

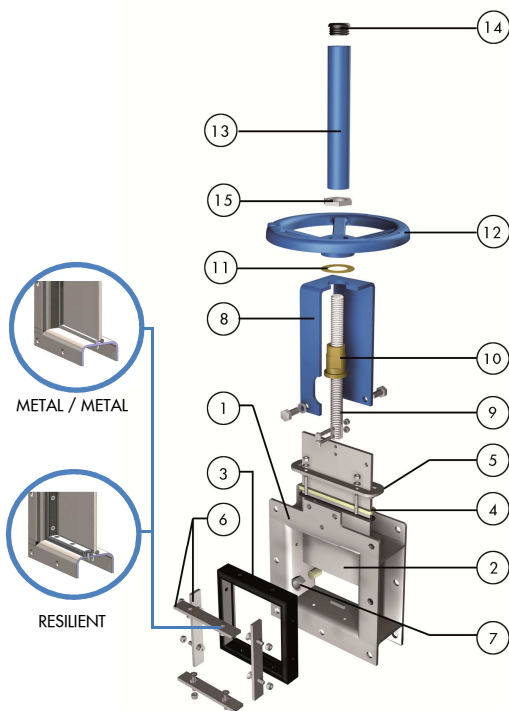
The BC model knife gate valve is a fabricated square or rectangular port low-pressure valve for fluids with high solids concentration or solids, mainly used in bulk handling and silo outlet applications in industries such as Chemical Plants, Power Plants, Food and Beverage, Wastewater Treatment Plants, Mining , Etc.

Product description:

- Uni-directional fabricated type knife gate valve
- Size range of 150x150 - 600x600 (larger sizes upon request). See Dimension Charts for pressure rating
- Rising & non-rising stem configurations available
- See Flange and Bolting details for standard flange connection
Others available upon request
- Manual (handwheel and bevel gear), pneumatic (single and double-acting) and electric actuation options available
- Directives: 2006/42/EC (MACHINES), 2014/68/EU (PED) Fluid: Group 1(b), 2 (Cat. I. mod. A) and 2014/34/EU (ATEX)

Features:

- Fabricated design with internal gate wedges and guides for tighter shut off
- Square or rectangular port design for higher flow capacity and minimal pressure drop
- 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
- Other options: flush ports, special materials, cast bodies, special 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

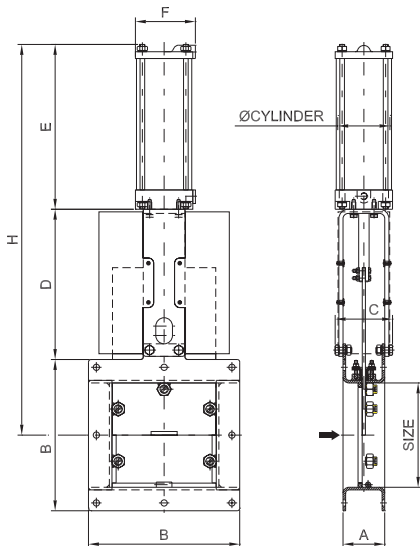
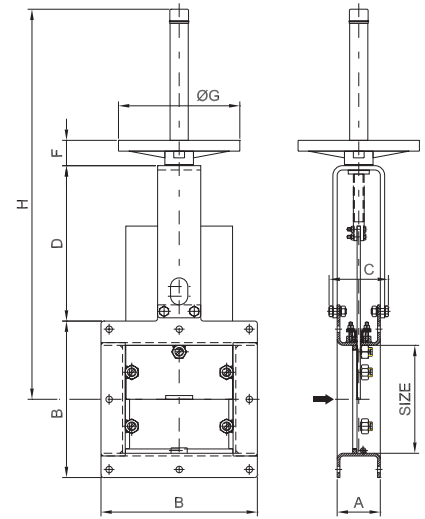


STANDARD PARTS LIST

Part	Material
1 Body	Carbon Steel / AISI 316
2 Gate	AISI 304 / AISI 316
3 Seat	Metal-to-Metal or EPDM
4 Packing	PTFE imprg.synth. fibre with EPDM o-ring
5 Gland Follower	Carbon steel / AISI 316
6 Seal Retainer Plate	Carbon steel / AISI 316
7 Slider Support	Carbon steel or AISI-316 + Nylon or PTFE
8 Yoke	Carbon steel - Epoxy coated
9 Stem	Stainless Steel
10 Stem Nut	Brass
11 Friction Washer	Brass
12 Handwheel	GJS400 (GGG40)
13 Stem Protector	Epoxy-coated carbon steel
14 Cap	Plastic
15 Nut	Zinc plated carbon steel

DIMENSIONS (mm) Handwheel Rising Stem

DN	Working pressure	A	B	C	D	F	ØG	H	Weight (kg.)
150 x 150	1 bar	80	240	100	219	47	225	580	23
200 x 200	1 bar	80	290	115	288	67	310	740	27
250 x 250	1 bar	80	340	115	338	67	310	915	32
300 x 300	1 bar	80	390	115	388	67	310	990	38
350 x 350	1 bar	100	450	137	444	68	410	1165	58
400 x 400	1 bar	100	500	137	494	68	410	1240	66
450 x 450	1 bar	100	550	137	544	68	410	1390	75
500 x 500	1 bar	110	600	137	594	68	410	1575	85
600 x 600	1 bar	110	700	137	694	68	410	1725	110



DIMENSIONS (mm) Pneumatic Actuator (D/A)

DN	Working pressure*	A	B	C	D	E	F	H	Weight (kg.)	Standard Cyl.	Connect.
150 x 150	1 bar	80	240	100	219	266	115	605	25	C100/150	1/4" G
200 x 200	1 bar	80	290	115	288	317	115	750	30	C100/200	1/4" G
250 x 250	1 bar	80	340	115	338	367	115	875	35	C100/250	1/4" G
300 x 300	1 bar	80	390	115	388	417	140	1000	42	C100/300	1/4" G
350 x 350	1 bar	100	450	137	444	485	140	1154	63	C125/355	1/4" G
400 x 400	1 bar	100	500	137	494	535	140	1279	72	C125/405	1/4" G
450 x 450	1 bar	100	550	137	544	585	140	1404	80	C125/455	1/4" G
500 x 500	1 bar	110	600	137	594	650	175	1544	98	C160/510	1/4" G
600 x 600	1 bar	110	700	137	694	750	175	1794	125	C160/610	1/4" G

Note: for higher real working pressure (cast bodies), contact our technical department in order to properly oversize the actuator

(*) For specific thightness requirements, contact ORBINOX technical department

FLANGE AND BOLTING DETAILS

DN	A x A	n° divis. to Y	M	d	T	⊕
150 x 150	240 x 240	2 div.to 105=210	M-10	12	10	7 - 1
200 x 200	290 x 290	2 div.to 130=260	M-10	12	10	7 - 1
250 x 250	340 x 340	2 div.to 155=310	M-10	12	10	7 - 1
300 x 300	390 x 390	3 div.to 120=360	M-10	12	10	10 - 2
350 x 350	450 x 450	3 div.to 140=420	M-12	14	10	10 - 2
400 x 400	500 x 500	4 div.to 117,5=470	M-12	14	10	13 - 3
450 x 450	550 x 550	4 div.to 130=520	M-12	14	10	13 - 3
500 x 500	600 x 600	4 div.to 142,5=570	M-12	14	10	13 - 3
600 x 600	700 x 700	4 div.to 167,5=670	M-12	14	10	13 - 3

