

# CAST BODY KNIFE GATE VALVES

FIG. 84, STAINLESS STEEL - FULL PORT - BI-DIRECTIONAL RESILIENT 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 150psi @ 32-150°F (0C-66C)
- Full port one piece cast body with integral resilient seat.
- Drip tight shut-off in both directions (Bi-directional).
- 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 for shut-off on light consistency stock, white water or clear liquids.*

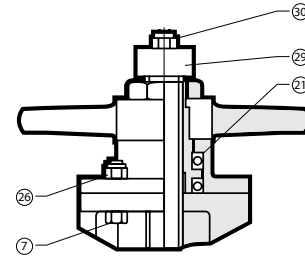
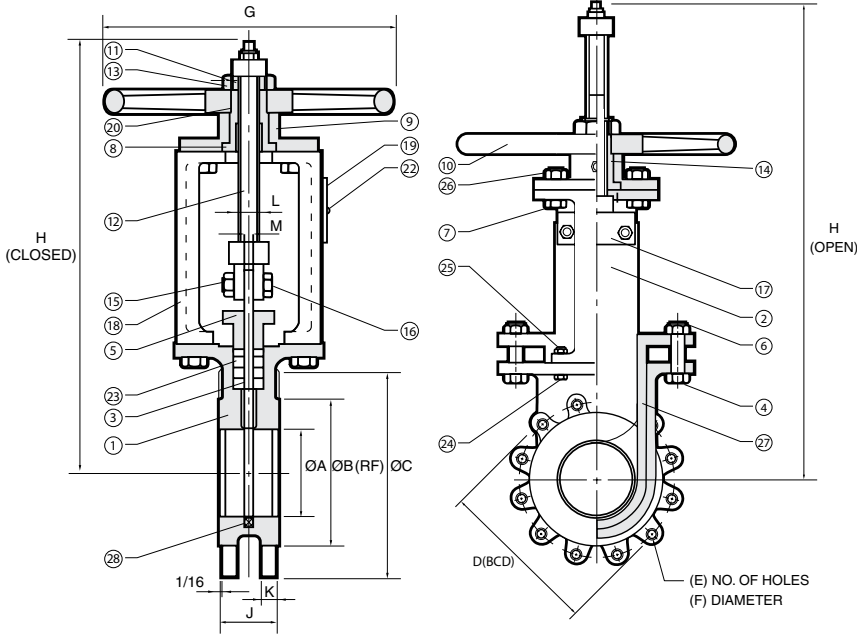


# STAINLESS STEEL KNIFE GATE VALVES

**FIG. 84, STAINLESS STEEL - FULL PORT - BI-DIRECTIONAL RESILIENT SEAT**

FIG 84B - CF8M (316)

FIG 84L - CG8M (317)



FOR 16" TO 24"  
TOP WORKS DETAIL

- Optional seat: HYCAR (BUNA N or NITRILE)
- 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	2	3.625	6	4.75	4	0.625 - 11	8.5	12.75	15	1.875	0.5	0.75	0.3125	31
2.5	2.44	4.125	7	5.5	4	0.625 - 11	8.5	13.75	16.375	2	0.5	0.75	0.3125	35
3	2.875	5	7.5	6	4	0.625 - 11	10	16.6875	19.6875	2	0.5	0.75	0.3125	38
4	3.875	6.1875	9	7.5	8	0.625 - 11	10	19.1875	23.375	2	0.5	0.75	0.3125	65
6	5.875	8.5	11	9.5	8	0.75 - 10	14	22.9375	29.125	2.25	0.625	1.125	0.3125	86
8	7.875	10.625	13.5	11.75	8	0.75 - 10	14	26.5625	34.75	2.75	0.625	1.125	0.375	140
10	9.875	12.75	16	14.25	12	0.875 - 9	18	30.8125	41.125	2.75	0.75	1.125	0.4687	187
12	11.875	15	19	17	12	0.875 - 9	18	36.0625	47.125	3	0.75	1.125	0.5625	225
14	13.125	16.25	21	18.75	12	1 - 8	20	38.5	52.0625	3	0.875	1.5	0.5625	274
16	15.5	18.5	23.5	21.25	16	1 - 8	20	45.5	59.75	3.5	1	1.5	0.75	410
18	17.5	21	25	22.75	16	1.125 - 7	24	49.5	67.375	3.5	1	1.5	0.75	435
20	19.5	23	27.5	25	20	1.125 - 7	24	57.625	77.125	4.5	1	1.5	0.9687	598
24	23.5	27.25	32	29.5	20	1.25 - 7	30	63.25	98.25	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	51	92	152	121	4	0.625 - 11	216	324	381	48	13	19	8	14
65	62	105	178	140	4	0.625 - 11	216	349	416	51	13	19	8	16
80	73	127	191	152	4	0.625 - 11	254	424	500	51	13	19	8	17
100	98	157	229	191	8	0.625 - 11	254	487	594	51	13	19	8	30
150	149	216	279	241	8	0.75 - 10	356	583	740	57	16	29	8	39
200	200	270	343	298	8	0.75 - 10	356	675	883	70	16	29	10	64
250	251	324	406	362	12	0.875 - 9	457	783	1045	70	19	29	12	85
300	302	381	483	432	12	0.875 - 9	457	916	1197	76	19	29	14	102
350	333	413	533	476	12	1 - 8	508	978	1322	76	22	38	14	125
400	394	470	597	540	16	1 - 8	508	1156	1518	89	25	38	19	186
450	445	533	635	578	16	1.125 - 7	610	1257	1711	89	25	38	19	198
500	495	584	699	635	20	1.125 - 7	610	1464	1960	114	25	38	25	272
600	597	692	813	749	20	1.25 - 7	762	1607	2496	114	25	38	25	350

Item	Description	84B	84L
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 A240 Gr.304	
20	Handwheel Key	Mild Steel	
21	Thrust Bearing	SKF 51112 (Ball Bearing)	
22	Rivets	Aluminium	
23	Wiper Ring	Viton 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	
27	Resilient Seat	Viton 70	
28	Reinforce Wire (ss rod)	ASTM A479 Gr.316	
29	Adjusting Nut	ISO 3506 Gr.A2-70	
30	Lock Nut	AISI 304 Nylock	