
PRODUCT GUIDE

KNIFE GATE AND SLURRY VALVES

UNIDIRECTIONAL | BIDIRECTIONAL



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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

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

STANDARD CONSTRUCTION

Body	CF8 (304)	CF8M (316)
Gate	304	316
Seat	Metal Nitrile EPDM FKM PTFE	Metal Nitrile EPDM FKM PTFE
Stem	304	304
Gland	304	304
Packing	PTFE Impregnated Synthetic Fiber	PTFE Impregnated Synthetic Fiber
Topworks	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

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

STANDARD CONSTRUCTION

Body	CF8M (316)	
Gate	316	
Seat	Metal Nitrile EPDM FKM PTFE	
Stem	304	
Gland	304	
Packing	Energized Quad Seal with PTFE Anti-Extrusion Ring	
Topworks	CS	

APPLICATION GUIDE

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



SERIES 942 UNIDIRECTIONAL VORTEX BREAKER KNIFE GATE VALVES

Vortex Breaker Knife Gate Valve is engineered for on/off service and isolation of pulp and paper recycle and rejects applications.

TECHNICAL SPECIFICATIONS

Size Range	NPS 4 to 12 DN 100to 300
Body Style	Single piece Lug
Pressure Rating	4-12 150psi
	100-300mm 10 bar
Drilling	ASME B16.5 CL150
Face to Face	MSS SP-81
Certification	CE/PED UKCA
Design Standard	MSS SP-81
Testing Standard	MSS SP-151

STANDARD CONSTRUCTION

Body	CF8M (316)
Gate	17-4PH H-1025
Seat	Metal
Stem	304
Packing	4-layer (Copper-Kevlar-Quad Seal-Kevlar)
Vortex Breaker	Hi-Chrome
Topworks	CS

APPLICATION GUIDE

Pulp & Paper

SERIES 943 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

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

STANDARD CONSTRUCTION

Body	CF8M (316)
Gate	316
Seat	Integral Metal
Stem	304
Gland	CF8
Packing	PTFE Impregnated Synthetic Fiber w/Quad Seal
Topworks	Carbon Steel

APPLICATION GUIDE

Pulp & Paper | General Industrial | Power | Water/ 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

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

STANDARD CONSTRUCTION

Body	DI
Gate	304
Seat	Integral
Stem	304
Gland	CS
Packing	PTFE Impregnated Synthetic Fiber
Topworks	CS

APPLICATION GUIDE

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

SERIES 953 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

Size Range	NPS 2 to 24 DN 50 to 600
Body Style	Single Piece - Semi-Lug
Pressure Rating	2-10 150psi 50-250mm 10bar 12-16 90psi 300-400mm 6bar 18 75psi 450mm 5bar 20-24 60psi 500-600mm 4bar
Drilling	ASME B16.5 CL150
Face to Face	MSS SP-81
Certification	Canadian CRN CE/PED ATEX
Design Standard	Manufacturers Standard
Testing Standard	MSS SP-151

STANDARD CONSTRUCTION

Body	Cast Iron
Gate	304
Seat	Integral Metal
Stem	304
Gland	Ductile Iron
Packing	PTFE Impregnated Synthetic Fiber w/Quad Seal
Topworks	Carbon Steel

APPLICATION GUIDE

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



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

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

STANDARD CONSTRUCTION

Body	CF8 (304)	CF8M (316)
Gate	304	316
Seat	Nitrile EPDM	Nitrile EPDM
Stem	304	304
Gland	304	304
Packing	PTFE Impregnated Synthetic Fiber	PTFE Impregnated Synthetic Fiber
Topworks	Steel	Steel

APPLICATION GUIDE

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



SERIES 746HP POLYURETHANE LINED BIDIRECTIONAL SLURRY VALVES

One-piece polyurethane bonded liner throughout the body and chest providing Zero Leakage shutoff in the most abrasive applications.

TECHNICAL SPECIFICATIONS

Size Range	NPS 2 to 24 DN 50 to 600	
Body Style	Single Piece - Wafer	
Temp. Rating	Polyurethane: -20°F to 194°F -29°C to 90°C	
Pressure Rating	150psi 10 bar 232psi 16 bar	
Drilling	ASME B16.5 CL150	
Face to Face	MSS SP-81	
Design Standard	Manufacturer Standard	
Testing Standard	MSS SP-151	

STANDARD CONSTRUCTION

Body	Ductile Iron
Gate	10bar - 316 Stainless Steel 16bar - 2205
Liner	Polyurethane
Stem	304
Gland	Carbon Steel
Packing	PTFE Impregnated Synthetic Fiber + Quad Seal
Topworks	Carbon Steel

APPLICATION GUIDE

Wastewater | Mining | Power | Chemical



SERIES 762 SLURRYSHIELD® BIDIRECTIONAL HEAVY DUTY SLURRY VALVES

Two-piece bolted body with twin elastomer seats designed, for bidirectional heavy duty zero leakage shutoff with self cleaning in aggressive slurries.

TECHNICAL SPECIFICATIONS

Size Range	NPS 3 to 54 DN 80 to 1350	
Body Style	Two-piece Bolted - Flanged	
Pressure Rating	SS 316 Gate	Duplex 2205 Gate
	NPS 3-24 100psi DN 80-600 7 bar	NPS 3-18 232psi DN 80-450 16bar
	NPS 26-42 75psi DN 650-1050 5 bar	NPS 20-24 150psi DN 500-600 10bar
	NPS 48-54 50psi DN 1200-1350 3 bar	NPS 26-42 100psi DN 650-1050 7bar NPS 48 75psi DN 1200 5bar
Drilling	ASME B16.5 CL150 ASME B16.47 CL150	
Face-to-Face	Per Industry Standard	
Certification	Canadian CRN PED Category I Module A (Group 2 liquids)	
Design Standard	Manufacturer Standard	
Testing Standard	Manufacturer Standard ¹	

NOTE¹: 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

Body	DI NPS 3 to 28 DN 80 to 700 WCB NPS 30-48 DN 750 to 1200
Gate	316
Sleeve	Natural Rubber
Stem	304
Gland Plate	Carbon Steel
Secondary Seal	EPDM
Topworks	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, designed for bidirectional zero leakage shutoff with self cleaning in high pressure slurries.

TECHNICAL SPECIFICATIONS

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

STANDARD CONSTRUCTION

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

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

STANDARD CONSTRUCTION

Body	DI
Gate	316
Sleeve	Natural Rubber EPDM
Secondary Seal	EPDM

APPLICATION GUIDE

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



SERIES 752 BIDIRECTIONAL SLURRY VALVES

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

TECHNICAL SPECIFICATIONS

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

STANDARD CONSTRUCTION

Body	CF8 CF8M WCB DI
Gate	304 316
Seat	Nitrile
Packing	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

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

STANDARD CONSTRUCTION

Body	CF8 CF8M WCB DI
Gate	304 316
Seat	Nitrile EPDM
Packing	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

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

STANDARD CONSTRUCTION

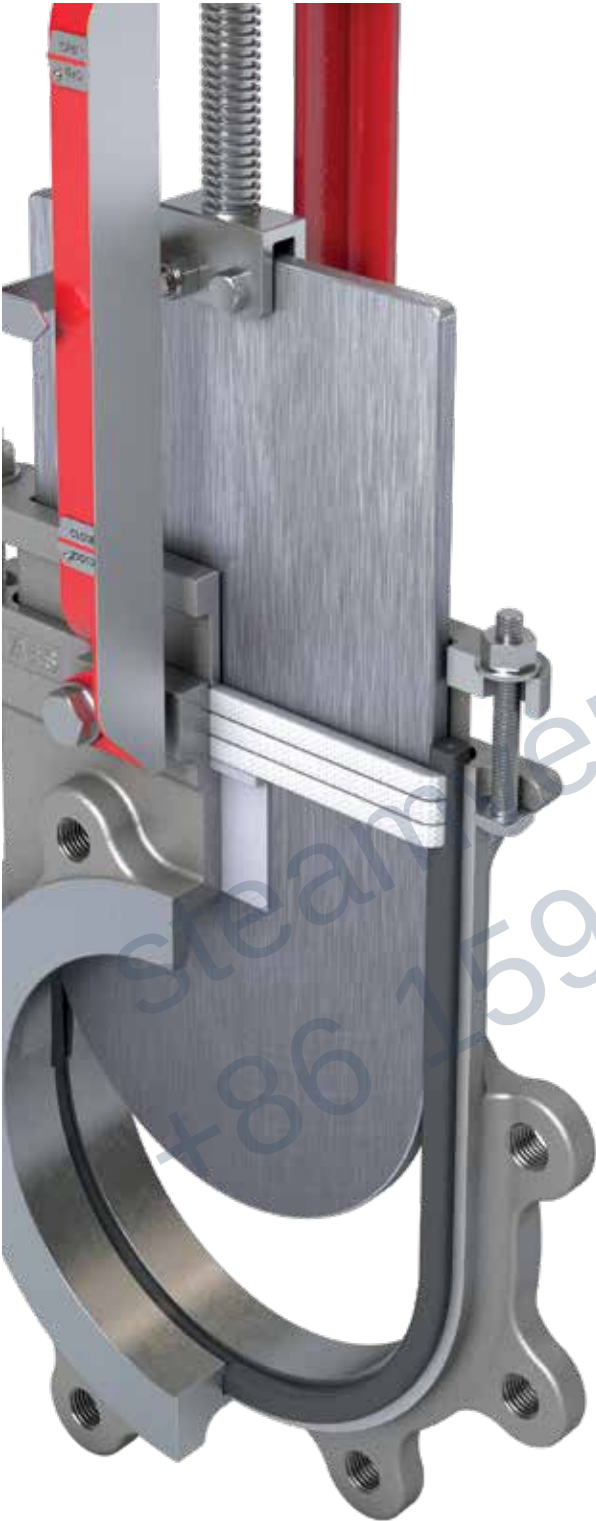
Body	DI
Gate	304
Seat	Natural Rubber
Secondary Seal	EPDM

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/Nitrile Quad Seal¹	194°F	
	90°C	
PTFE w/Viton® Quad Seal¹	392°F	
	200°C	
PTFE w/EPDM Quad Seal	248°F	
	120°C	
PTFE w/Copper Wiper²	500°F	
	260°C	
Graphite	1202°F	
	650°C	
HD Packing	536°F	
	280°C	

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

SEAT OPTIONS

UNIDIRECTIONAL

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

Nitrile	-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 941 Standard integral metal seat and optional replaceable zero leakage resilient seat.

Nitrile	-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 953 Standard integral metal seat and optional replaceable zero leakage resilient seat

Nitrile	-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 943 Standard integral metal seat and optional replaceable zero leakage resilient seat

Nitrile	-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 950 Standard integral metal seat and optional replaceable zero leakage resilient seat

Nitrile	-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 740 Replaceable flexible wire reinforced elastomer seat

Nitrile	-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 752 Replaceable steel reinforced elastomer seat

Nitrile	-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 755 Replaceable steel reinforced elastomer seat

Nitrile	-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 762 Twin elastomer seats

Natural Rubber	-60° to 165°F	-51° to 74°C
Nitrile	-35° to 194°F	-37° to 90°C
EPDM-HT	-65° to 302°F	-54° to 150°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 767 Twin elastomer seats

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



Series 768 Twin elastomer seats

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





DIRECT MOUNTED HANDWHEEL



BEVEL GEAR OPERATOR



DOUBLE ACTING PNEUMATIC ACTUATOR



HYDRAULIC ACTUATOR



LEVER



ELECTRIC ACTUATOR



DEFLECTION CONE



HANDWHEEL LOCK OUT



PINNED LOCKOUT OPEN
& CLOSED



PNEUMATIC FAILSAFE



NON-RISING STEM



GATE GUARD



CHAIN WHEEL



MANUAL OVERRIDE



PROXIMITY SENSOR



MECHANICAL LIMIT
SWITCH



ELECTRO PNEUMATIC
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HEADQUARTERS

Bray International, Inc.

13333 Westland East Blvd.

Houston, Texas 77041

Tel: +1.281.894.5454

steamvendor.com
+86 159 0590 7595

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