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**PRODUCT GUIDE**

# **KNIFE GATE AND SLURRY VALVES**

UNIDIRECTIONAL | BIDIRECTIONAL





## 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   Nitrile   EPDM   FKM   PTFE	Metal   Nitrile   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   Nitrile   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 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

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

### STANDARD CONSTRUCTION

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

<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>	Integral Metal
<b>Stem</b>	304
<b>Gland</b>	CF8
<b>Packing</b>	PTFE Impreganted Synthetic Fiber w/Quad Seal
<b>Topworks</b>	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

<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 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

<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 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>	Nitrile   EPDM	Nitrile   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 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

<b>Size Range</b>	NPS 2 to 24   DN 50 to 600	
<b>Body Style</b>	Single Piece - Wafer	
<b>Temp. Rating</b>	Polyurethane: -20°F to 194°F   -29°C to 90°C	
<b>Pressure Rating</b>	150psi   10 bar 232psi   16 bar	
<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>	MSS SP-151	

### STANDARD CONSTRUCTION

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

<b>Size Range</b>	NPS 3 to 54   DN 80 to 1350	
<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 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	
<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 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, 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 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>	Nitrile
<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>	Nitrile   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

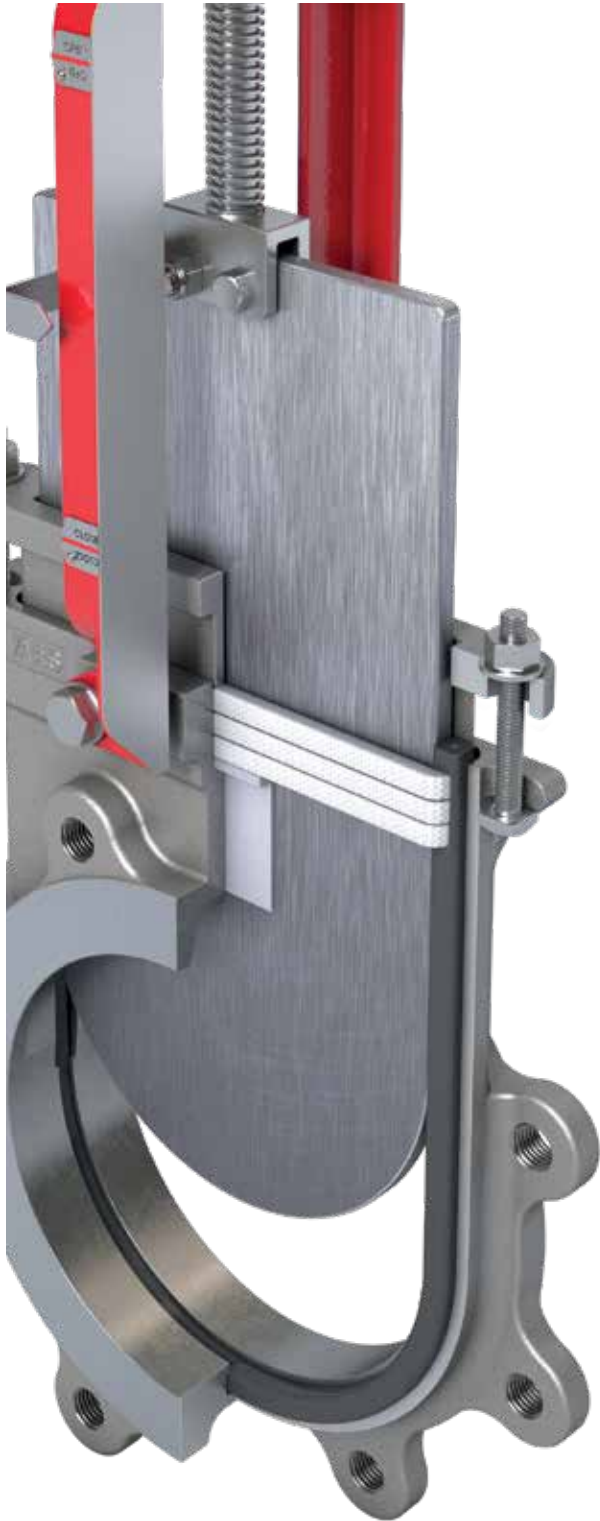
<b>Body</b>	DI
<b>Gate</b>	304
<b>Seat</b>	Natural Rubber
<b>Secondary Seal</b>	EPDM

### APPLICATION GUIDE

Chemical | Mining | Power



## PACKING OPTIONS



### MAXIMUM TEMPERATURE RANGE

<b>Pure PTFE</b>	500°F	
	260°C	
<b>PTFE impregnated Synthetic Fiber</b>	450°F	
	232°C	
<b>PTFE w/Nitrile Quad Seal<sup>1</sup></b>	194°F	
	90°C	
<b>PTFE w/Viton® Quad Seal<sup>1</sup></b>	392°F	
	200°C	
<b>PTFE w/EPDM Quad Seal</b>	248°F	
	120°C	
<b>PTFE w/Copper Wiper<sup>2</sup></b>	500°F	
	260°C	
<b>Graphite</b>	1202°F	
	650°C	
<b>HD Packing</b>	536°F	
	280°C	

<sup>1</sup> PTFE packing with energized elastomer.

<sup>2</sup> 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



**ACTUATOR OPTIONS** | SHOWN IN RED



DIRECT MOUNTED HANDWHEEL



BEVEL GEAR OPERATOR



DOUBLE ACTING PNEUMATIC ACTUATOR



HYDRAULIC ACTUATOR



LEVER



ELECTRIC ACTUATOR

AVAILABLE ACCESSORIES | SHOWN IN RED



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 POSITIONER



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