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**SERIES 762**

# **BRAY SLURRYSHIELD® BIDIRECTIONAL KNIFE GATE VALVES**

3" to 48"



 **Bray**<sup>®</sup>

BRAY.COM

THE HIGH PERFORMANCE COMPANY

## 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.
- 8 Seat retainers are standard on all sizes and are provided to ensure proper and uniform compression is maintained on the seats.



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**

<b>Body</b>	DI up to 28 / WCB 30-48
<b>Gate</b>	316
<b>Seat</b>	Natural Rubber
<b>Stem</b>	304
<b>Gland Plate</b>	Carbon Steel
<b>Secondary Seal</b>	EPDM
<b>Topworks</b>	Steel

**TECHNICAL SPECIFICATIONS**

<b>Size Range</b>	NPS 3 to 48 DN 80 to 1200										
<b>Body Style</b>	Two Piece Bolted   Flanged										
<b>Pressure Rating</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"><b>SS 316 Gate</b></td> <td style="width: 50%;"><b>Duplex 2205 Gate</b></td> </tr> <tr> <td>NPS 3-24 100psi   DN 80-600 7 bar</td> <td>NPS 3-18 232psi   DN 80-450 16 bar</td> </tr> <tr> <td>NPS 26-42 75psi   DN 650-1050 5 bar</td> <td>NPS 20-24 150psi   DN 500-600 10bar</td> </tr> <tr> <td>NPS 44-48 50psi   DN 1100-1200 3 bar</td> <td>NPS 26-42 100psi   DN 650-1050 7bar</td> </tr> <tr> <td></td> <td>NPS 44-48 75psi   DN 1100-1200 5bar</td> </tr> </table>	<b>SS 316 Gate</b>	<b>Duplex 2205 Gate</b>	NPS 3-24 100psi   DN 80-600 7 bar	NPS 3-18 232psi   DN 80-450 16 bar	NPS 26-42 75psi   DN 650-1050 5 bar	NPS 20-24 150psi   DN 500-600 10bar	NPS 44-48 50psi   DN 1100-1200 3 bar	NPS 26-42 100psi   DN 650-1050 7bar		NPS 44-48 75psi   DN 1100-1200 5bar
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<b>Drilling</b>	ASME B16.5 CL150 ASME B16.47 CL150										
<b>Face to Face</b>	Per Industry Standard										
<b>Certification</b>	Canadian CRN   PED Category I Module A (Group 2 liquids)										
<b>Design Standard</b>	Manufacturer Standard										
<b>Testing Standard</b>	Manufacturer Standard <sup>1</sup>										

**NOTE<sup>1</sup>** 762 valves are elastomer sleeved slurry valves and MSS SP-81 and MSS SP-151 does not apply. The valves are tested for bi-directional, zero leakage across the seats.

**GATE OPTIONS**

- 304, 317 Stainless Steel
- SAF 2507 Duplex
- SAF 2205 Duplex
- 17-4PH Stainless Steel
- Hastelloy<sup>®</sup> C
- Monel<sup>®</sup>
- Titanium

**BODY OPTIONS**

- Carbon Steel (WCB)
- CF3M Stainless Steel
- Ductile Iron

**SEAT OPTIONS**



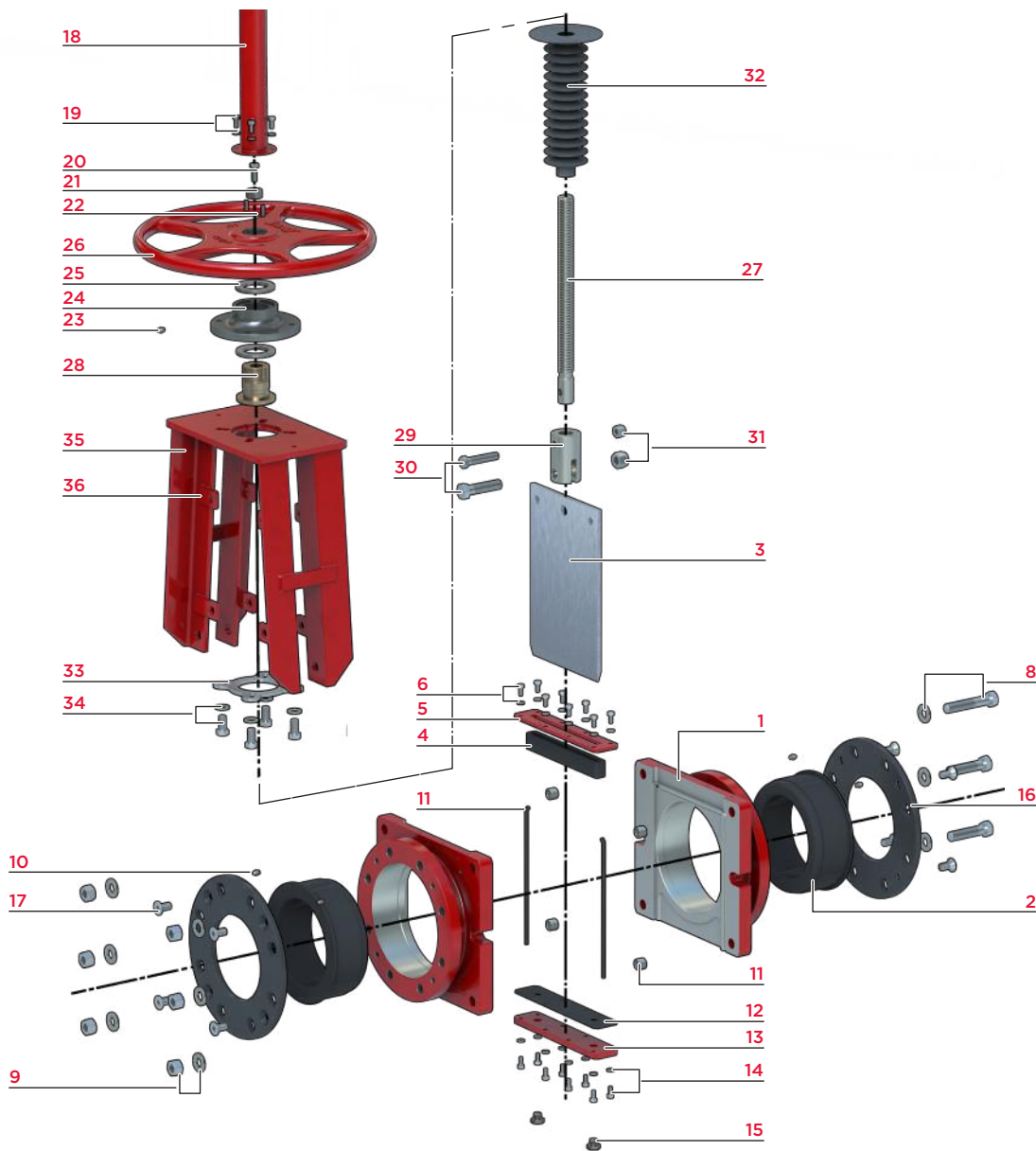
<b>Natural Rubber</b>	-60 to 165°F -51 to 74°C
<b>Buna-N</b>	-34 to 194°F -36 to 90°C
<b>EPDM-HT*</b>	-65 to 302°F -54 to 150°C

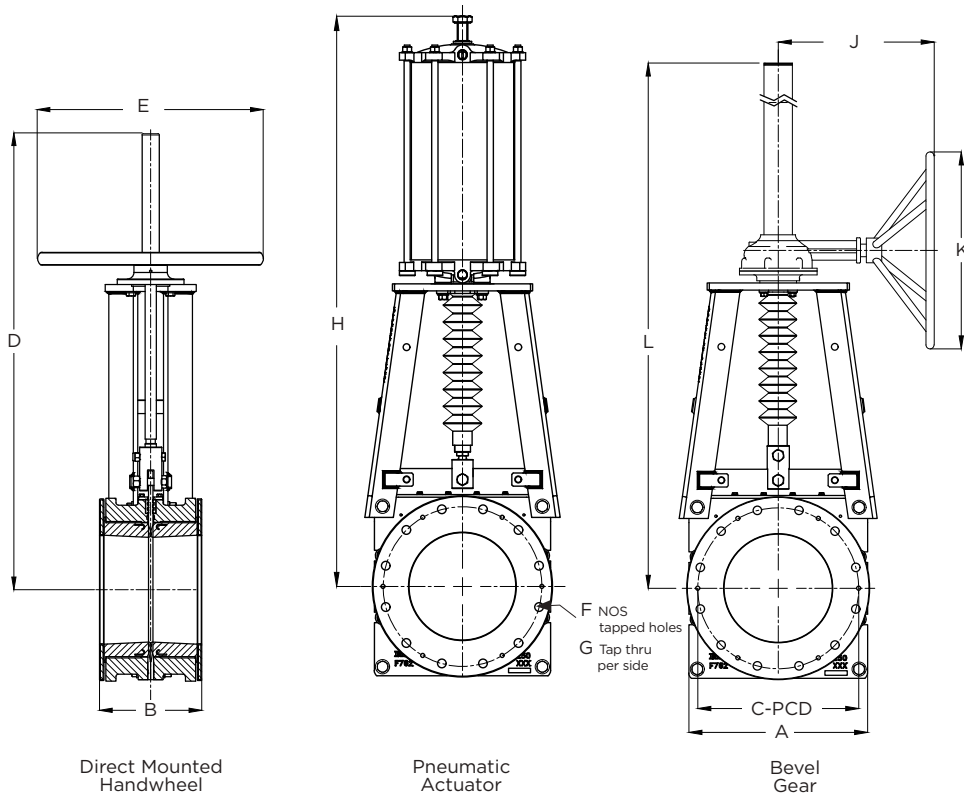
\* Exposure to continuous elevated temperatures will result in premature aging of the elastomer.  
<sup>1</sup> Do not operate the valve if the media in the line is frozen.

# MATERIALS OF CONSTRUCTION

## BILL OF MATERIALS & PARTS CALL OUT

Item	Description	Item	Description	Item	Description
1	Body	13	Drain Plate (optional)	25	Thrust Bearing
2	Seat	14	Drain Plate Fasteners & Washers (opt.)	26	Handwheel
3	Gate	15	Drain Plug (optional)	27	Stem
4	Secondary Seal	16	Seat Retainer	28	Stem Nut
5	Gland Plate	17	Seat Retainer Screws	29	Clevis
6	Gland Plate Fasteners & Washers	18	Stem Guard	30	Clevis Bolt
7	Locating Bush	19	Stem Guard Bolt & Nut	31	Clevis Lock Nut
8	Body Mounting Bolt & Washer	20	Travel Stop Fastener	32	Bellows
9	Body Mounting Nut & Washer	21	Travel Stop	33	Bellows Flange
10	Grease Nipple	22	Grub Screws	34	Bellows Mounting Fasteners
11	Body O-Ring	23	Grease Nipple	35	Superstructure/Tower Assembly
12	Drain Plate Gasket (optional)	24	Handwheel Assembly Housing	36	Lock Out Bracket





**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	A	B	CPCD	D	E	F	G	H	J	K	L
3	8.66	6.88	6.00	22.24	12	4	5/8"-11	24.80	8.86	11.81	26.77
4	10.04	6.88	7.50	23.94	12	8	5/8"-11	25.98	8.86	11.81	28.34
6	12.32	7.00	9.50	31.58	16	8	3/4"-10	34.02	9.45	11.81	35.43
8	13.98	7.28	11.75	36.93	20	8	3/4"-10	39.57	9.45	11.81	43.50
10	15.83	8.89	14.25	42.32	20	12	7/8"-9	44.88	10.24	11.81	49.60
12	19.09	10.15	17.00	--	--	12	7/8"-9	50.79	15.55	19.69	52.75
14	21.06	10.15	18.75	--	--	12	1"-8	58.46	15.55	19.69	67.52
16	23.43	11.02	21.25	--	--	16	1"-8	62.99	16.93	19.69	72.83
18	26.38	12.28	22.75	--	--	16	1-1/8"-7	68.50	18.11	19.69	79.13
20	28.35	14.13	25.00	--	--	20	1-1/8"-7	72.83	18.50	29.53	83.26
24	33.86	14.64	29.50	--	--	20	1-1/4"-7	87.70	21.26	39.37	100.59

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

DIMENSIONS (Millimeters)											
DN	A	B	CPCD	D	E	F	G	H	J	K	L
80	220	175	152.4	565	300	4	5/8"-11	630	225	300	680
100	255	175	190.5	608	300	8	5/8"-11	660	225	300	720
150	313	178	241.3	802	400	8	3/4"-10	864	240	300	900
200	355	185	298.5	938	500	8	3/4"-10	1005	240	300	1105
250	402	226	362	1075	500	12	7/8"-9	1140	260	300	1260
300	485	258	431.8	--	--	12	7/8"-9	1290	395	500	1340
350	535	258	476.3	--	--	12	1"-8	1485	395	500	1715
400	595	280	539.8	--	--	16	1"-8	1600	430	500	1850
450	670	312	577.9	--	--	16	1-1/8"-7	1740	460	500	2010
500	720	359	635	--	--	20	1-1/8"-7	1850	470	750	2115
600	860	372	749.3	--	--	20	1-1/4"-7	2230	540	1000	2555

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

# OPTIONS & ACCESSORIES

## ACTUATOR OPTIONS | SHOWN IN RED



Direct Mounted Handwheel



Bevel Gear Operator



Double Acting Pneumatic Actuator



Hydraulic Actuator



Electric Actuator

ADDITIONAL ACCESSORIES | SHOWN IN RED



Handwheel Lock Out



Pneumatic Failsafe



Non-Rising Stem



Gate Guard



Manual Override



Chain Wheel



Mechanical Limit Switch



Proximity Sensor



Solenoid



Drain Plate



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

**ENERGY**

Mining  
Oil & Gas  
Power / FGD  
Nuclear Power

**WATER**

Water / Wastewater  
Ultra Pure Water  
Desalination  
Irrigation

**INDUSTRIAL**

Chemical  
Pulp & Paper  
Textile  
Marine

**INFRASTRUCTURE**

Beverage & Food  
Transportation  
Heating, Ventilation & Air Conditioning (HVAC)



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