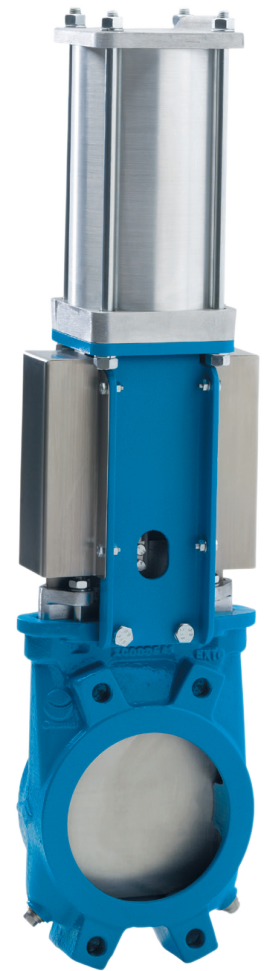
Valve is usually installed under silos or hoppers in vertical pipes with the seat in the upstream side of the valve in order to protect it from the solids flow. This set up helps to protect the seat from premature wear and gate jamming due to solid build-up

Product description

- Uni-directional wafer type knife gate valve
- Size range of DN50-600 (larger upon request). See Dimension Charts for pressure rating
- Rising & non-rising stem configurations available
- Standard flange connection: EN-1092 PN10 and ASME B16.5 (class 150). 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 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
- Other options: bonnets, flushing ports, special materials, fabricated valves, etc.
- Actuation accessories: limit & proximity switches, mechanical stops, positioners, solenoid valves, manual over-rides, locking devices, fail safe systems, stem extensions and floor stands



STANDARD PARTS LIST

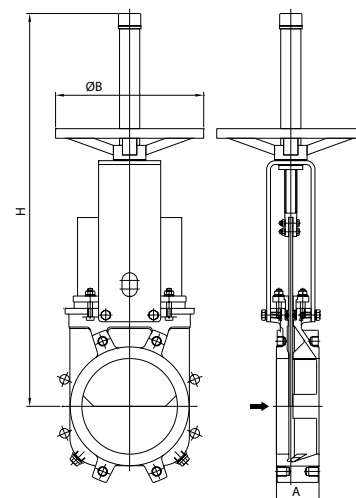
Part	Description
1 Body	EN-GJL250 / CF8M ¹
2 Gate	AISI 304 / AISI 316 ¹
3 Seat	Metal-Metal / EPDM / NBR
4 Packing	PTFE Impreg. Synth. Fibre (ST) + EPDM O-ring
5 Gland follower	Al. (DN 50-DN 300) / EN-GJS400 (DN 350-DN 1200) / CF8M ¹
6 Seat retainer ring	AISI 304 / AISI 316 ¹
7 Stem	Stainless Steel
8 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

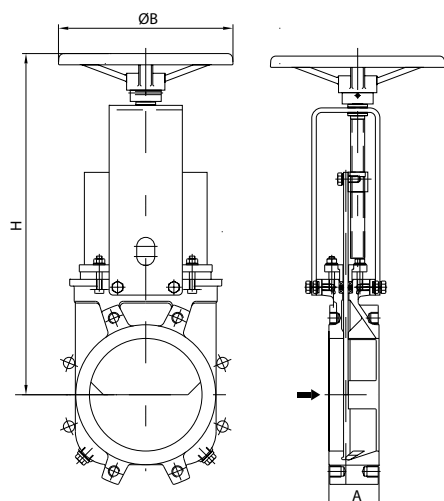
Handwheel Rising Stem

DN	W. pressure *	A	ØB	H	Weight (Kg)
50	10 bar	46	225	420	9
65	10 bar	46	225	450	10
80	10 bar	64	225	475	12
100	10 bar	64	225	520	14
125	10 bar	70	225	600	15
150	10 bar	76	225	647	17
200	10 bar	89	310	822	34
250	10 bar	114	310	1012	56
300	6 bar	114	310	1102	66
350	6 bar	127	410	1305	111
400	6 bar	140	410	1385	148
450	5 bar	152	550	1582	197
500	4 bar	152	550	1672	208
600	4 bar	178	550	1962	291

* For specific tightness requirements, contact ORBINOX technical department



Handwheel Non-Rising Stem



DN	W. pressure *	A	ØB	H	Weight (Kg)
50	10 bar	46	225	312	7
65	10 bar	46	225	339	9
80	10 bar	64	225	364	11
100	10 bar	64	225	405	13
125	10 bar	70	225	439	14
150	10 bar	76	225	485	16
200	10 bar	89	310	595	31
250	10 bar	114	310	685	49
300	6 bar	114	310	775	58
350	6 bar	127	410	927	107
400	6 bar	140	410	1007	142
450	5 bar	152	550	1129	-
500	4 bar	152	550	1219	-
600	4 bar	178	550	1399	-

* For specific tightness requirements, contact ORBINOX technical department

Pneumatic Cylinder

DN	W. pressure *	A	B	H	Connect.	Weight (Kg)
50	10 bar	46	115	412	1/4" G	8
65	10 bar	46	115	454	1/4" G	10
80	10 bar	64	115	497	1/4" G	12
100	10 bar	64	115	558	1/4" G	14
125	10 bar	70	140	632	1/4" G	19
150	10 bar	76	140	703	1/4" G	22
200	10 bar	89	175	872	1/4" G	41
250	10 bar	114	220	1032	3/8" G	69
300	6 bar	114	220	1172	3/8" G	80
350	6 bar	127	277	1369	3/8" G	145
400	6 bar	140	277	1499	3/8" G	184
450	5 bar	152	382	1698	1/2" G	256
500	4 bar	152	382	1838	1/2" G	269
600	4 bar	178	382	2128	1/2" G	357

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