

---

**SERIES 762**

**BRAY SLURRYSHIELD® BIDIRECTIONAL  
KNIFE GATE VALVES**



**Bray**®

BRAY.COM

THE HIGH PERFORMANCE COMPANY

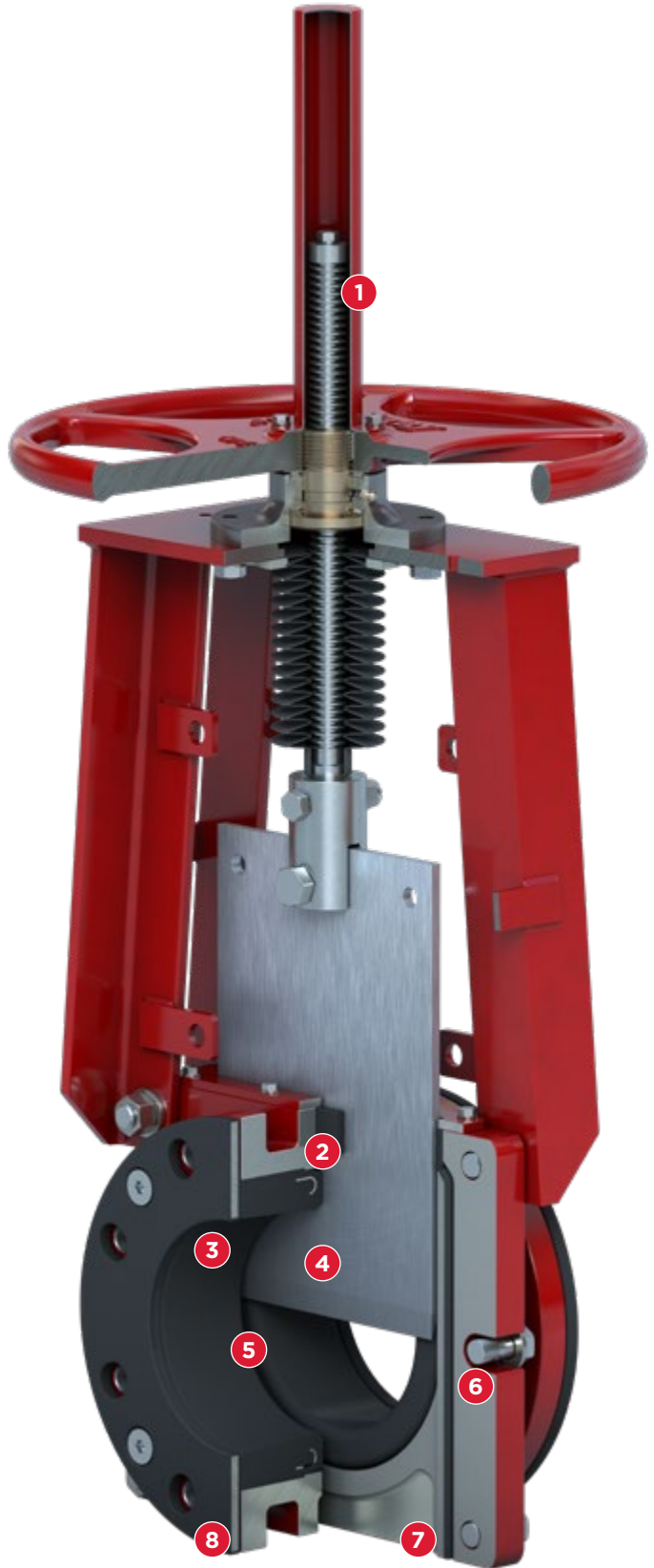
## FEATURES & BENEFITS

### DESIGN FEATURES

Series 762 is a bidirectional heavy duty slurry valve, designed for demanding high pressure slurry applications. Twin elastomer sleeves 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 dirty/dusty 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 Sleeve retainers are standard on all sizes and are provided to ensure proper and uniform compression is maintained on the sleeves.



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 NPS 3 to 28   DN 80 to 700 WCB NPS 30-48   DN 750 to 1200
<b>Gate</b>	316
<b>Sleeve</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"> <tr> <td><b>SS 316 Gate</b></td> <td><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 48 50psi   DN 1200 3 bar</td> <td>NPS 26-42 100psi   DN 650-1050 7bar</td> </tr> <tr> <td></td> <td>NPS 48 75psi   DN 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 48 50psi   DN 1200 3 bar	NPS 26-42 100psi   DN 650-1050 7bar		NPS 48 75psi   DN 1200 5bar
<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 48 50psi   DN 1200 3 bar	NPS 26-42 100psi   DN 650-1050 7bar										
	NPS 48 75psi   DN 1200 5bar										
<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 sleeves.

## 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

## SLEEVE OPTIONS



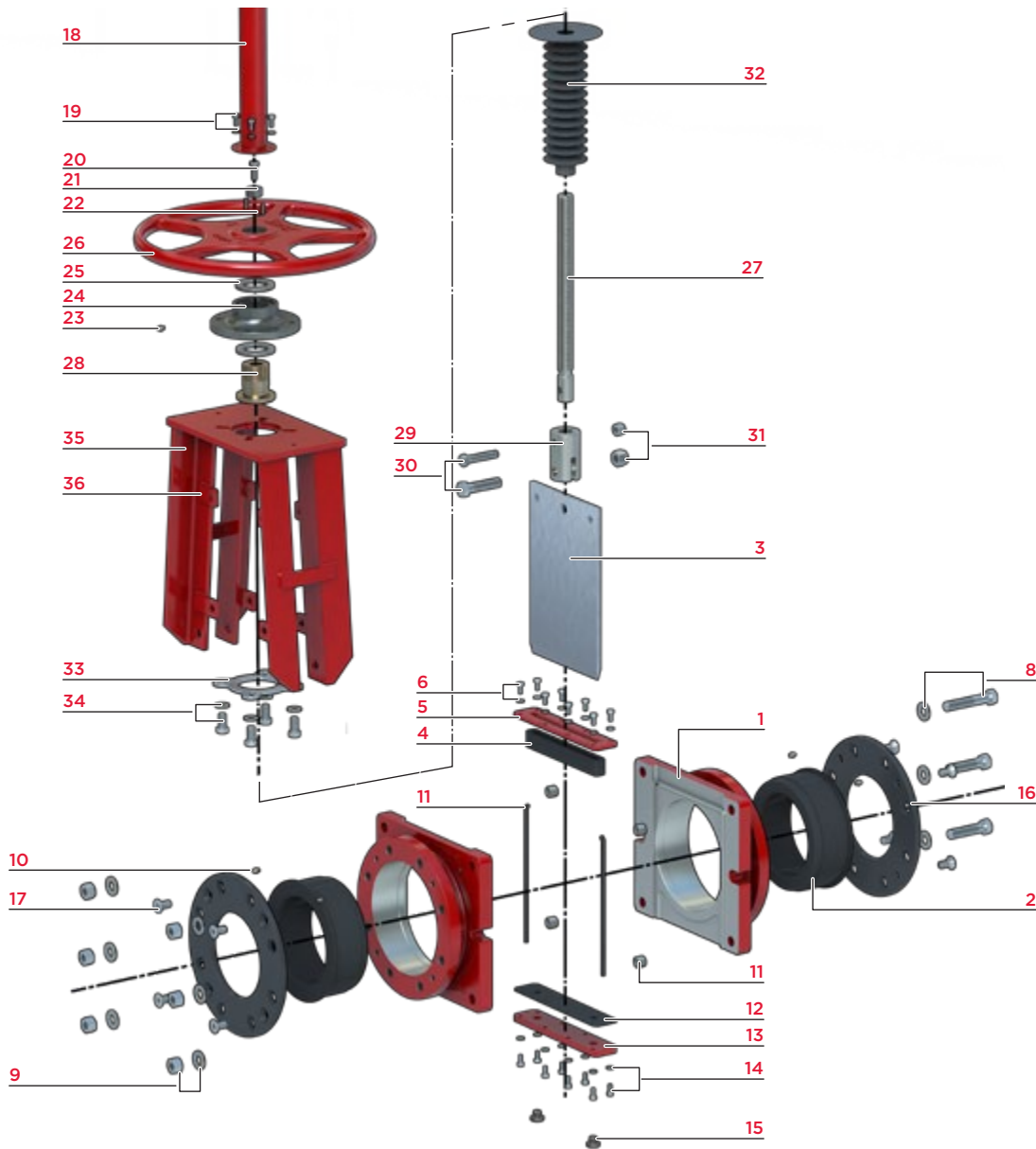
<b>Natural Rubber</b>	-60 to 165°F -51 to 74°C
<b>Buna-N</b>	-34 to 194°F -36 to 90°C
<b>EPDM-HT*</b>	-65 to 302°F -54 to 150°C

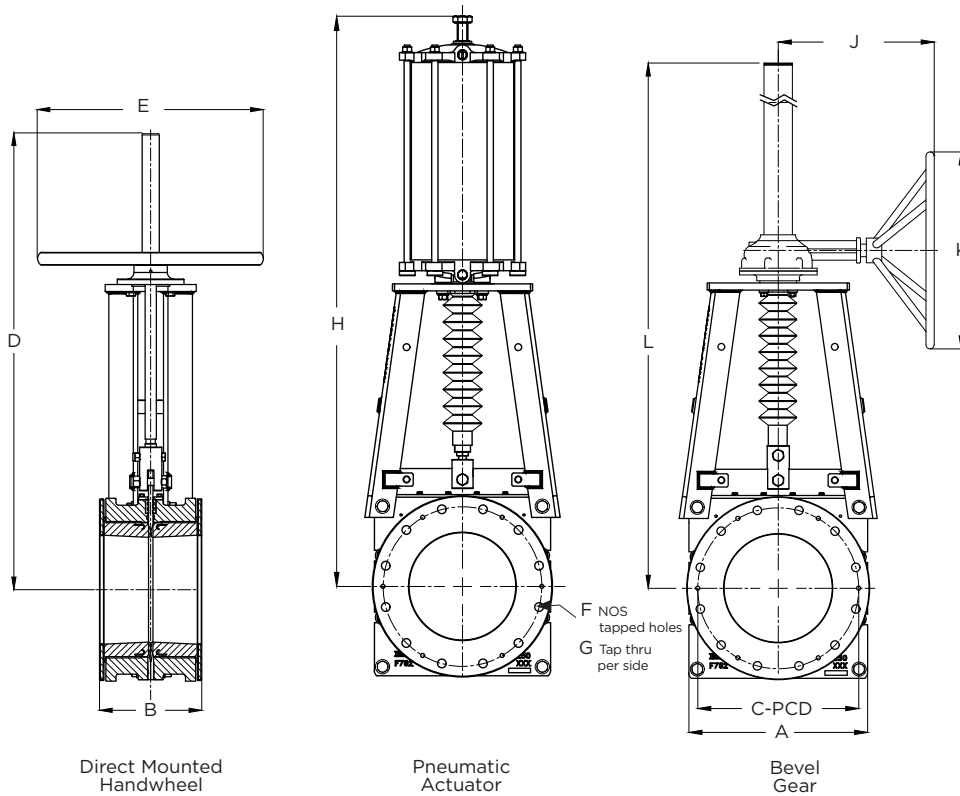
\* Exposure to continuous elevated temperatures will result in premature aging of the elastomer.  
<sup>1</sup> Do not operate the valve if the media in the line is frozen.

# 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	Sleeve	14	Drain Plate Fasteners & Washers (opt.)	26	Handwheel
3	Gate	15	Drain Plug (optional)	27	Stem
4	Secondary Seal	16	Sleeve Retainer	28	Stem Nut
5	Gland Plate	17	Sleeve 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.

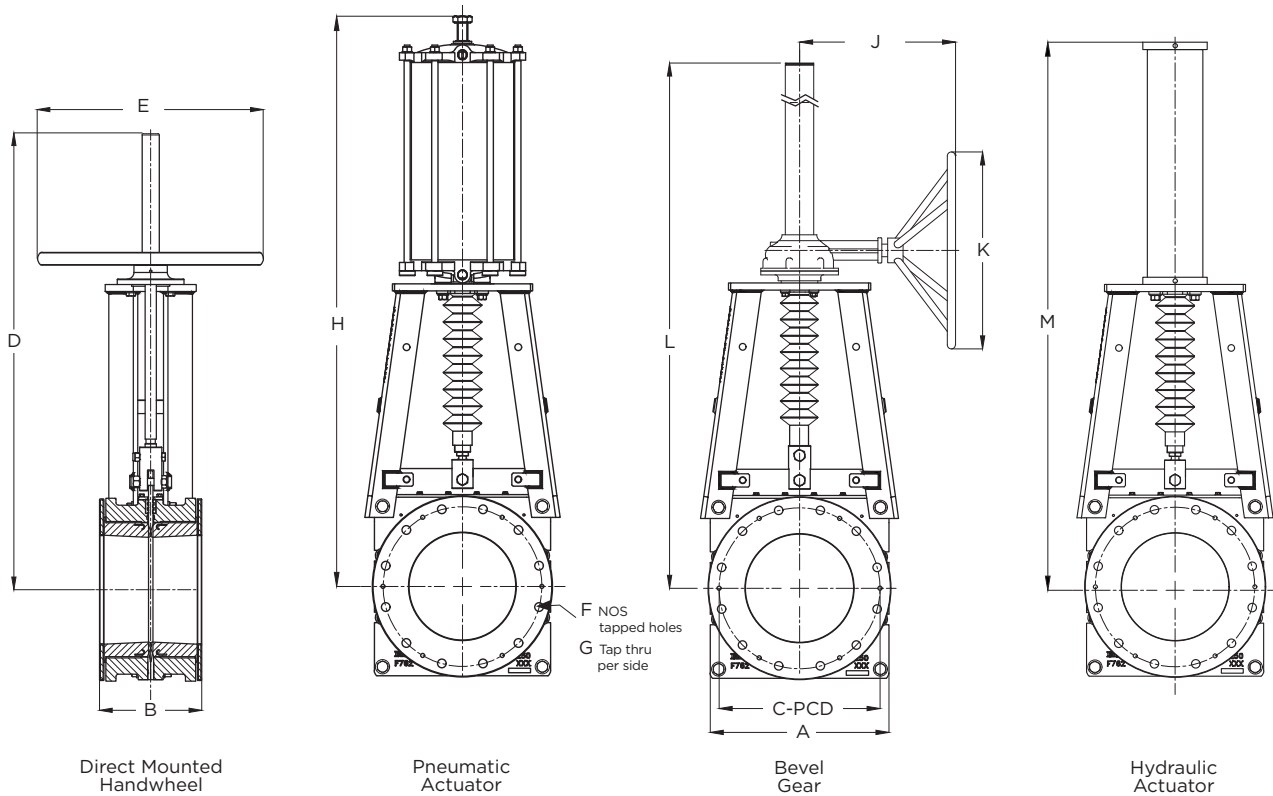
DIMENSIONS (Inches)											
NPS	A	B	CPCD	D	E	F	G	H	J	K	L
3	8.66	6.88	6.00	22.24	12	4	5/8"-11	24.80	8.86	11.81	26.77
4	10.04	6.88	7.50	23.94	12	8	5/8"-11	25.98	8.86	11.81	28.34
6	12.32	7.00	9.50	31.58	16	8	3/4"-10	34.02	9.45	11.81	35.43
8	13.98	7.28	11.75	36.93	20	8	3/4"-10	39.57	9.45	11.81	43.50
10	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

# DIMENSIONS & WEIGHTS



DIMENSIONS (Inches)												
NPS	A	B	CPCD	D	E	F	G	H	J	K	L	M
26	35.43	14.37	31.75	--	--	24	1- $\frac{1}{4}$ "-8UN	108.27	21.26	31.50	94.49	99.80
28	35.43	14.80	34.00	--	--	28	1- $\frac{1}{4}$ "-8UN	108.27	21.26	31.50	94.49	99.80
30	39.37	15.55	36.00	--	--	28	1- $\frac{1}{4}$ "-8UN	117.72	23.43	29.53	109.06	111.22
32	39.37	16.18	38.50	--	--	28	1- $\frac{1}{2}$ "-8UN	117.72	23.43	29.53	109.06	111.22
36	46.46	18.50	42.75	--	--	32	1- $\frac{1}{2}$ "-8UN	132.87	27.36	39.37	122.83	126.38
38	46.46	18.50	45.25	--	--	32	1- $\frac{1}{2}$ "-8UN	132.87	27.36	39.37	122.83	126.38
42	53.15	21.10	49.50	--	--	36	1- $\frac{1}{2}$ "-8UN	150.59	30.51	31.50	140.75	144.09
48	60.04	21.10	56.00	--	--	44	1- $\frac{1}{2}$ "-8UN	168.50	30.51	31.50	160.64	162.01

WEIGHT (lbs)			
HAND WHEEL	PNEUMATIC ACTUATOR	GEAR OPERATOR	HYD ACT.
--	2978	2079	#
--	3217	2317	#
--	5015	2998	#
--	5487	3470	#
--	6902	4820	#
--	7254	5172	#
--	8508	6411	#
--	10189	7975	#

DIMENSIONS (Millimeters)												
DN	A	B	CPCD	D	E	F	G	H	J	K	L	M
650	900	365	806.4	--	--	24	1- $\frac{1}{4}$ "-8UN	2750	540	800	2400	2535
700	900	376	863.6	--	--	28	1- $\frac{1}{4}$ "-8UN	2750	540	800	2400	2535
750	1000	395	914.4	--	--	28	1- $\frac{1}{4}$ "-8UN	2990	595	750	2770	2825
800	1000	411	977.9	--	--	28	1- $\frac{1}{2}$ "-8UN	2990	595	750	2770	2825
900	1180	470	1085.8	--	--	32	1- $\frac{1}{2}$ "-8UN	3375	695	1000	3120	3210
950	1180	470	1149.4	--	--	32	1- $\frac{1}{2}$ "-8UN	3375	695	1000	3120	3210
1050	1350	536	1257.3	--	--	36	1- $\frac{1}{2}$ "-8UN	3825	775	800	3575	3660
1200	1525	536	1422.4	--	--	44	1- $\frac{1}{2}$ "-8UN	4280	775	800	4070	4115

WEIGHT (kg)			
--	1351	943	#
--	1459	1051	#
--	2275	1360	#
--	2489	1574	#
--	3131	2186	#
--	3290	2346	#
--	3859	2908	#
--	4622	3618	#

**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.  
 # Contact Engineering

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

---

SINCE 1986, BRAY HAS PROVIDED FLOW CONTROL SOLUTIONS FOR A VARIETY OF INDUSTRIES AROUND THE WORLD.

VISIT **BRAY.COM** TO LEARN MORE ABOUT BRAY PRODUCTS AND LOCATIONS NEAR YOU.

## **HEADQUARTERS**

**Bray International, Inc.**

13333 Westland East Blvd.

Houston, Texas 77041

Tel: +1.281.894.5454

All statements, technical information, and recommendations in this bulletin are for general use only. Consult Bray representatives or factory for the specific requirements and material selection for your intended application. The right to change or modify product design or product without prior notice is reserved. Patents issued and applied for worldwide. Bray® is a registered trademark of Bray International, Inc.

© 2022 BRAY INTERNATIONAL, INC. ALL RIGHTS RESERVED. BRAY.COM

EN\_V6007\_S762\_KnifeGate\_20220706

---



**THE HIGH PERFORMANCE COMPANY**

**BRAY.COM**