

XC SERIES 14 KNIFE GATE VALVE



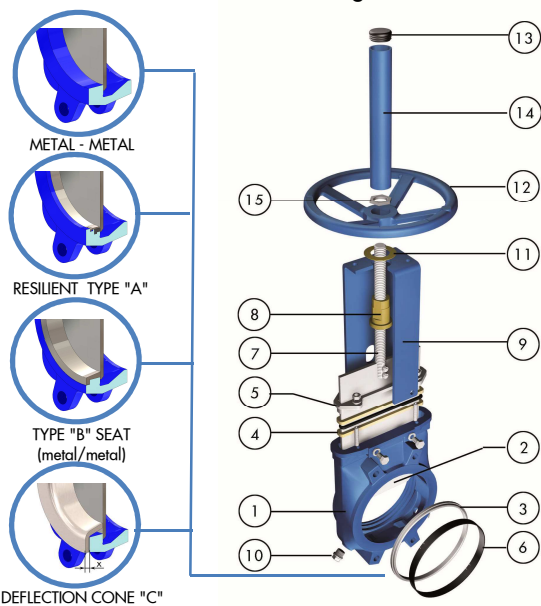
The SERIES 14 (XC) model knife gate valve is a wafer type valve designed for industrial bulk handling service applications (powdered and granular products). The special design of the body allows for easy passage of the fluid and makes it ideal for use as a silo outlet valve. Widely used in industries such as Power Plants, Chemical Plants, Mining, Food and Beverage, etc.

Product description:

- Uni-directional wafer type knife gate valve
- Size range of DN 2"-24"(larger sizes upon request). See Dimension Charts for pressure rating
- Rising & non-rising stem configurations available
- Standard flange connection: DIN PN10 (EN 1092-2) and ANSI B16.5 (class 150)
Others available upon request
- Manual (handwheel, chainwheel, lever and bevel gear), pneumatic (single and double-acting), electric and hydraulic actuation options available
- Directives: 2006/42/EC (MACHINES), 2014/68/EU (PED) Fluid: Group 1(b), 2 (Cat. I. mod. A) and 2014/34/EU (ATEX)

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 opposite 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, other seat materials, 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	Cast Iron/ Stainless Steel
1 Body	GJL250(GG25) / CF8M
2 Gate	AISI 304 / AISI 316
3 Seat	Metal-to-Metal, EPDM
4 Packing	PTFE impreg. synth. fibre with EPDM o-ring
5 Gland Follower	Al.(DN 2"-12") - Ductile Iron (DN 14"-24") / CF8M
6 Seat Retainer Ring	AISI 304 / AISI 316
7 Stem	Stainless Steel
8 Stem Nut	Brass
9 Yoke	Epoxy-coated carbon steel
10 Cleaning	Carbon steel
11 Friction Washer	Brass
12 Handwheel	GJS400 (GGG40)
13 Cap	Plastic
14 Stem Protector	Epoxy-coated carbon steel
15 Nut	Zinc plated carbon steel

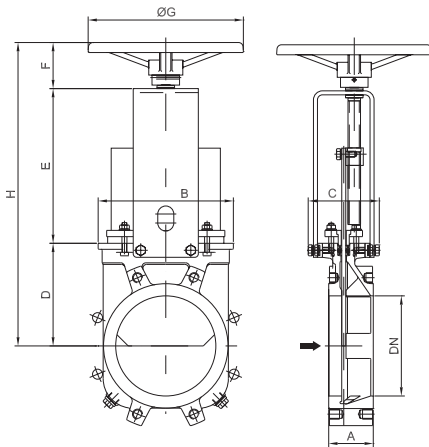
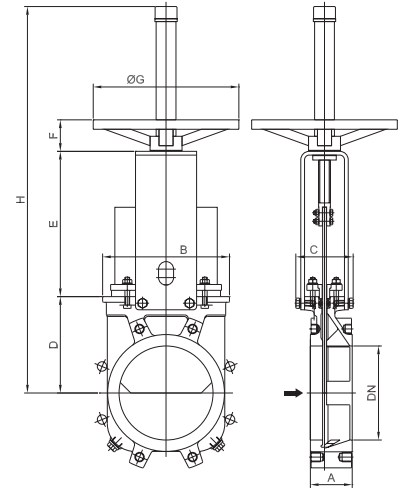
* Refer to full catalogue for complete details

XC SERIES 14 KNIFE GATE VALVE



DIMENSIONS Handwheel Rising Stem

DN	Working pressure (*)	A	B	C	D	E	F	ØG	H	Weight (lbs.)
2"	150 psi	1,81	4,88	4	4,13	5,07	1,85	8,86	16,53	15
2,5"	150 psi	1,81	5,47	4	4,53	5,79	1,85	8,86	17,71	18
3"	150 psi	2,52	6,06	4	4,88	6,37	1,85	8,86	18,70	20
4"	150 psi	2,52	6,85	4	5,52	7,36	1,85	8,86	20,47	24
5"	150 psi	2,75	7,55	4	6,00	8,30	1,85	8,86	23,62	33
6"	150 psi	2,99	8,54	4	6,89	9,33	1,85	8,86	25,67	40
8"	150 psi	3,5	10,62	4,80	8,07	12,16	2,64	12,20	32,36	66
10"	150 psi	4,48	12,83	6,70	9,44	14,33	2,64	12,20	39,84	97
12"	90 psi	5,00	14,96	6,70	11,02	16,30	2,64	12,20	43,38	128
14"	90 psi	5,00	17,24	6,70	12,59	19,13	2,60	16,14	51,37	217
16"	90 psi	5,51	19,40	6,70	13,78	21,10	2,60	16,14	54,53	274
18"	75 psi	5,98	21,49	6,70	16,53	23,15	2,60	21,65	62,28	370
20"	60 psi	5,98	24,40	6,70	17,71	25,51	2,60	21,65	65,82	424
24"	60 psi	7,00	28,11	6,70	20,86	29,44	2,60	21,65	77,24	540

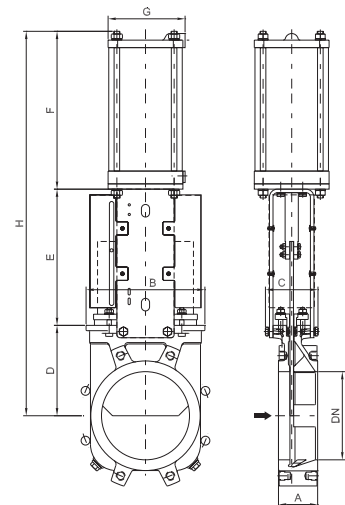


DIMENSIONS Handwheel Non Rising Stem

DN	Working pressure (*)	A	B	C	D	E	F	ØG	H
2"	150 psi	1,81	4,88	4	4,13	5,07	1,85	8,86	16,53
2,5"	150 psi	1,81	5,47	4	4,53	5,79	1,85	8,86	17,71
3"	150 psi	2,52	6,06	4	4,88	6,37	1,85	8,86	18,70
4"	150 psi	2,52	6,85	4	5,52	7,36	1,85	8,86	20,47
5"	150 psi	2,75	7,55	4	6,00	8,30	1,85	8,86	23,62
6"	150 psi	2,99	8,54	4	6,89	9,33	1,85	8,86	25,67
8"	150 psi	3,5	10,62	4,80	8,07	12,16	2,64	12,20	32,36
10"	150 psi	4,48	12,83	6,70	9,44	14,33	2,64	12,20	39,84
12"	90 psi	5,00	14,96	6,70	11,02	16,30	2,64	12,20	43,38
14"	90 psi	5,00	17,24	6,70	12,59	19,13	2,60	16,14	51,37
16"	90 psi	5,51	19,40	6,70	13,78	21,10	2,60	16,14	54,53
18"	75 psi	5,98	21,49	6,70	16,53	23,15	2,60	21,65	62,28
20"	60 psi	5,98	24,40	6,70	17,71	25,51	2,60	21,65	65,82
24"	60 psi	7,00	28,11	6,70	20,86	29,44	2,60	21,65	77,24

DIMENSIONS Pneumatic Actuator (D/A)

DN	Working pressure (*)	A	B	C	D	E	F	G	H	Weight (lbs.)	Standard Cyl.	Connect.
2"	150 psi	1,81	4,88	4	4,13	5,07	7,00	4,53	16,22	9	C4"-2.44"	1/4" G
2,5"	150 psi	1,81	5,47	4	4,53	5,79	7,6	4,53	17,87	10	C4"-3.03"	1/4" G
3"	150 psi	2,52	6,06	4	4,88	6,37	8,31	4,53	19,56	11	C4"-3.74"	1/4" G
4"	150 psi	2,52	6,85	4	5,52	7,36	9,09	4,53	21,96	14	C4"-4.52"	1/4" G
5"	150 psi	2,75	7,55	4	6,00	8,30	10,67	5,51	24,88	20	C5"-5.52"	1/4" G
6"	150 psi	2,99	8,54	4	6,89	9,33	11,65	5,51	27,68	25	C5"-6.61"	1/4" G
8"	150 psi	3,5	10,62	4,80	8,07	12,16	14,09	6,89	34,33	44	C6.30"-8.66"	1/4" G
10"	150 psi	4,48	12,83	6,70	9,44	14,33	16,85	8,66	40,62	67	C6.30"-8.66"	3/8" G
12"	90 psi	5,00	14,96	6,70	11,02	16,29	18,82	8,66	46,14	82	C8"-10.62"	3/8" G
14"	90 psi	5,00	17,24	6,70	12,59	19,68	21,61	10,90	53,89	135	C8"-12.60"	3/8" G
16"	90 psi	5,51	19,40	6,70	13,78	21,65	23,58	10,90	59,01	165	C10"-14.76"	3/8" G
18"	75 psi	5,98	21,49	6,70	16,53	23,94	26,77	15,03	66,85	220	C12"-18.70"	1/2" G
20"	60 psi	5,98	24,40	6,70	17,71	25,90	28,74	15,03	72,36	280	C12"-20.67"	1/2" G
24"	60 psi	7,00	28,11	6,70	20,86	29,84	32,68	15,03	83,38	330	C12"-24.60"	1/2" G



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