

# KNIFE GATE & SLURRY VALVE PRODUCT GUIDE

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THE HIGH PERFORMANCE COMPANY

## SERIES 740 BIDIRECTIONAL KNIFE GATE VALVES

One-piece cast body with flexible wire reinforced elastomer seat for bidirectional zero leakage shutoff in a wide range of industrial applications.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 36   DN 50 to 900	
<b>Body Style</b>	Single Piece - Lug	
<b>Pressure Rating</b>	2-24 150psi   30-36 100psi	
	50-600mm 10 bar   750-900mm 7 bar	
<b>Drilling</b>	ASME B16.5 CL150   ASME B16.47 CL150	
<b>Face to Face</b>	MSS SP-81	
<b>Certification</b>	CE/PED   Canadian CRN   AWWA C520 (2019)	
<b>Design Standard</b>	MSS SP-81	
<b>Testing Standard</b>	MSS SP-151	

### STANDARD CONSTRUCTION

<b>Body</b>	CF8 (304)	CF8M (316)
<b>Gate</b>	304	316
<b>Seat</b>	Buna-N   EPDM	Buna-N   EPDM
<b>Stem</b>	304	304
<b>Gland</b>	304	304
<b>Packing</b>	PTFE Impregnated Synthetic Fiber	PTFE Impregnated Synthetic Fiber
<b>Topworks</b>	Steel	Steel

### APPLICATION GUIDE

Pulp & Paper | General Industrial | Power | Wastewater | Chemical | Ethanol



## SERIES 940 UNIDIRECTIONAL KNIFE GATE VALVES

One-piece cast body designed for rugged performance in applications ranging from general purpose to severe media handling.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600	
<b>Body Style</b>	Single piece   Lug	
<b>Pressure Rating</b>	2-24 150psi	
	50-600mm 10 bar	
<b>Drilling</b>	ASME B16.5 CL150	
<b>Face to Face</b>	MSS SP-81	
<b>Certification</b>	CE/PED   Canadian CRN   AWWA C520 (2019)	
<b>Design Standard</b>	MSS SP-81	
<b>Testing Standard</b>	MSS SP-151	

### STANDARD CONSTRUCTION

<b>Body</b>	CF8 (304)	CF8M (316)
<b>Gate</b>	304	316
<b>Seat</b>	Metal   Buna-N   EPDM   FKM   PTFE	Metal   Buna-N   EPDM   FKM   PTFE
<b>Stem</b>	304	304
<b>Gland</b>	304	304
<b>Packing</b>	PTFE Impregnated Synthetic Fiber	PTFE Impregnated Synthetic Fiber
<b>Topworks</b>	CS	CS

### APPLICATION GUIDE

Pulp & Paper | General Industrial | Power | Wastewater | Chemical  
Food & Beverage



## SERIES 941 UNIDIRECTIONAL KNIFE GATE VALVES

Engineered for general purpose on/off service and isolation of clean, dirty, corrosive, abrasive, viscous and high temperature media

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Single Piece - Lug
<b>Pressure Rating</b>	2-24 150psi 50-600mm 10 bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face to Face</b>	MSS SP-81
<b>Certification</b>	CE/PED   Canadian CRN
<b>Design Standard</b>	MSS SP-81
<b>Testing Standard</b>	MSS SP-151

### STANDARD CONSTRUCTION

<b>Body</b>	CF8M (316)
<b>Gate</b>	316
<b>Seat</b>	Metal   Buna-N   EPDM   FKM   PTFE
<b>Stem</b>	304
<b>Gland</b>	304
<b>Packing</b>	Energized Quad Seal with PTFE Anti-Extrusion Ring
<b>Topworks</b>	CS

### APPLICATION GUIDE

Pulp & Paper | General Industrial | Power | Wastewater | Chemical | Mining  
Food & Beverage



## SERIES 950 UNIDIRECTIONAL KNIFE GATE VALVES

Engineered for general purpose on/off service and isolation of clean, dirty, corrosive, abrasive, viscous and high temperature media.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Single Piece - Semi-Lug
<b>Pressure Rating</b>	2-12 150psi   14-24 75psi 50-300mm 10 bar   350-600mm 5 bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face to Face</b>	MSS SP-81
<b>Certification</b>	Canadian CRN   CE/PED   ATEX   AWWA C520 (2019)
<b>Design Standard</b>	MSS SP-81
<b>Testing Standard</b>	MSS SP-151

### STANDARD CONSTRUCTION

<b>Body</b>	DI
<b>Gate</b>	304
<b>Seat</b>	Integral
<b>Stem</b>	304
<b>Gland</b>	CS
<b>Packing</b>	PTFE Impregnated Synthetic Fiber
<b>Topworks</b>	CS

### APPLICATION GUIDE

Pulp & Paper | General Industrial | Power | Wastewater | Chemical  
Food & Beverage



## SERIES 762 SLURRYSHIELD® BIDIRECTIONAL HEAVY DUTY SLURRY VALVES

Two-piece bolted body with twin elastomer seats and a push-through gate designed for bidirectional heavy duty zero leakage shutoff with self cleaning in aggressive slurries.

### 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>	<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>	
<b>NOTE<sup>1</sup>:</b>	762 valves are elastomer sleeved slurry valves and MSS SP-81 and MSS SP-151 does not apply. The valves are tested for bidirectional, zero leakage across the sleeves.	

### 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

### APPLICATION GUIDE

Chemical | Mining | Power | Pulp & Paper | Alumina | Cement | HPAL/POX



## SERIES 767 SLURRYSHIELD® BIDIRECTIONAL HIGH PRESSURE SLURRY VALVES

Two-piece bolted body with twin elastomer seats and a push-through gate designed for bidirectional zero leakage shutoff with self cleaning in high pressure slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 3 to 36   DN 80 to 900
<b>Body Style</b>	Two-piece Bolted - Flanged
<b>Pressure Rating</b>	300psi   450psi   740psi
	20 bar   31 bar   51bar
<b>Drilling</b>	ASME B16.5 CL150   ASME B16.5 CL300
<b>Face-to-face</b>	Per Industry Standard
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	Manufacturer Standard
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

<b>Body</b>	WCB
<b>Gate</b>	316   2205   17-4 (depending on pressure rating)
<b>Sleeve</b>	Natural Rubber   EPDM
<b>Secondary Seal</b>	EPDM

### APPLICATION GUIDE

Chemical | Mining | Power | Pulp & Paper | Cement





## SERIES 768 SLURRYSHIELD® BIDIRECTIONAL HEAVY DUTY SLURRY VALVES

Two-piece bolted body with twin elastomer seats and a push-through gate designed for bidirectional zero leakage shutoff with self cleaning in demanding slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Two-piece Bolted - Wafer
<b>Pressure Rating</b>	2"-16" 150psi   18"-24" 90psi 50mm-400mm 10 bar   450mm-600mm 6.2 bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	Per Industry Standard
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	Manufacturer Standard
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

<b>Body</b>	DI
<b>Gate</b>	316
<b>Sleeve</b>	Natural Rubber   EPDM
<b>Secondary Seal</b>	EPDM

### APPLICATION GUIDE

Chemical | Mining | Power | Pulp & Paper | HPAL/POX



## SERIES 746 BIDIRECTIONAL SLURRY VALVES

One-piece cast body with extended, molded and bonded polyurethane liner for bidirectional zero leakage shutoff and increased protection from abrasive/corrosive high pressure slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	One-piece - Wafer
<b>Pressure Rating</b>	240psi 16 bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	Per Industry Standard
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	MSS SP-151

### STANDARD CONSTRUCTION

<b>Body</b>	DI
<b>Gate</b>	316
<b>Liner</b>	Polyurethane
<b>Packing</b>	PTFE impregnated synthetic fiber

### APPLICATION GUIDE

Chemical | Mining | Power



## SERIES 752 BIDIRECTIONAL SLURRY VALVES

Two-piece bolted body with steel reinforced perimeter seat for bidirectional zero leakage shutoff in demanding slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Two-piece bolted - Wafer
<b>Pressure Rating</b>	150psi   240psi   300psi
	10bar   16bar   20bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	MSS SP-81 (150psi & 240psi models)
<b>Design Standard</b>	MSS SP-81
<b>Testing Standard</b>	MSS SP-151
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

<b>Body</b>	CF8   CF8M   WCB   DI
<b>Gate</b>	304   316
<b>Seat</b>	Buna-N
<b>Packing</b>	PTFE impregnated synthetic fiber

### APPLICATION GUIDE

Chemical | Mining | Power



## SERIES 755 BIDIRECTIONAL SLURRY VALVES

Two-piece bolted body with a replaceable polyurethane bore liner and steel reinforced perimeter seat for bidirectional zero leakage shutoff in abrasive/corrosive slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Two-piece bolted - Wafer
<b>Pressure Rating</b>	150psi   240psi   300psi
	10bar   16bar   20bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	MSS SP-81 (150psi & 240psi models)
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	MSS SP-151
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

<b>Body</b>	CF8   CF8M   WCB   DI
<b>Gate</b>	304   316
<b>Seat</b>	Buna-N   EPDM
<b>Packing</b>	PTFE impregnated synthetic fiber

### APPLICATION GUIDE

Chemical | Mining | Power



## SERIES 765 BIDIRECTIONAL SLURRY VALVES

Compact, two-piece bolted body with twin elastomer seats and a push-through gate designed for bidirectional zero leakage shutoff with self cleaning in demanding slurries.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 12   DN 50 to 300
<b>Body Style</b>	Two-piece bolted - Wafer
<b>Pressure Rating</b>	90psi 6.2bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	MSS SP-81
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	Manufacturer Standard
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

<b>Body</b>	DI
<b>Gate</b>	304
<b>Seat</b>	Natural Rubber
<b>Secondary Seal</b>	EPDM

### APPLICATION GUIDE

Chemical | Mining | Power



## SERIES 770 BIDIRECTIONAL O-PORT GATE VALVES

Two-piece bolted body with o-ported slide gate designed for minimal stress with maximum sealing in severe media applications.

### TECHNICAL SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600
<b>Body Style</b>	Two-piece bolted - Wafer
<b>Pressure Rating</b>	150psi CWP 10bar
<b>Drilling</b>	ASME B16.5 CL150
<b>Face-to-face</b>	MSS SP-81
<b>Design Standard</b>	Manufacturer Standard
<b>Testing Standard</b>	Manufacturer Standard
<b>Certification</b>	Canadian CRN

### STANDARD CONSTRUCTION

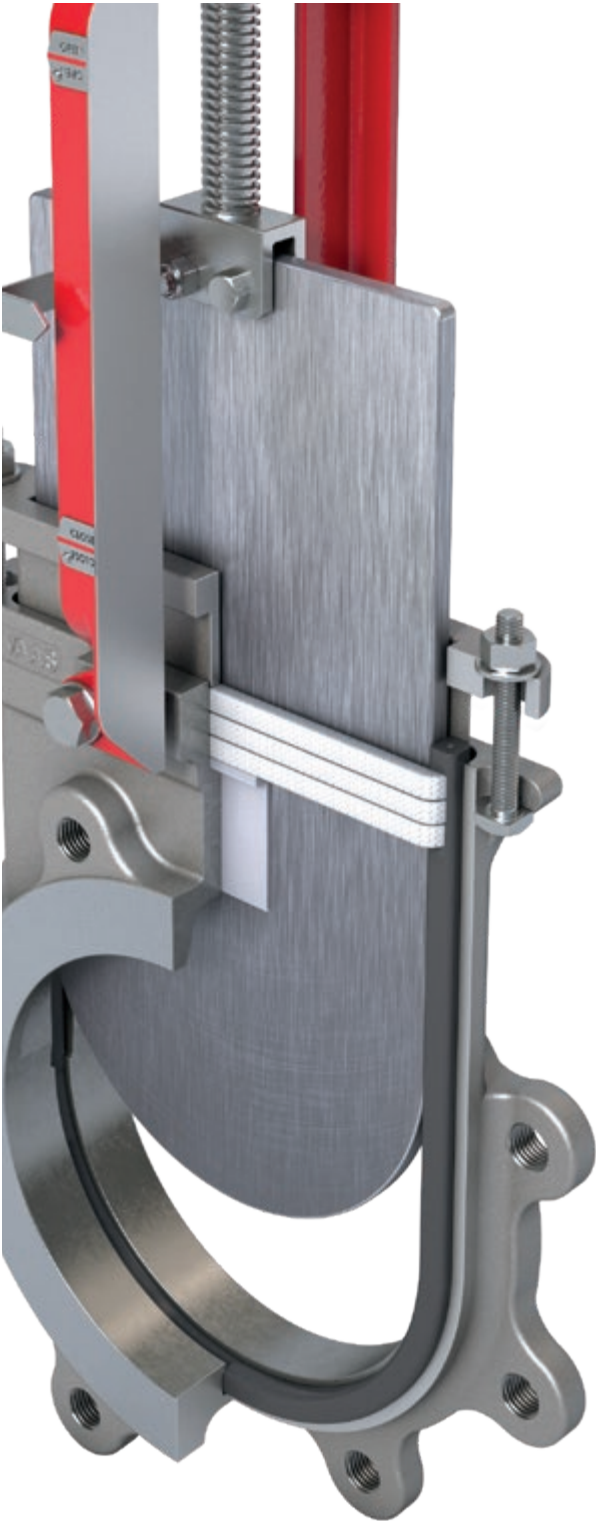
<b>Body</b>	DI
<b>Gate</b>	304
<b>Seat</b>	EPDM
<b>Packing</b>	PTFE impregnated synthetic fiber

### APPLICATION GUIDE

Chemical | Mining | Power



PACKING OPTIONS



MAXIMUM TEMPERATURE RANGE		
Pure PTFE	500°F	
	260°C	
PTFE impregnated Synthetic Fiber	450°F	
	232°C	
PTFE w/Buna-N Quad Seal <sup>1</sup>	194°F	
	90°C	
PTFE w/Viton® Quad Seal <sup>1</sup>	392°F	
	200°C	
PTFE w/EPDM Quad Seal	248°F	
	120°C	
PTFE w/Copper Wiper <sup>2</sup>	500°F	
	260°C	
Graphite	1202°F	
	650°C	

1 PTFE packing with energized elastomer.  
2 PTFE packing with copper wiper. Copper wiper not applicable for F752 / 755



## SEAT OPTIONS

Series 740 Replaceable flexible wire reinforced elastomer seat

Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C
FKM	-15° to 392°F	-26° to 200°C



Series 767 Twin elastomer seats

Natural Rubber	-60° to 165°F	-51° to 74°C
EPDM	-65° to 248°F	-54° to 120°C



Series 752 Replaceable steel reinforced elastomer seat

Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C
FKM	-15° to 392°F	-26° to 200°C



Series 768 Twin elastomer seats

Natural Rubber	-60° to 165°F	-51° to 74°C
Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C



Series 755 Replaceable steel reinforced elastomer seat

Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C
FKM	-15° to 392°F	-26° to 200°C



Series 770 Twin elastomer seat

EPDM	-65° to 248°F	-54° to 120°C
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Series 762 Twin elastomer seats

Natural Rubber	-60° to 165°F	-51° to 74°C
Buna-N	-35° to 194°F	-37° to 90°C
EPDM-HT	-65° to 302°F	-54° to 150°C



Series 940 Standard integral metal seat and optional replaceable zero leakage resilient seat

Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C
FKM	-15° to 392°F	-26° to 200°C
PTFE	-235° to 500°F	-148° to 260°C



Series 765 Twin elastomer seats

Natural Rubber	-60° to 165°F	-51° to 74°C
EPDM	-65° to 248°F	-54° to 120°C



Series 950 Standard integral metal seat and optional replaceable zero leakage resilient seat

Buna-N	-35° to 194°F	-37° to 90°C
EPDM	-65° to 248°F	-54° to 120°C
FKM	-15° to 392°F	-26° to 200°C
PTFE	-235° to 500°F	-148° to 260°C



## ACTUATOR OPTIONS



Direct Mounted Handwheel



Hydraulic Actuator



Double Acting  
Pneumatic Actuator



Electric Actuator



Bevel Gear Actuator



Chain Wheel



Lever

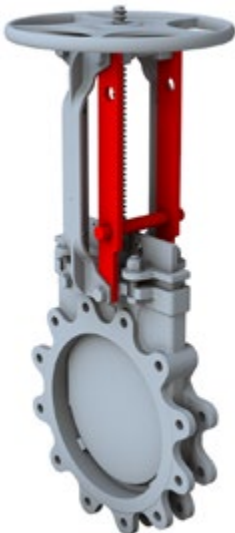
ADDITIONAL ACCESSORIES (ILLUSTRATED IN RED)



Deflection Cone



Handwheel Lock Out



Pinned Lockout Open & Closed



Pneumatic Failsafe



Proximity Sensor



Mechanical Limit Switch



Bonnet



Manual Override



Non Rising Stem



Gate Guard

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