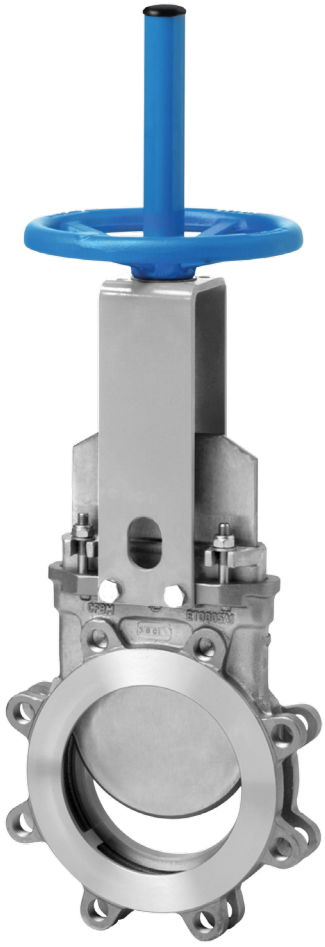
HEAVY DUTY KNIFE GATE VALVE

The Series 20 (ET) model knife gate is an uni-directional lug type valve designed according to MSS-SP-81 and TAPPI TIS 405-8 for industrial service applications. The design of the body and seat assures nonclogging shut off on suspended solids in industries such as:

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

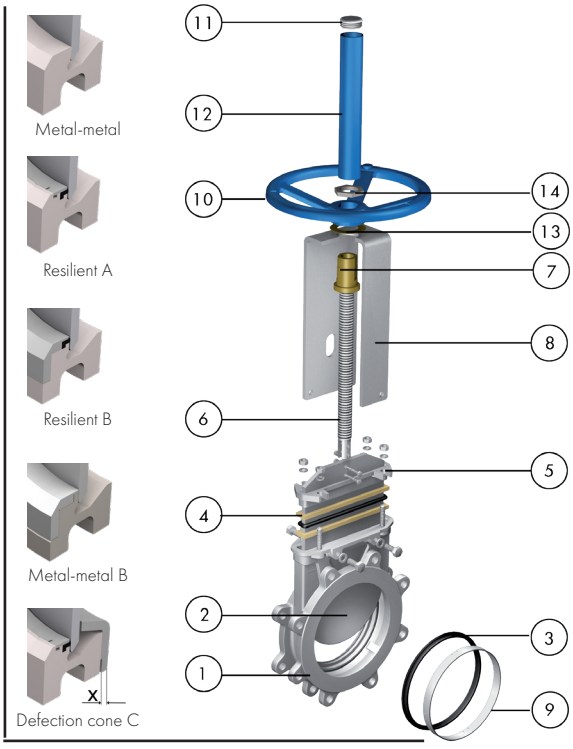


Product description

- Uni-directional lug type knife gate valve
- Size range of f DN 2in-36in (larger upon request). See Dimension Charts for pressure rating
- Rising stem as standard. Non-rising stem also available
- Standard flange connection: ASME B16.5 (class 150) and EN-1092 PN10 / PN16. 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

- 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, 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

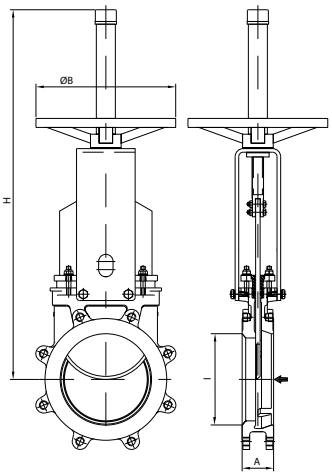


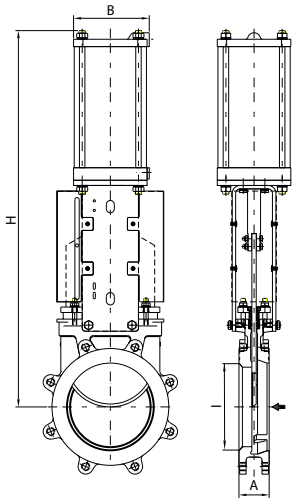
STANDARD PARTS LIST

Part		Description
1	Body	CF8M
2	Gate	AISI 316
3	Seat	Metal/Metal or EPDM
4	Packing	PTFE Impreg. Synth. Fibre + EPDM O-Ring
5	Gland follower	CF8M
6	Stem	Stainless Steel
7	Stem nut	Brass
8	Yoke	AISI 304 / Epoxy-coated Carbon Steel
9	Seal retainer ring	AISI 316
10	Handwheel	EN-GJS400
11	Cap	Plastic
12	Stem protector	Epoxy-coated Carbon Steel
13	Friction washer	Brass
14	Nut	Zinc Plated Carbon Steel

Handwheel Rising Stem

DN (in)	W. pressure	I (in)	A (in)	ØB (in)	H (in)	Weight (lbs.)
2	150 psi	1,96	1,89	8,86	16,53	20
3	150 psi	3,14	2,00	8,86	18,5	27
4	150 psi	3,81	2,00	8,86	20,43	31
5	150 psi	4,60	2,24	8,86	24,13	36
6	150 psi	5,51	2,24	8,86	25,27	42
8	150 psi	7,24	2,75	12,20	32,28	80
10	150 psi	9,05	2,75	12,2	38,81	102
12	150 psi	10,82	2,99	16,14	42,16	144
14	150 psi	12	2,99	16,14	49,01	201
16	150 psi	13,84	3,5	16,14	52,16	258
18	150 psi	15,35	3,5	21,65	59,49	336
20	150 psi	17,12	4,49	21,65	63,66	455
24	150 psi	20,55	4,49	21,65	74,13	629





Pneumatic Cylinder

DN (in)	W. pressure	I (in)	A (in)	ØB (in)	H (in)	Connect.	Weight (lbs.)
2	150 psi	1,96	1,89	4,53	16,22	1/4 "G	20
3	150 psi	3,14	2,00	4,53	19,37	1/4 "G	27
4	150 psi	3,81	2,00	4,53	21,93	1/4 "G	31
5	150 psi	4,6	2,24	5,51	25,35	1/4 "G	45
6	150 psi	5,51	2,24	5,51	27,48	1/4 "G	53
8	150 psi	7,24	2,75	6,89	34,25	1/4 "G	95
10	150 psi	9,05	2,75	8,66	39,6	3/8" G	128
12	150 psi	10,82	2,99	8,66	44,93	3/8" G	170
14	150 psi	12,00	2,99	10,9	51,96	3/8" G	265
16	150 psi	13,84	3,50	10,9	56,06	3/8" G	327
18	150 psi	15,35	3,50	15,03	64,84	1/2" G	472
20	150 psi	17,12	4,49	15,03	70,51	1/2" G	596
24	150 psi	20,55	4,49	15,03	79,84	1/2" G	783
30	100 psi	26,37	4,60	17,48	100,35	3/4" G	1419
36	100 psi	31,88	4,60	20,27	121,14	3/4" G	1716

* For sizes DN 12in and above, Torque figures calculated based on pressure rate for SER.10 valve model

Electric Actuator Rising Stem

DN (in)	W. pressure	I (in)	A (in)	C (in)	ØB (in)	H (in)	D (in)	E (in)	F (in)	G (in)	Torque (ft.LBS)	Weight (lbs.)
2	150 psi	1,96	1,89	14,84	6,30	17,87	10,43	9,80	2,44	9,37	7.4	148
3	150 psi	3,14	2,00	16,69	6,30	19,72	10,43	9,80	2,44	9,37	7.4	153
4	150 psi	3,81	2,00	18,46	6,30	21,49	10,43	9,80	2,44	9,37	7.4	157
5	150 psi	4,60	2,24	20,31	6,30	23,34	10,43	9,80	2,44	9,37	11.1	164
6	150 psi	5,51	2,24	21,45	6,30	44,17	10,43	9,80	2,44	9,37	14.8	170
8	150 psi	7,24	2,75	26,25	6,30	49,40	10,43	9,80	2,44	9,37	22.2	206
10	150 psi	9,05	2,75	28,85	6,30	52,00	10,43	9,80	2,44	9,37	33.3	-
12	150 psi	10,82	2,99	31,22	7,87	54,37	11,14	10,00	2,55	9,76	51.8	199
14	150 psi	12,00	2,99	34,44	7,87	57,59	11,14	10,00	2,55	9,76	81.4	-
16	150 psi	13,84	3,50	37,6	12,40	60,75	15,31	13,22	3,58	11,25	118.4	-
18	150 psi	15,35	3,50	44,96	12,40	73,63	15,31	13,22	3,58	11,25	140.6	-
20	150 psi	17,12	4,49	48,11	15,74	76,77	15,31	13,34	3,58	11,25	199.8	-
24	150 psi	20,55	4,49	56,85	15,74	85,51	15,31	13,34	3,58	11,25	333	790
30	100 psi	26,37	4,60	70,03	19,68	111,49	16,92	14,37	4,61	11,25	407	-
36	100 psi	31,88	4,60	80,11	19,68	121,26	16,92	14,37	4,61	11,25	627	-

* For sizes DN 12in and above, Torque figures calculated based on pressure rate for SER.10 valve model