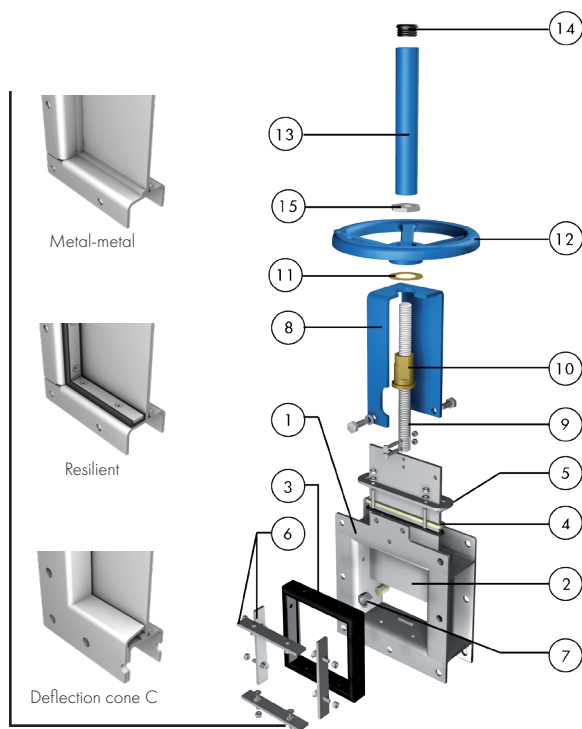


The Series 90 (BC) model knife gate is a fabricated square or rectangular port low-pressure valve for highly solid loaded fluids or solids, mainly used in bulk handling and silo outlet applications in industries such as:

- Chemical plants
- Power plants
- Food and Beverage
- Wastewater treatment plants
- Mining
- etc

- Uni-directional fabricated type knife gate valve
- Size range of 6in x 6in - 24in x 24in (larger upon request). See Dimension Charts for pressure rating
- Rising & non-rising stem configurations available
- See Flange and Bolting details for standard flange connection. Others upon request
- Manual (handwheel and bevel gear), pneumatic (single and double-acting) and electric actuation options available
- For EU Directives and other Certificates, please see the document: Directives and Certificates Compliance - Knife Gate Valves - Catalogues and Datasheets

- 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. Only in EU
- 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



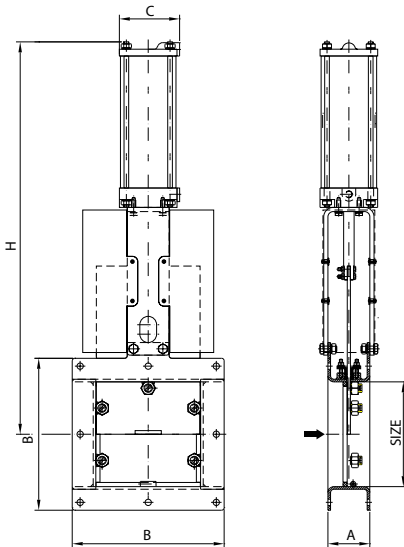
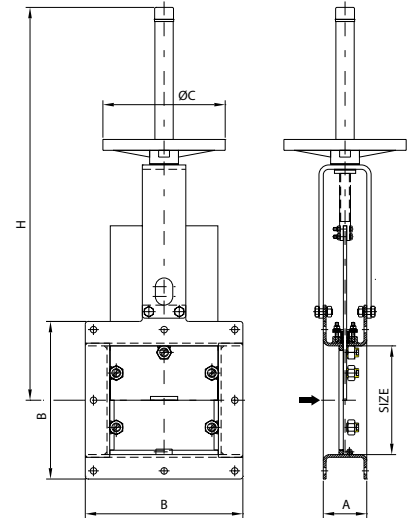
Part		Cast Iron
1	Body	Carbon Steel / AISI 316 ¹
2	Gate	AISI 304 / AISI 316 ¹
3	Seat	Metal/Metal or EPDM
4	Packing	ST
5	Gland follower	Carbon Steel / AISI 316 ¹
6	Seal retainer plate	Carbon Steel / AISI 316 ¹
7	Slider support	Carbon Steel or AISI-316 + Nylon or PTFE
8	Yoke	Epoxy-coated Carbon Steel
9	Stem	Stainless Steel
10	Stem nut	Brass
11	Friction washer	Brass
12	Handwheel	EN-GJS400
13	Stem protector	Epoxy-coated Carbon Steel
14	Cap	Plastic
15	Nut	Zinc Plated Carbon Steel

¹ Stainless steel configuration

Handwheel Rising Stem

SIZE	Pressures ¹	A	B	ØC	H	Weight (lbs.)
6in x 6in	15 psi	3,14	9,44	8,86	22,83	51
8in x 8in	15 psi	3,14	11,42	12,20	29,13	60
10in x 10in	15 psi	3,14	13,38	12,20	36,02	71
12in x 12in	15 psi	3,14	15,35	12,20	38,97	84
14in x 14in	15 psi	4,00	17,72	16,14	45,87	128
16in x 16in	15 psi	4,00	19,68	16,14	48,82	146
18in x 18in	15 psi	4,00	21,65	16,14	54,72	166
20in x 20in	15 psi	4,00	23,62	16,14	62,00	188
24in x 24in	15 psi	4,00	27,55	16,14	67,91	243

¹For specific thightness requirements, contact ORBINOX technical department



Pneumatic Cylinder

SIZE	Pressures ¹	A	B	C	H	Connect.	Weight (lbs.)
6in x 6in	15 psi	3,14	9,44	4,52	23,81	1/4" G	55
8in x 8in	15 psi	3,14	11,42	4,52	29,52	1/4" G	66
10in x 10in	15 psi	3,14	13,38	4,52	34,44	1/4" G	77
12in x 12in	15 psi	3,14	15,35	4,52	39,37	1/4" G	92
14in x 14in	15 psi	4,00	17,72	5,51	45,43	1/4" G	138
16in x 16in	15 psi	4,00	19,68	5,51	50,35	1/4" G	158
18in x 18in	15 psi	4,00	21,65	5,51	55,27	1/4" G	176
20in x 20in	15 psi	4,00	23,62	6,89	60,78	1/4" G	216
24in x 24in	15 psi	4,00	27,55	6,89	70,62	1/4" G	275

Note: for higher real working pressure (cast bodies), contact our technical department in order to properly oversize the actuator
¹For specific thightness requirements, contact ORBINOX technical department

Flange And Bolting Details

DN (in)	A x A (in)	n° divis. to Y=Z	d	T	
6in x 6in	9,5in x 9,5in	2 div.to 4,15in=8,30in	0,48	0,39	7 - 1
8in x 8in	11,5in x 11,5in	2 div.to 5,15in=10,25in	0,48	0,39	7 - 1
10in x 10in	13,5in x 13,5in	2 div.to 6,10in=12,20in	0,48	0,39	7 - 1
12in x 12in	15,5in x 15,5in	3 div.to 4,80in=14,20in	0,48	0,39	10 - 2
14in x 14in	18in x 18in	3 div.to 5,52in=16,55in	0,55	0,39	10 - 2
16in x 16in	20in x 20in	4 div.to 4,65in=18,50in	0,55	0,39	13 - 3
18in x 18in	22in x 22in	4 div.to 5,12in=20,50in	0,55	0,39	13 - 3
20in x 20in	24in x 24in	4 div.to 5,62in=22,50in	0,55	0,39	13 - 3
24in x 24in	28in x 28in	4 div.to 6,60in=26,38in	0,55	0,39	13 - 3

