Figure 67B KNIFE GATE VALVES



STAINLESS STEEL METAL SEATED KNIFE GATE VALVE

The figure 67B is an all cast stainless steel body and yoke design. The 67B is designed to handle dense mixtures of stock and slurries with unidirectional shut off. The shearing action of the knife gate cuts through solids and cleans the seat as it closes.

Features:

- · Unidirectional Shutoff
- 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
- Seat/Shell Test: MSS SP-81
- Material: ASME B16.34



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Options

20

21

22

23-1

23-2

Bearing Housing

Thrust Ball Bearing

Bearing Gland

Bearing Housing Bolt

Bearing Housing Nut

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 for low ΔP or reverse operation applications, or 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 or seat pocket area
- Quick opening levers
- · Gate scraper
- · Open and close position lockout lugs

Contact FNW for knife gate valve options.

Description	Material	Qty	Remarks
Body	A351 CF8M	1	
Disc	A240 316SS	1	
Yoke	A351 CF8	1	
Stem	A276 304	1	
Body Seat	A351 CF8M		Integral
Packing	PTFE/FIBER	1 Set	Non-Asbestos
Packing Gland	A351 CF8	1	
Gland Bolt	A193 B8	1 Set	
Gland Nut	A194 8	1 Set	Nylon Lock Nut
Yoke Bolt	A193 B8	4	
Yoke Nut	A194 8	4	
Clevis Bolt	A193 B8	2	
Clevis Nut	A194 8	2	Nylon Lock Nut
Yoke Sleeve	BRASS	1	
Thrust Washer	BRASS	1	
Hand Wheel	DUCTILE IRON	1	
Name Plate	ALUMINUM	1	
Lock Washer	A240 304	1	
Wheel Nut	STEEL	1	
Bottom Wedge	A351 CF8M		Integral
Rivet	ALUMINUM	2	
Grease Nipple	ASS'Y	1	
	Body Disc Disc Yoke Stem Body Seat Packing Packing Gland Gland Bolt Gland Bolt Gland Nut Yoke Bolt Yoke Bolt Clevis Bolt Clevis Bolt Clevis Bolt Clevis Nut Yoke Sleeve Thrust Washer Hand Wheel Name Plate Lock Washer Wheel Nut Bottom Wedge Rivet	BodyA351 CF8MDiscA240 316SSYokeA351 CF8StemA276 304Body SeatA351 CF8MPackingPTFE/FIBERPacking GlandA351 CF8Gland BoltA193 B8Gland NutA194 8Yoke BoltA193 B8Clevis BoltA193 B8Clevis NutA194 8Yoke SleeveBRASSThrust WasherBRASSHand WheelDUCTILE IRONName PlateALUMINUMLock WasherA240 304Wheel NutSTEELBottom WedgeA351 CF8MRivetALUMINUM	BodyA351 CF8M1DiscA240 316SS1YokeA351 CF81YokeA351 CF81Body SeatA351 CF8M1Body SeatA351 CF8M1PackingPTFE/FIBER1 SetPacking GlandA351 CF81Gland BoltA193 B81 SetGland NutA194 81 SetYoke BoltA193 B84Yoke NutA194 82Clevis BoltA193 B82Clevis NutA194 82Yoke SleeveBRASS1Hand WheelDUCTILE IRON1Name PlateALUMINUM1Lock WasherA240 3041Wheel NutSTEEL1Bottom WedgeA351 CF8M2

Packing Options

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

Figure Number Matrix

FN	FNW 67 B <u>Size</u>					
	SIZE CODE					
3 = M	10 = 10	18 = 18				
4 = P	12 = 12	20 = 20				
6 = U	14 = 14	24 = 24				
8 = X	16 = 16	30 = 30				

Flow Coefficients, Port Areas, & Weights

A351 CF8

ASS'Y

A351 CF8

A193 B8

A194 8

1

2

1

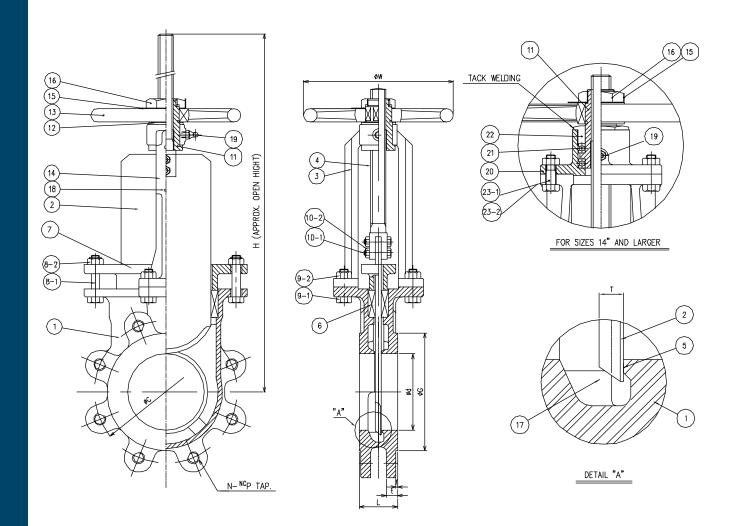
4

4

Tack Weld

Size	Cv	Port Area (in ²)	Wt. (Lbs)	
3	290	6.65	24	
4	550	12.69	36	
6	1,220	28.07	47	
8	2,070	47.76	70	
10	3,250	74.78	116	
12	4,880	112.48	153	
14	5,960	137.4	204	
16	7,830	180.41	305	
18	10,130	233.32	364	
20	12,580	289.68	534	
24	18,380	423.61	680	
30	29,150	671.62	1330	

Standard Materials



Dimensions (inches)

Size	L	Ød	ØG	ØC	Ν	№Р	t	f	Т	ØW	Н
3	2.00	2.91	5.00	6.00	4	5/8" - 11	0.59	0.08	0.315	7.09	17.32
4	2.00	4.02	6.18	7.50	8	5/8" - 11	0.59	0.08	0.315	9.84	20.51
6	2.25	5.98	8.50	9.50	8	3/4" - 10	0.63	0.10	0.315	9.84	25.91
8	2.75	7.80	10.63	11.75	8	3/4" - 10	0.75	0.10	0.315	11.81	31.42
10	2.75	9.76	12.76	14.25	12	7/8" - 9	0.83	0.10	0.39	13.78	38.94
12	3.00	11.97	15.00	17.00	12	7/8" - 9	0.87	0.10	0.39	15.75	45.16
14	3.00	13.23	16.26	18.75	12	1" - 8	0.94	0.12	0.55	15.75	50.63
16	3.50	15.16	18.50	21.25	16	1" - 8	1.06	0.12	0.55	19.69	58.19
18	3.50	17.24	20.98	22.75	16	1-1/8" - 7	1.06	0.12	0.55	19.69	64.29
20	4.50	19.21	22.99	25.00	20	1-1/8" - 7	1.18	0.12	0.71	21.65	71.30
24	4.50	23.23	27.24	29.50	20	1-1/4" - 7	1.18	0.12	0.71	21.65	82.76
30	4.75	29.25	33.74	36.00	28	1-1/4" - 7	1.26	0.12	0.71	23.62	104.33



Figure 67B **KNIFE GATE VALVES**

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DOC: FNW67B05 Ver. 4/2012

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