

Figure 68B KNIFE GATE VALVES

FNW™

STAINLESS STEEL RESILIENT SEATED KNIFE GATE VALVE

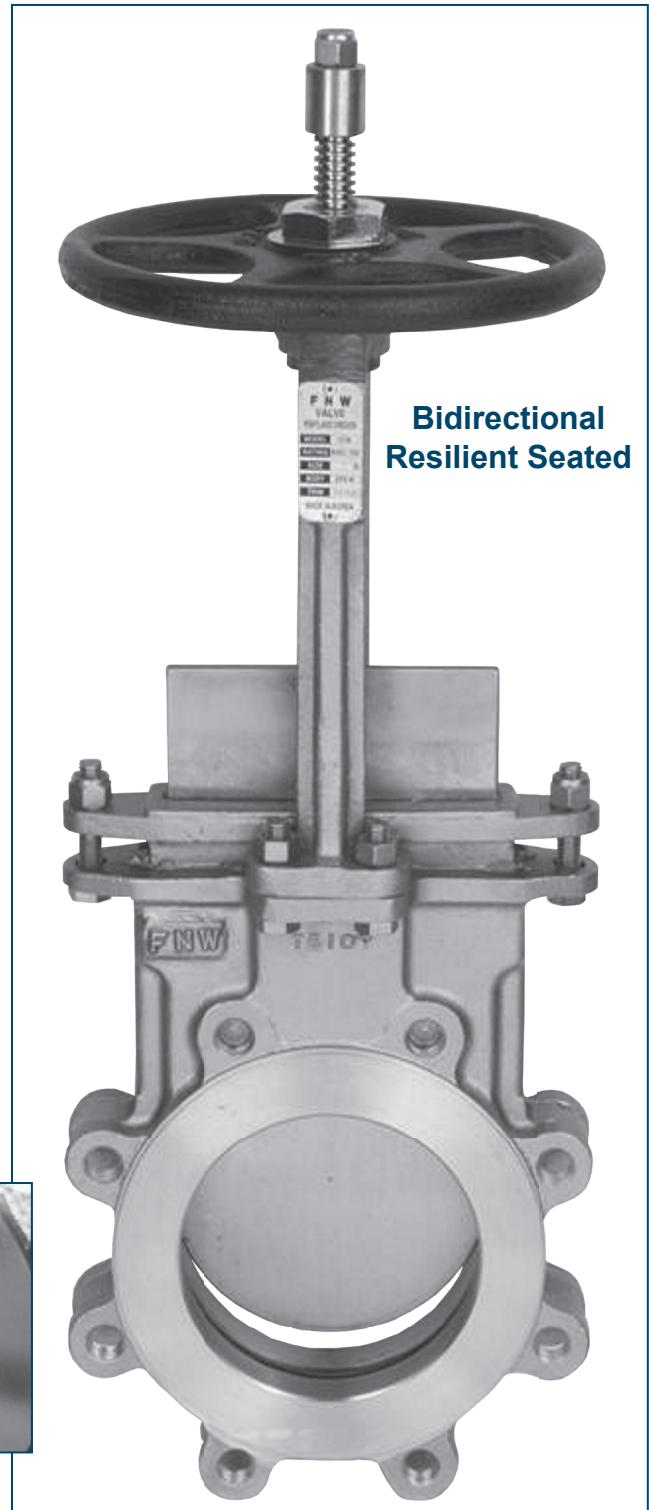
The figure 68B is a stainless steel body and yoke design. The 68B is designed to handle light mixtures of stock and slurries with bidirectional positive shut off.

Features:

- Bidirectional Shut off
- Zero Pressure Differential Needed for Shut off
- Mechanically Retained Resilient Seat
- Wire Reinforced Seat Material
- Cast Stainless Steel Body, Yoke and Packing Gland
- Thrust Ball Bearing Yoke Bushing (14" & Larger)
- Ductile Iron Handwheel
- Bonnetless, Outside Screw & Yoke
- Rising Stem
- Meets MSS SP-81 Specification for 150 PSI CWP
- Smooth Flow, Non-clogging Step Seat Design
- Available in sizes from 3" to 30"

Standards:

- Design: MSS SP-81
- Flange Drilling: ANSI B16.5
- Shell Test: MSS SP-81
- Seat Test: Exceeds MSS SP-81



Positive Shut off Seat

Options

FNW Valve Company offers many options and modifications for valves. These include, but are not limited to:

- Actuation including ratchets, chain wheels, AWWA nuts, gear-operators, pneumatic & hydraulic cylinders, and electric actuators
- Packing options for pH and temperature requirements
- Back seat stops to prevent knife blade deflection
- V-ports for reduced plugging in metering applications
- Stem extensions in carbon and stainless steel
- Conversion to non-rising stem (NRS)
- Deflection cones in Ni-Hard and HDPE for added seat and gate protection in abrasive services
- Flush ports to clear suspended matter from the valve chest
- Quick opening levers
- Various seat materials
- Open and close position lockout lugs

Contact FNW for knife gate valve options.

Standard Materials

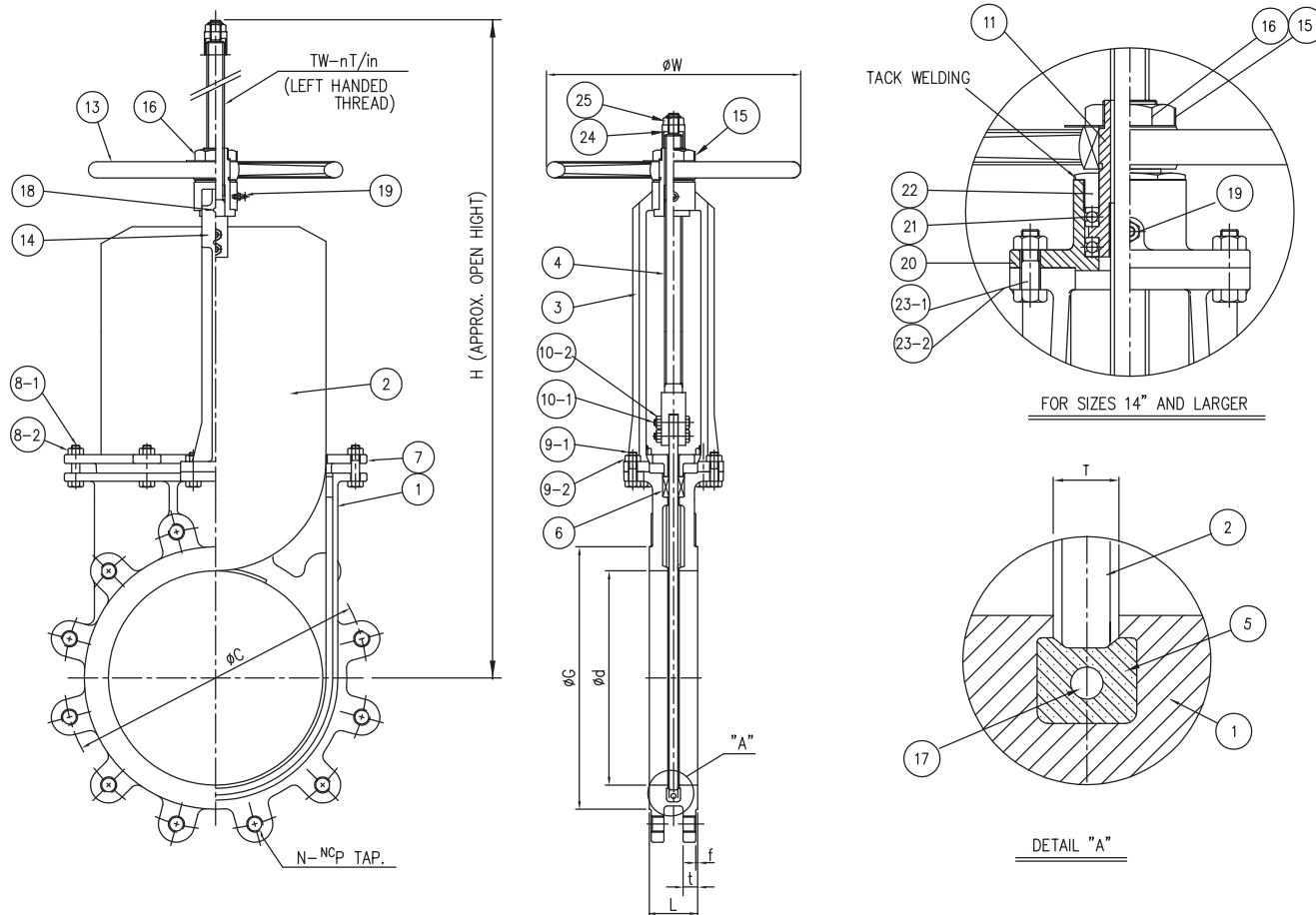
Ref. No.	Description	Material	Qty	Remarks
1	Body	A351 CF8M	1	
2	Disc	A240 316	1	
3	Yoke	A351 CF8	1	
4	Stem	A276 304	1	
5	Resilient Seat	BUNA		
6	Packing	PTFE/FIBER	1 Set	Non-Asbestos
7	Packing Gland	A351 CF8	1	
8-1	Gland Bolt	A193 B8	1 Set	
8-2	Gland Nut	A194 8	1 Set	Nylon Lock Nut
9-1	Yoke Bolt	A193 B8	4	
9-2	Yoke Nut	A194 8	4	
10-1	Clevis Bolt	A193 B8	2	
10-2	Clevis Nut	A194 8	2	Nylon Lock Nut
11	Yoke Sleeve	BRASS	1	
12	Thrust Washer	BRASS	1	
13	Hand Wheel	DUCTILE IRON	1	
14	Name Plate	ALUMINUM	1	
15	Lock Washer	A240 304	1	
16	Wheel Nut	STEEL	1	
17	Seat Wire	A276 304	1	
18	Rivet	ALUMINUM	2	
19	Grease Nipple	ASS'Y	1	
20	Bearing Housing	A351 CF8	1	14" & Larger
21	Thrust Ball Bearing	ASS'Y	2	14" & Larger
22	Bearing Gland	A351 CF8	1	Tack Weld
23-1	Bearing Housing Bolt	A193 B8	4	14" & Larger
23-2	Bearing Housing Nut	A194 8	4	14" & Larger
24	Lock Cap	A276-304	1	
25	Lock Cap Nut	A194-8	1	Nylon Lock Nut

Packing Options

Type	Temperature Limit
PTFE Impregnated Fiber (Standard)	425°F
Pure TFE	425°F
TFE Fiber (Ultra)	500°F
Graphite Filament Yarn	1000°F

Flow Coefficients, Port Areas, & Weights

Size	Cv	Port Area (in ²)	Wt. (Lbs)
3	290	6.65	26
4	530	12.19	37
6	1,160	26.68	51
8	2,110	48.62	77
10	3,300	76.01	123
12	4,820	110.98	170
14	6,100	140.74	234
16	8,200	188.84	348
18	10,220	235.49	415
20	12,680	292.10	600
24	18,380	423.61	781
30	28,920	666.12	1480



Dimensions (inches)

Size	L	Ød	ØG	ØC	N	NCP	t	f	T	ØW	H
3	2.00	2.91	5.00	6.00	4	5/8"-11	0.59	0.08	0.315	7.09	18.70
4	2.00	3.94	6.18	7.50	8	5/8"-11	0.59	0.08	0.315	9.84	20.27
6	2.25	5.83	8.50	9.50	8	3/4"-10	0.67	0.08	0.315	9.84	27.80
8	2.75	7.87	10.63	11.75	8	3/4"-10	0.71	0.08	0.315	11.81	34.13
10	2.75	9.84	12.76	14.25	12	7/8"-9	0.91	0.10	0.39	13.78	42.28
12	3.00	11.89	15.00	17.00	12	7/8"-9	0.91	0.10	0.39	15.75	48.98
14	3.00	13.39	16.26	18.75	12	1"-8	0.94	0.10	0.55	15.75	53.15
16	3.50	15.51	18.50	21.25	16	1"-8	1.06	0.10	0.55	19.68	60.24
18	3.50	17.32	20.98	22.75	16	1-1/8"-7	1.10	0.10	0.55	19.68	67.32
20	4.50	19.29	22.99	25.00	20	1-1/8"-7	1.18	0.10	0.71	21.65	75.20
24	4.50	23.23	27.24	29.50	20	1-1/4"-7	1.18	0.10	0.71	21.65	103.15
30	4.75	29.13	33.74	36.00	28	1-1/4"-7	1.26	0.12	0.71	23.62	108.15

Figure Number Matrix

FNW 68B B Size			
SEAT CODE	SIZE CODE		
B = BUNA (Standard)	3 = M	10 = 10	18 = 18
E = EPDM	4 = P	12 = 12	20 = 20
H = Hypalon	6 = U	14 = 14	24 = 24
V = Viton®	8 = X	16 = 16	30 = 30