

# ET SERIES 20 KNIFE GATE VALVE



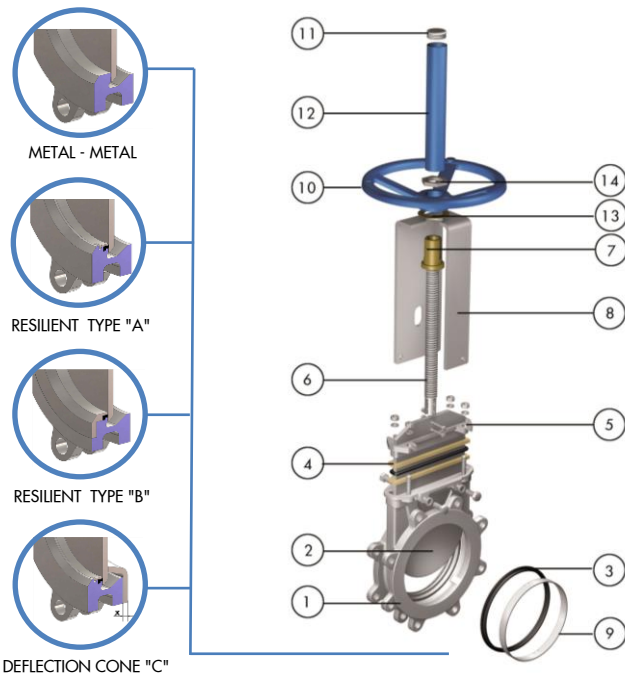
The SERIES 20 (ET) model knife gate valve is a lug type valve designed according to MSS SP-81 and TAPPI TIS 405-8 for general industrial service applications. The design of the body and seat assures nonclogging shut off on suspended solids in industries such as Pulp & Paper, Power Plants, Mining, Chemical Plants, Wastewater Treatment Plants, Food & Beverage, etc

## Product description:

- Uni-directional lug type knife gate valve destined for open/close or control installations
- Size range of DN 2"-36" (larger sizes upon request). See Dimension Charts for pressure rating
- Rising stem as standard. Non-rising stem also 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
- For EU Directives and other Certificates, please see the document:  
Directives and Certificates Compliance - Knife Gate Valves - Catalogues and Datasheets

## Features:

- Lug type one piece cast stainless steel body with internal cast-in gate wedges and guides
- Port design as per the MSS SP-81 and TAPPI TIS 405-8 standards
- Stainless steel 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, V-ports, flush 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	Stainless Steel:
1 Body	CF8M
2 Gate	AISI 316
3 Seat	Metal/Metal, EPDM
4 Packing	PTFE impreg. synth. fibre and EPDM o-ring
5 Gland Follower	CF8M
6 Stem	Stainless Steel
7 Stem Nut	Brass
8 Yoke	AISI 304 / Epoxy-coated carbon steel
9 Seat Retainer Ring	AISI 316
10 Handwheel	GJS400 (GGG40)
11 Cap	Plastic
12 Stem Protector	Epoxy-coated carbon steel
13 Friction Washer	Brass
14 Nut	Zinc-plated carbon steel

\* Refer to full catalogue for complete details

[www.orbinox.com](http://www.orbinox.com)

Reserves the right to change specifications without notice

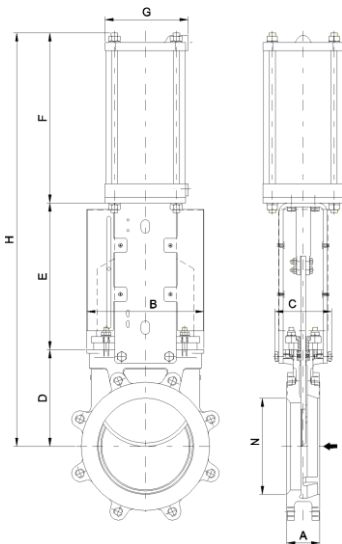
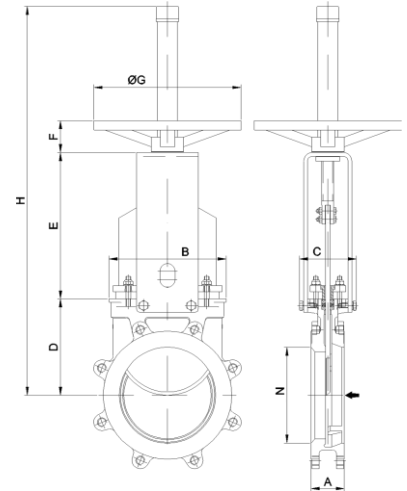
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# ET SERIES 20 KNIFE GATE VALVE



## DIMENSIONS Handwheel Rising Stem

DN(“)	Pressure	N	A	B	C	D	E	F	ØG	H	Weight (lbs.)
2”	150 psi	1,96	1,89	4,88	4	3,85	5,35	1,85	8,86	16,53	18
3”	150 psi	3,14	2	5,87	4	4,68	6,38	1,85	8,86	18,50	22
4”	150 psi	3,81	2	6,65	4	5,47	7,36	1,85	8,86	20,43	28
5”	150 psi	4,6	2,24	6,65	4	5,90	8,78	1,8	8,86	24,13	35
6”	150 psi	5,51	2,24	7,75	4	6,50	9,33	1,85	8,86	25,27	44
8”	150 psi	7,24	2,75	9,72	4,80	7,99	12,16	2,64	12,20	32,28	70
10”	150 psi	9,05	2,75	11,73	4,80	9,17	13,58	2,64	12,20	38,81	103
12”	150 psi	10,82	2,99	13,74	4,80	10,74	15,35	2,72	16,14	42,16	143
14”	150 psi	12	2,99	15,39	7,60	12,28	17,04	2,60	16,14	49,01	209
16”	150 psi	13,84	3,50	17,28	7,60	13,66	18,81	2,60	16,14	52,16	268
18”	150 psi	15,35	3,50	19,01	7,75	16,33	21,73	2,64	21,65	59,49	352
20”	150 psi	17,12	4,49	21,33	7,75	17,71	24,05	2,64	21,65	63,66	444
24”	150 psi	20,55	4,49	25,08	7,75	19,72	27,44	2,64	21,65	74,13	638



## DIMENSIONS Pneumatic Actuator (D/A)

DN(“)	Pressure	N	A	B	C	D	E	F	G	H	Weight (lbs.)	Standard Cyl.	Connect.
2”	150 psi	1,96	1,89	4,88	4	3,85	5,35	7,00	4,53	16,22	22	C4”-2.44”	1/4”G
3”	150 psi	3,14	2	5,87	4	4,68	6,38	8,30	4,53	19,37	26	C4”-3.74”	1/4”G
4”	150 psi	3,81	2	6,65	4	5,47	7,36	9,09	4,53	21,93	33	C4”-4.52”	1/4”G
5”	150 psi	4,6	2,24	6,65	4	5,90	8,78	10,66	5,51	25,35	46	C5”-5.52”	1/4”G
6”	150 psi	5,51	2,24	7,75	4	6,50	9,33	11,65	5,51	27,48	59	C5”-6.61”	1/4”G
8”	150 psi	7,24	2,75	9,72	4,80	7,99	12,16	14,09	6,89	34,25	101	C6.30”-8.66”	1/4”G
10”	150 psi	9,05	2,75	11,73	4,80	9,17	13,58	16,85	8,66	39,60	154	C8”-10.62”	3/8”G
12”	150 psi	10,82	2,99	13,74	4,80	10,74	15,35	18,81	8,66	44,93	195	C8”-12.60”	3/8”G
14”	150 psi	12	2,99	15,39	7,60	12,28	18,07	21,61	10,90	51,96	297	C10”-14.76”	3/8”G
16”	150 psi	13,84	3,50	17,28	7,60	13,66	18,81	23,58	10,90	56,06	356	C10”-16.73”	3/8”G
18”	150 psi	15,35	3,50	19,01	7,75	16,33	21,73	26,77	15,03	64,84	466	C12”-18.70”	1/2”G
20”	150 psi	17,12	4,49	21,33	7,75	17,71	24,05	28,74	15,03	70,51	638	C12”-20.67”	1/2”G
24”	150 psi	20,55	4,49	25,08	7,75	19,72	27,44	32,68	15,03	79,84	825	C12”-24.60”	1/2”G
30”	100 psi	26,37	4,60	33,15	12,60	24,57	37,00	38,77	17,48	100,35	1419	C14”-30.70”	3/4”G
36”	100 psi	31,88	4,60	38,19	12,60	30,51	43,30	47,32	20,27	121,14	1716	C16”-36.61”	3/4”G

## DIMENSIONS Electric Actuator Rising Stem

DN(“)	Pressure	N	A	B	C	D	E	F	ØG	H	I	J	L	M	Stem Ø X pitch	Torque (ft.LBS)
2”	150 psi	1,96	1,89	4,88	4	3,86	5,35	14,84	6,30	17,87	10,43	9,80	2,44	9,37	0.79 x 0.16	7.4
3”	150 psi	3,14	2/51	5,87	4	4,68	6,38	16,69	6,30	19,72	10,43	9,80	2,44	9,37	0.79 x 0.16	7.4
4”	150 psi	3,81	2/51	6,65	4	5,47	7,36	18,46	6,30	21,49	10,43	9,80	2,44	9,37	0.79 x 0.16	7.4
5”	150 psi	4,6	2,24	6,65	4	5,90	8,78	20,31	6,30	23,34	10,43	9,80	2,44	9,37	0.79 x 0.16	11.1
6”	150 psi	5,51	2,24	7,75	4	6,50	9,33	21,45	6,30	24,17	10,43	9,80	2,44	9,37	0.79 x 0.16	14.8
8”	150 psi	7,24	2,75	9,72	4,80	7,99	12,16	26,25	6,30	29,40	10,43	9,80	2,44	9,37	0.98 x 0.2	22.2
10”	150 psi	9,05	2,75	11,73	4,80	9,17	13,58	28,85	6,30	32,00	10,43	9,80	2,44	9,37	0.98 x 0.2	33.3
12”	150 psi	10,82	2,99	13,74	4,80	10,74	15,35	31,22	7,87	34,37	11,14	10	2,55	9,76	0.98 x 0.2	51.8
14”	150 psi	12	2,99	15,39	7,60	12,28	17,04	34,44	7,87	37,59	11,14	10	2,55	9,76	1.38 x 0.24	81.4
16”	150 psi	13,84	3,50	17,28	7,60	13,66	18,81	37,60	12,40	40,75	15,31	13,22	3,58	11,25	1.38 x 0.24	118.4
18”	150 psi	15,35	3,50	19,01	7,75	16,33	21,73	44,96	12,40	47,63	15,31	13,22	3,58	11,25	1.38 x 0.24	140.6
20”	150 psi	17,12	4,49	21,33	7,75	17,71	24,05	48,11	15,74	52,77	15,31	13,34	3,58	11,25	1.38 x 0.24	199.8
24”	150 psi	20,55	4,49	25,08	7,75	19,71	27,44	56,85	15,74	63,51	15,31	13,34	3,58	11,25	1.57 x 0.27	333
30”	100 psi	26,37	4,60	33,15	12,60	24,57	34,76	70,03	19,68	81,49	16,92	14,37	4,61	11,93	1.97 x 0.31	407
36”	100 psi	31,88	4,60	38,19	12,60	30,67	41,18	80,11	19,68	94,26	16,92	14,37	4,61	11,93	2.36 x 0.35	627

