# **SERIES 762**

# BRAY SLURRYSHIELD® BIDIRECTIONAL KNIFE GATE VALVES



**5** Bray

# **FEATURES & BENEFITS**

## **DESIGN FEATURES**

Series 762 is a bidirectional heavy duty slurry valve, designed for demanding high pressure slurry applications. Twin elastomer seats and push-through gate design facilitate self-cleaning and prevent media build up.

The durable ductile iron body is offered in a two-piece bolted flange style. When fully open, the valve is full bore, offering no resistance to line media.

- 1 Upper and lower protective stem cover is standard in all models, increasing cycle life in hazardous environments.
- 2 Fully encapsulated J-ring providing sleeve reinforcement and memory assist, guaranteeing bidirectional zero leakage performance.
- 3 In the open position, the energized sleeves shield all metal components from direct contact with the flowing process media.
- **4** Gate available in a wide range of corrosion resistant alloys to suit the pressure rating and application.
- 5 The design provides unobstructed flow path, extending sleeve life and minimizing pressure drop across valve.
- 6 Flanged two-piece bolted body allows for easy maintenance and is drilled and tapped to country standards.
- 7 Optional bottom flush plate with tapped ports, allows for safe discharge of media and easy flush water connection.



Series 762 Bidirectional Heavy Duty Slurry Valve



# **INDUSTRY APPLICATIONS**

## Mining

- > Primary Milling
- > Secondary Milling
- > Primary Cyclone
- > Secondary Cyclone
- > Flotation Cell
- > Thickener
- > Filter Pump

## **HPAL/POX**

> Autoclave Application **Process Pumps** 

Power

Pulp & Paper

**Alumina** 

Chemical

Cement

## STANDARD CONSTRUCTION

Body	DI
Gate	304
Seat	Natural Rubber
Stem	304
Gland Plate	Carbon Steel
Secondary Seal	EPDM
Topworks	Steel

# **TECHNICAL SPECIFICATIONS**

Size Range	NPS 3 to 24						
	DN 80 to 600						
Body Style Two Piece Bolted   Flanged							
Pressure Rating	SS 316 Gate	Duplex 2205 Gate	17-4 PH Gate				
	NPS 3-24 100psi	NPS 3-24 150psi	NPS 3-24 232psi				
	DN80-600 7 bar	DN80-600mm 10 bar	DN80-600mm 16bar				
Drilling	ASME B16.5 CL150						
	ASME B16.47 CL150						
Face to Face	Per Industry Standard						
Certification	Canadian CRN						
Design Standard	Manufacturer Standard						
Testing Standard	Manufacturer Standard <sup>1</sup>						

762 valves are elastomer sleeved slurry valves and MSS SP-81 does not apply. The valves are tested for bi-directional, zero leakage across the seats. NOTE1

# **GATE OPTIONS**

304, 316, 317 Stainless Steel	
SAF 2507 Duplex	_
17-4PH Stainless Steel	
Hastelloy® C	
Monel®	
Titanium	

# **BODY OPTIONS**

Carbon Steel (WCB)
CF8 Stainless Steel
CF8M Stainless Steel
CF3M Stainless Steel
SAF 2205 Duplex
SAF 2507 Duplex

# **SEAT OPTIONS**



Natural	-60 to 165°F		
Rubber	-51 to 74°C		
Buna-N	-34 to 194°F		
	-36 to 90°C		
EPDM*	-65 to 248°F		
	-54 to 150°C		

<sup>\*</sup> Exposure to continuous elevated temperatures will result in premature aging of the elastomer.

Do not operate the valve if the media in the line is frozen.

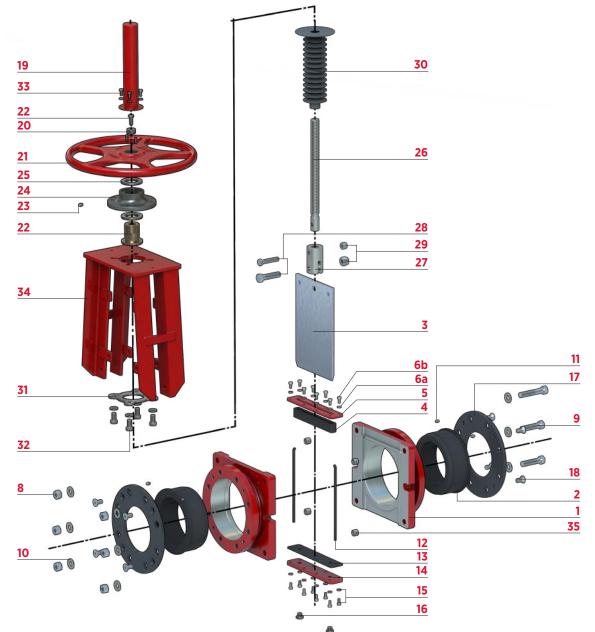
# **MATERIALS OF CONSTRUCTION**

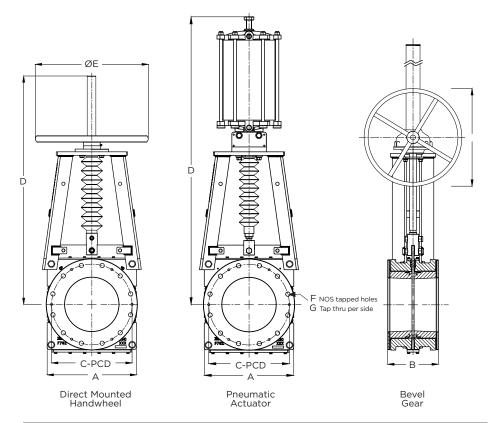
# **BILL OF MATERIALS & PARTS CALL OUT**

Item	Description
1	Body
2	Sleeve
3	Gate
4	Secondary Seal
5	Gland Plate
6a	Gland Plate Washers
6b	Gland Plate Fasteners
7	Locating Bush
8	Nylock Nut
9	Body Bolt
10	Body Bolt Washer
11	Grease Nipple

Item	Description
12	O-Ring
13	Drain Plate Gasket
14	Drain Plate
15	Drain Plate Fasteners & Washers
16	Drain Plug
17	Seat Retainer
18	Seat Retainer Screws
19	Stem Cover
20	Lock Nut
21	Handwheel
22	Stem Nut
23	Grease NIpple

Item	Description
24	Handwheel Housing
25	Thrust Bearing
26	Stem
27	Clevis
28	Clevis Bolt
29	Clevis Lock Nut
30	Bellows
31	Bellow Flange
32	Bellow Mounting Fasteners
33	Nut
34	Superstructure/Tower
35	Locating Bush





## NOTE

- 1 Consult factory for hydraulic and electric actuator dimensions.
- 2 Dimensions are approximate and subject to change. Consult factory for certified drawings.
- \* In conformance with ASME B16.5, Class 150 for sizes NPS 3 (DN80) through NPS 24 (DN600) and per ASME B16.47 Series A for sizes > NPS 24.

DIMENSIONS (Inches)								
NPS	Α	В	CPCD	D	ØE	F	G	Н
3	8.66	6.88	6.00	22.24	12	4	5/8"-11	
4	10.04	6.88	7.50	23.94	12	8	5/8"-11	
6	12.32	7.00	9.50	31.58	16	8	3/4"-10	
8	13.98	7.28	11.75	36.93	20	8	3/4"-10	
10	15.83	8.89	14.25	42.32	20	12	7/8"-9	
12	19.09	10.15	17.00	50.79	20	12	7/8"-9	15.55
14	21.06	10.15	18.75	58.46	20	12	1"-8	15.55
16	23.43	11.02	21.25	62.99	20	16	1″-8	16.93
18	26.38	12.28	22.75	68.50	20	16	1-1/8"-7	18.11
20	28.35	14.13	25.00	72.83	30	20	1-1/8"-7	18.50
24	33.86	14.64	29.50	87.80	39	20	1-1/4"-7	21.26

DIMENS	SIONS (Mill	imeters)						
DN	Α	В	CPCD	D	ØE	F	G	н
80	220	175	152.4	630	300	4	5/8"-11	
100	255	175	190.5	660	300	8	5/8"-11	
150	313	178	241.3	864	300	8	3/4"-10	
200	355	185	298.5	1005	300	8	3/4"-10	
250	402	226	362	1140	300	12	7/8"-9	
300	485	258	431.8	1290	500	12	7/8"-9	395
350	535	258	476.3	1485	500	12	1"-8	395
400	595	280	539.8	1600	500	16	1"-8	430
450	670	312	577.9	10	500	16	1-1/8"-7	460
500	720	359	635	1850	750	20	1-1/8"-7	470
600	860	372	749.3	2230	1000	20	1-1/4"-7	540

WEIGHT (lbs)						
HAND WHEEL	PNEUMATIC ACTUATOR	GEAR OPERATOR				
83	90	88				
105	115	110				
165	156	168				
225	254	225				
297	370	298				
	558	447				
	783	595				
	970	756				
	1587	1146				
	1905	1424				
	2976	2088				

WEIGHT (kg)					
38	41	40			
48	52	50			
75	71	76			
102	115	102			
135	168	135			
	253	203			
	355	270			
	440	343			
	720	520			
	864	646			
	1350	947			

# **ACTUATOR OPTIONS | SHOWN IN RED**







**Bevel Gear Operator** 



**Double Acting Pneumatic Actuator** 



**Hydraulic Actuator** 



**Electric Actuator** 



# **ADDITIONAL ACCESSORIES | SHOWN IN RED**



**Deflection Cone** 



Handwheel Lock Out



Pinned Lockout Open & Closed



Pneumatic Failsafe



Non-Rising Stem



**Gate Guard** 



Manual Override



Chain Wheel



**Mechanical Limit Switch** 



**Proximity Sensor** 



Solenoid





BRAY FLOW CONTROL SOLUTIONS ARE AVAILABLE FOR A VARIETY OF INDUSTRIES.

#### **ENERGY**

Mining
Oil & Gas
Power / FGD
Nuclear Power

#### **INDUSTRIAL**

Chemical
Pulp & Paper
Textile
Marine

#### WATER

Water / Wastewater Ultra Pure Water Desalination Irrigation

#### **INFRASTRUCTURE**

Beverage & Food Transportation

Heating, Ventilation & Air Conditioning (HVAC)



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