

# CAST BODY KNIFE GATE VALVES

FIG. 83, ALL STAINLESS STEEL - FULL PORT - UNI-DIRECTIONAL METAL TO METAL SEAT



## Design Features

- Locking handwheel nut.
- Provision for lockout lanyard.
- Heavy gate with wide spaced clevis.
- Wiper ring in stuffing box assists sealing during both operating and static conditions.
- Valve rated for 150 psi @ 32-150°F (0C-66C)
- Full port one piece cast body with integral cast 210° back-up ring and self cleaning seat pocket.
- Full lug pattern. Drilled and tapped to class 150 flanges.
- Easy bolt on conversion to actuator or bevel gear operator.

**Designed and tested to conform to MSS-SP81 and TAPPI TIS 405-8 specifications.**

*Designed to handle dense mixtures of stock and slurries. The shearing action of the knife gate cuts through solids and cleans the seat as it closes.*

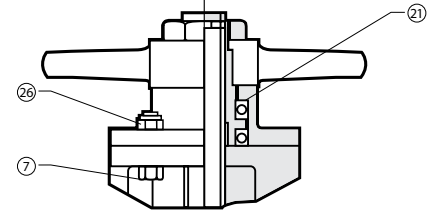
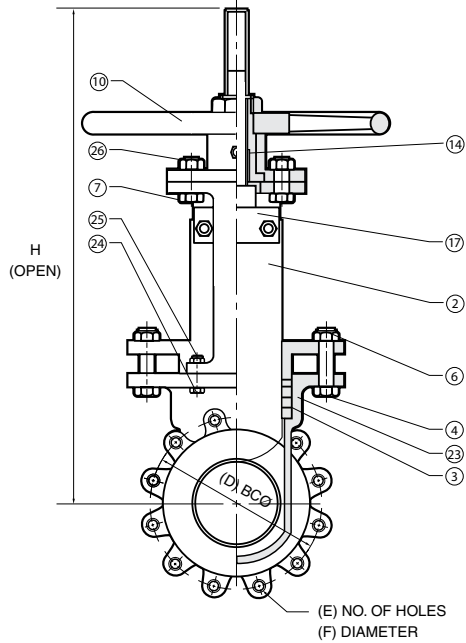
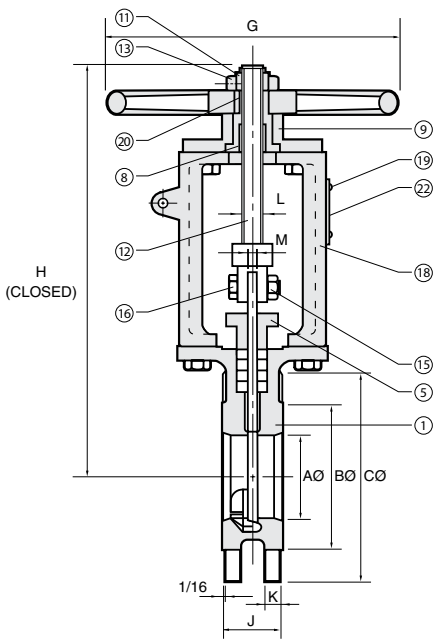


# STAINLESS STEEL KNIFE GATE VALVES

FIG. 83, STAINLESS STEEL - FULL PORT - UNI-DIRECTIONAL METAL TO METAL SEAT

FIG 83B - CF8M (316)

FIG 83L - CG8M (317)



FOR 16" TO 24" TOP WORKS DETAIL

- Handwheel actuator standard.
- Chainwheel, bevel gear, electric, hydraulic or pneumatic actuators are available.
- Valves 30" and larger, or in special alloys like CN7m (Alloy 20), Duplex SS, Hastelloy are available on request.

## DIMENSIONS - INCHES

Valve Size	A	B	C	D	E	F	G	h	H	J	K	L	M	Weight lbs
2	1.875	3.625	6	4.75	4	0.625-11	8.5	11.875	14	1.875	0.5	0.75	0.3125	31
2.5	2.5	4.125	7	5.5	4	0.625-11	8.5	12.625	15.25	2	0.5	0.75	0.3125	35
3	2.875	5	7.5	6	4	0.625-11	10	14.3125	17.3125	2	0.5	0.75	0.3125	38
4	4	6.1875	9	7.5	8	0.625-11	10	16.8125	21	2	0.5	0.75	0.3125	65
6	6	8.5	11	9.5	8	0.75-10	14	20.5625	26.75	2.25	0.125	1.125	0.3125	86
8	8	10.625	13.5	11.75	8	0.75-10	14	24.1875	32.375	2.75	0.125	1.125	0.375	140
10	10	12.75	16	14.25	12	0.875-9	18	28.4375	38.75	2.75	0.75	1.125	0.4687	187
12	12	15	19	17	12	0.875-9	18	32.4375	44.75	3	0.75	1.125	0.5625	225
14	13.25	16.25	21	18.75	12	1-8	20	36.125	49.6875	3	0.8125	1.5	0.5625	274
16	15.25	18.5	23.5	21.25	16	1-8	20	43	58.75	3.5	0.875	1.5	0.75	410
18	17.25	21	25	22.75	16	1.125-7	24	47	64.75	3.5	0.875	1.5	0.75	435
20	19.25	23	27.5	25	20	1.125-7	24	51.125	70.875	4.5	1	1.5	0.9687	598
24	23.25	27.25	32	32	20	1.25-7	30	58.875	82.625	4.5	1	1.5	0.9687	771

## DIMENSIONS - MILLIMETERS

Valve Size	A	B	C	D	E	F	G	h	H	J	K	L	M	Weight Kg
50	48	92	152	121	4	0.625-11	216	302	356	48	13	19	8	14
65	62	105	178	140	4	0.625-11	216	321	387	51	13	19	8	16
80	73	127	191	152	4	0.625-11	254	364	440	51	13	19	8	17
100	102	157	229	191	8	0.625-11	254	427	533	51	13	19	8	30
150	152	216	279	241	8	0.75-10	356	522	679	57	16	29	8	39
200	203	270	343	298	8	0.75-10	356	614	822	70	16	29	10	64
250	254	324	406	362	12	0.875-9	457	722	984	70	19	29	12	85
300	305	381	483	432	12	0.875-9	457	824	1137	76	19	29	15	102
350	337	413	533	476	12	1-8	508	918	1262	76	21	38	15	125
400	387	470	597	540	16	1-8	508	1092	1492	89	22	38	20	186
450	438	533	635	578	16	1.125-7	610	1194	1645	89	22	38	20	198
500	489	584	699	635	20	1.125-7	610	1299	1800	114	25	38	25	272
600	591	692	813	749	20	1.25-7	762	1495	2099	114	25	38	25	350

Item	Description	83B	83L
1	Body	ASTM A351 Gr.CF8M	ASTM A351 Gr.CG8M
2	Gate	ASTM A240 Gr.316	ASTM A240 Gr.317
3	Packing	1347 AF PALMETTO	
4	Gland Bolts	ISO 3506 Gr.A2-70	
5	Gland	ASTM A351 Gr.CF8M	ASTM A351 Gr.CG8M
6	Gland Nuts	ISO 3506 Gr.A2-70 Nylock	
7	Sleeve Housing Bolts	ISO 3506 Gr.A2-70	
8	Stem Sleeve	SAE 660 (Bronze)	
9	Sleeve Housing	ASTM A351 Gr.CF8	
10	Handwheel	ASTM A536 Gr.60-42-10	
11	Handwheel Nut	Cadmium Plated Steel	
12	Stem	ASTM A479 Gr.304	
13	Nut Locking Screw	SS-Commercial Grade (BSW)	
14	Grease Nipple	Cadmium Plated Steel	
15	Clevis Nuts	ISO 3506 Gr.A2-70 Nylock	
16	Clevis Bolts	ISO 3506 Gr.A2-70	
17	Clevis	ASTM A351 Gr.CF8	
18	Yoke	ASTM A351 Gr.CF8	
19	Nameplate	ASTM A351 Gr.304	
20	Handwheel Key	Mild Steel	
21	Thrust Bearing	SKF 51112 (Ball Bearing)	
22	Rivets	Aluminium	
23	Wiper Ring	Hycar 70	
24	Yoke Bolts	ISO 3506 Gr.A2-70	
25	Yoke Nuts	ISO 3506 Gr.A2-70 Nylock	
26	Housing Nuts	ISO 3506 Gr.A2-70 Nylock	