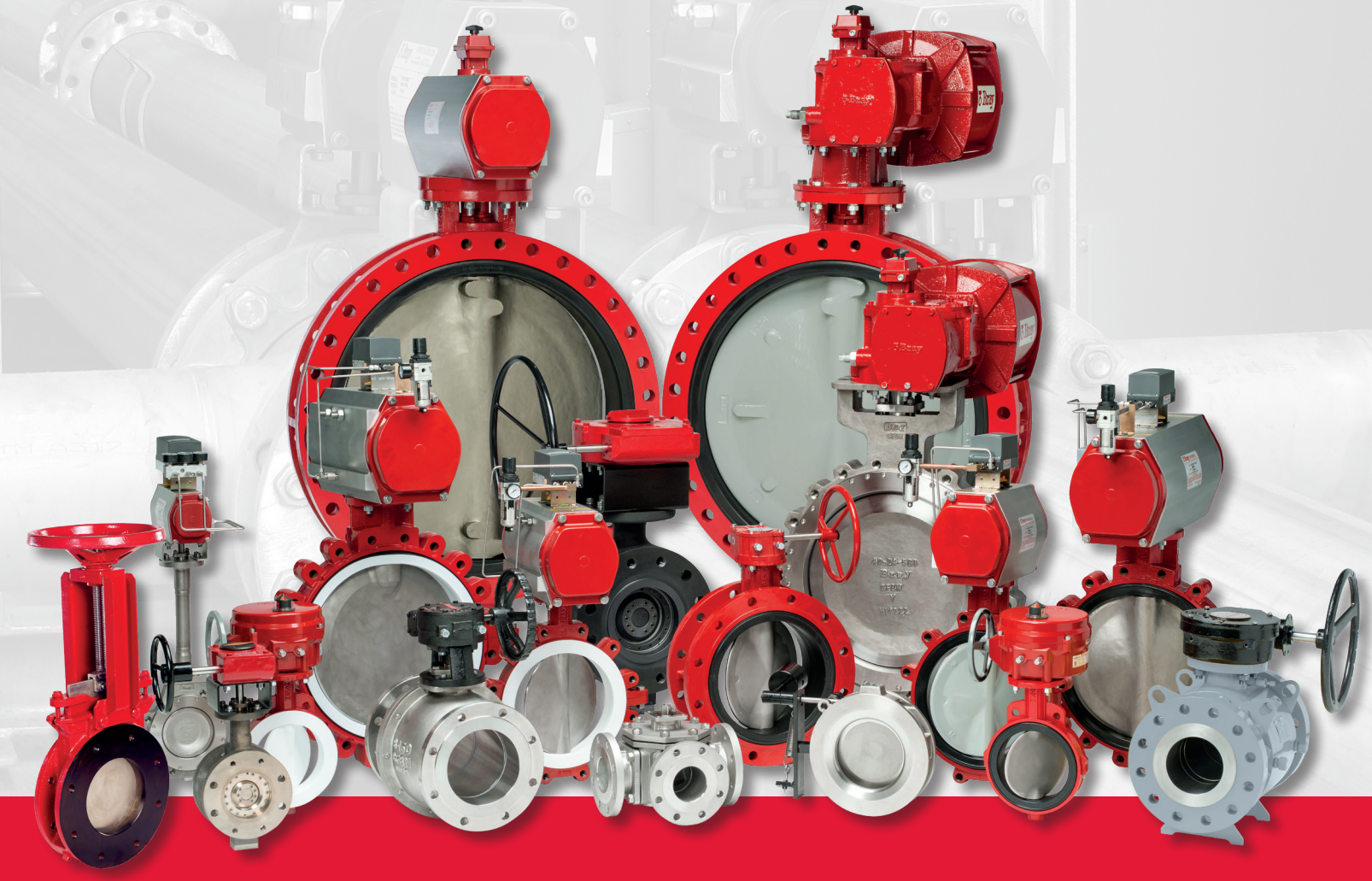
BRAY INTERNATIONAL

PRODUCT PROFILE



Bray®

BRAY.COM

THE HIGH PERFORMANCE COMPANY

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INTRODUCTION

At Bray International, Inc., our business is helping our customers with their flow control requirements. Our modular product line of butterfly, ball, knife gate and check valves, actuators and accessories offers the best compatibility, economy and quality performance in the flow control industry.

Through years of field application experience, research and development Bray has designed products that meet the stringent requirements of today's flow control industry. We have earned a reputation for excellence by creating products of superior value and quality, providing personalized customer service and emphasizing on-time deliveries. Our success has always been the direct result of our fully integrated range of valve, actuator and control products. Rugged and reliable, our products are engineered to provide years of trouble free service.

Bray manufacturing facilities are certified to ISO 9001 quality standards, assuring product quality, precision manufacturing and internal process integrity.

Bray is committed to customer support. Our extensively trained staff is knowledgeable of all Bray products and their applications and can provide personal attention to every customer. To serve you locally Bray maintains a factory certified sales and service network, for all Bray products, throughout the world.

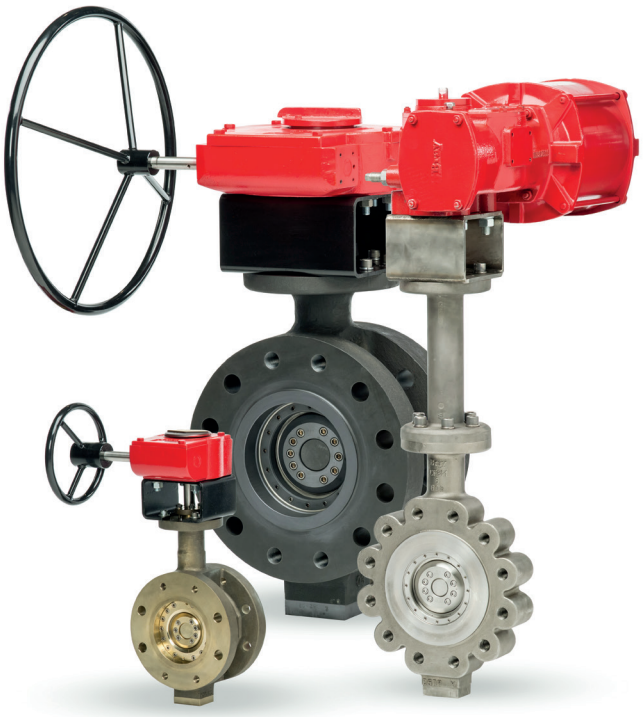
COMMITMENT TO QUALITY

Bray International recognizes that our customers make us successful and they have a choice of many manufacturers when selecting valves, actuators and accessories for their applications. Since many manufacturers have access to the same materials of construction for these products, Bray believes that a customer's purchase decision is heavily influenced by the following key factors:

- Trust in the Manufacturer
- Confidence in the Quality Assurance and Integrity of the Manufacturer
- Proven Industry Experience
- Features and Benefits of the product
- Cost of Ownership
- Customer Service
- Delivery

"Bray is focused on and committed to meeting the expectations and needs of our customers while continually improving the effectiveness of our quality management."

A complete listing of approvals and certifications can be found at bray.com.



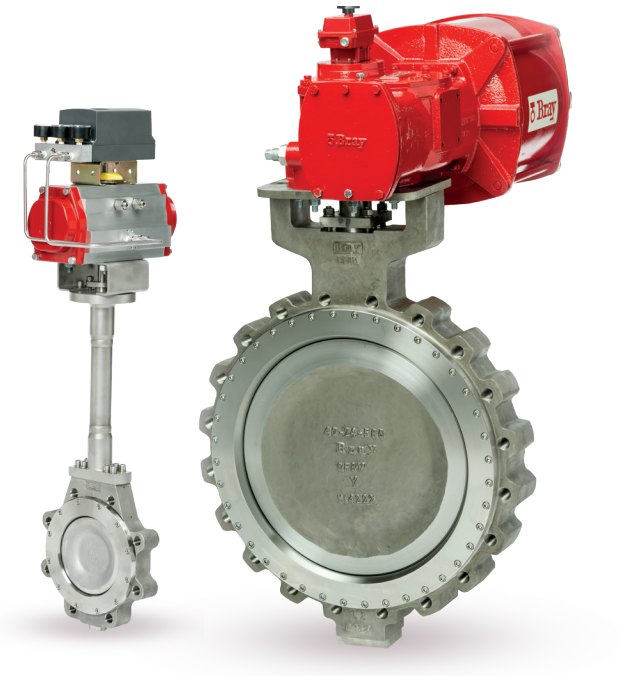
BRAY TRI LOK®
Triple Offset Valve
HIGH PRESSURE • ZERO LEAKAGE • METAL TO METAL SEALING

SEAT & SEAL RING
Field replaceable seat and seal ring system extends the overall life, without the need for costly off site repairs or total replacement.

STEM
Tri Lok's unique splined disc-to-stem connection minimizes hysteresis, eliminates external connections and allows for easy assembly and disassembly. Tri Lok features a one piece stem with a blow out prevention ring located outside the pressure boundary, in accordance with international standards.

PACKING
Fully adjustable, field replaceable stem seal system eliminates fugitive emissions.

Size Range:	3" – 48" (80mm – 1200mm)
Body Style:	Wafer, Lug, Double Flanged, Gate
Temperature Range:	-320°F to 842°F (-196°C to 450°C)
Pressure Rating:	ASME Class 150, 300, 600, 900
Shut Off Class:	Zero Leakage in Normal and Dead End Service
Body Materials:	Carbon Steel, Stainless Steel
Disc Materials:	Carbon Steel, Stainless Steel
Stem Materials:	410 Stainless Steel, 17-4PH, XM-19 (Nitronic®)
Body Seat Materials:	316SS Hardened
Disc Seal Materials:	Laminated 318 Stainless Steel/Graphite Laminated 316 Stainless Steel/Graphite
Applications:	High Pressure, High Temperature, Critical Service, Cryogenic Service



BRAY/McCANNALOK
Double Offset Butterfly Valve
HIGH PRESSURE & TEMPERATURE

The Bray/McCannalok's innovative seat design offers easy maintenance and industry leading performance in high and low pressure services.

Available with low temperature, cryogenic, metal to metal, and fire safe seat designs; the Bray/McCannalok offers robust performance in some of the most demanding applications. The Cryogenic Bray/McCannalok offers industry leading shut off for the air separation industry. The Metal Seated Bray/McCannalok offers low torque performance while providing customers with a rugged control or isolation valve for abrasive and harsh chemical applications. The Fire Safe Bray/McCannalok is validated to the latest industry standards and is offered in a low temperature configuration to service ship builders worldwide.

Size Range:	2 1/2" – 66" (65mm – 1650mm)	
Body Style:	Wafer, Lug, Double Flanged	
Temperature Range:	-320°F to 900°F (-196°C to 482°C)	
Pressure Rating:	ASME Class 150, 300 and 600	
Shut Off Class:	Zero Leakage	
Body Materials:	Carbon Steel, Stainless Steel, Nickel Aluminum Bronze	
Disc Materials:	Stainless Steel, Nickel Aluminum Bronze	
Stem Materials:	Stainless Steel, Monel® K500	
Seat Materials:	Standard	RPTFE with Resilient Energizer PTFE with Resilient Energizer
	Fire Safe	RPTFE and Inconel® with Resilient Energizer
	Polar®	Engineered Thermoplastic
	Metal Seat	Inconel®
	Low Temp.	TFM with Resilient Energizer
Applications:	High Pressure, High Temperature, Low Temperature, Cryogenic Service, Critical Service	

SERIES 20/21

Size Range:	1" – 20" (25mm – 500mm)	
Body Style:	Wafer, Lug	
Temperature Range:	-20°F to 400°F (-29°C to 204°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	150 psi (10.3 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Cast Iron, Ductile Iron, Stainless Steel, Aluminum	
Disc/Stem Materials:	Stainless Steel, EPDM Molded over SS, BUNA-N Molded over SS	
Seat Materials:	BUNA-N, EPDM, PTFE Lined EPDM, FKM, Polyurethane	
Applications:	Sanitary Service, Mildly Corrosive, Toxic Media, Other Liquids and Gases	

SERIES 22/23

Size Range:	2" – 24" (50mm – 600mm)	
Body Style:	Wafer, Lug	
Temperature Range:	0°F to 392°F (-18°C to 200°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	150 psi (10.3 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Ductile Iron, Carbon Steel, Stainless Steel	
Disc/Stem Materials:	Stainless Steel, PTFE/SS, UHMWPE/SS, UHMWPE/DI, Hastelloy®, Titanium, PFA/SS	
Seat Materials:	PTFE, Conductive PTFE, UHMWPE	
Applications:	Highly Corrosive, Toxic Media, Ultra Pure Water	

SERIES 30/31

Size Range:	2" – 20" (50mm – 500mm)	
Body Style:	Wafer, Lug	
Temperature Range:	-20°F to 400°F (-29°C to 204°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	175 psi (12 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Cast Iron, Ductile Iron, Carbon Steel, Aluminum	
Disc Materials:	Nylon 11 Coated Ductile Iron, Aluminum Bronze, Stainless Steel, Hastelloy®, Halar® Coated Ductile Iron	
Stem Materials:	Stainless Steel, Monel® K500	
Seat Materials:	BUNA-N, EPDM, FKM, Polyurethane, HTEPDM	
Applications:	Water, Wastewater, Seawater, HVAC, Other Liquids and Gases	

SERIES 31H

Size Range:	2" – 20" (50mm – 500mm)	
Body Style:	Lug	
Temperature Range:	-20°F to 250°F (-29°C to 121°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	250 psi (17.2 bar)
	Body CWP	250 psi (17.2 bar)
Body Material:	Ductile Iron	
Disc Materials:	Nylon 11 Coated Ductile Iron, Aluminum Bronze, Stainless Steel	
Stem Materials:	Stainless Steel	
Seat Materials:	Bonded BUNA-N, Bonded EPDM	
Applications:	High Pressure, HVAC, Dead End Service	

SERIES 31U

Size Range:	2" – 12" (50mm – 300mm)	
Body Style:	Lug	
Temperature Range:	0°F to 212°F (-18°C to 100°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	285 psi (20 bar)
	Body CWP	285 psi (20 bar)
Body Materials:	Ductile Iron, Carbon Steel, Nickel Aluminum Bronze	
Disc Materials:	Stainless Steel, Nickel Aluminum Bronze	
Stem Materials:	Stainless Steel, Monel® K500	
Seat Materials:	Bonded BUNA-N	
Applications:	High Pressure Industrial and Marine Dead End Service, On-Shore and Off-Shore Fire Protection	

SERIES 3A/3AH

Size Range:	2" – 20" (50mm – 500mm)	
Body Style:	Double Flanged	
Temperature Range:	-20°F to 400°F (-29°C to 204°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	250 psi (17.2 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Cast Iron, Ductile Iron, Carbon Steel	
Disc Materials:	Nylon 11 Coated Ductile Iron, Aluminum Bronze, Stainless Steel	
Stem Materials:	Stainless Steel, Monel® K500	
Seat Materials:	Bonded BUNA-N, Bonded EPDM, Bonded FKM*	
Applications:	Water, Wastewater, Seawater, Other Liquids and Gases	

SERIES 32/33 & 35/36

Size Range:	S32/33 – 22" – 36" (550mm – 900mm) S35/36 – 22" – 120" (550mm – 3000mm)	
Body Style:	S32/33 Wafer, S35/36 Full Flanged	
Temperature Range:	-20°F to 250°F (-29°C to 121°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	150 psi (10.3 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Cast Iron, Ductile Iron, Carbon Steel, Stainless Steel	
Disc Materials:	Nylon 11 Coated Ductile Iron, Aluminum Bronze, Stainless Steel, Duplex Stainless Steel, Super Austenitic Stainless Steel, Hastelloy®, Monel®	
Stem Materials:	Stainless Steel, Duplex Stainless Steel, Super Austenitic Stainless Steel, Monel®	
Seat Materials:	BUNA-N, EPDM, FKM	
Applications:	Water, Wastewater, Seawater, Other Liquids and Gases	

SERIES 36H

Size Range:	22" – 60" (550mm – 1500mm)	
Body Style:	Full Flanged	
Temperature Range:	-20°F to 250°F (-29°C to 121°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	232 psi (16 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Ductile Iron	
Disc Materials:	Nylon 11 Coated Ductile Iron, 316 Stainless Steel, Aluminum Bronze	
Stem Materials:	17-4 PH Stainless Steel	
Seat Materials:	Bonded BUNA-N, Bonded EPDM	
Applications:	High Pressure, HVAC, Dead End Service	

Pressure/Temperature ratings and material availability depend on valve size and series. Please consult your local Bray representative for your specific application.
FKM is the ASTM D1418 designation for Fluorinated Hydrocarbon Elastomers (also called Fluoroelastomers)
Hastelloy® is a registered trademark of Haynes International, Inc. - Halar® is a registered trademark of Solvay Solexis, Inc.

SERIES 35F

Size Range:	32" – 60" (800mm – 1500mm)	
Body Style:	Full Flanged	
Temperature Range:	-20°F to 250°F (-29°C to 121°C)	
Pressure Ratings:	Bidirectional Bubble Tight Shut Off	75 psi (5.2 bar)
	Body CWP	250 psi (17.2 bar)
Body Materials:	Cast Iron, Ductile Iron, Hastelloy®	
Disc Materials:	Duplex Stainless Steel, Super Austenitic Stainless Steel, Hastelloy®	
Stem Materials:	Stainless Steel	
Seat Materials:	Bonded BUNA-N, Bonded EPDM	
Applications:	FGD, Mining, Seawater	

SERIES 39L

Size Range:	2" – 20" (50mm – 500mm)
Body Style:	Wafer, Flanged Long Body
Temperature Range:	-20°F to 300°F (-29°C to 150°C)
Pressure Rating:	230 psi (16 bar)
Shut Off Rating:	≥ Class 4
Body Materials:	Ductile Iron, Stainless Steel
Disc Materials:	Chrome-Molly Iron (Hardened), PSZ Ceramic (Partially Stabilized Zirconia)
Stem Materials:	Stainless Steel
Liner Materials:	Ceramic (Sintered Silicone Carbide), Metallic Carbide Rich, Chrome Iron Alloy
Applications:	Highly Abrasive, Slurry Control

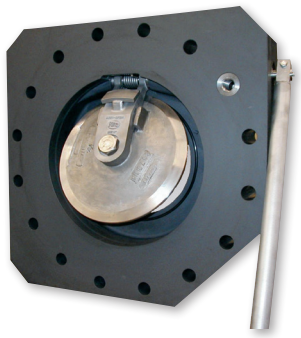
Bray/Rite® CHECK VALVES

Rite® Rite Corporation
Subsidiary of Bray International, Inc.

ASME Class 125 – 2500
1" (25mm) – 60" (1500mm)
API, DIN, BS, JIS Classes Available

Bray/Rite Valves successful, long term use in applications worldwide has made Bray/Rite the industry standard for economy, efficiency, durability and reliability.

Bray/Rite wafer combination swing check valves are flow activated. Inlet ports and disc have been shape optimized to achieve a fully open position at low velocity (3 ft/s on average) and at a lower pressure drop than most. Our check valves operate exceptionally well in series with control valves and lines with varying media flows.



Sea Water Valve
Aquatic Animal Life Support Check valve
PEZ SA-4AX PVC
Very popular with aquariums and marine environments.
PVC Body with passivated stainless steel and titanium internals with or without external position indication lever. Eliminates internal body corrosion.

Applications: Salt Water, Aquatic Animal Life Support Systems, Desalination Applications

V-CONTROL

Ports:	V-Port (Standard 15°, 30°, 60° & 90°, Custom and Slotted Ports), Full, Standard Port	
Body Style:	Flanged, 3 Piece	
Size Range:	1/4" - 12" (8mm - 300mm)	
Temperature Range:	-50°F to 550°F (-46°C to 287°C)	
Pressure Rating:	ASME Class 150, 300 (PN10 to PN40) & 2200 psi CWP (151 bar) & 1000 psi CWP (69 bar)	
End Connections:	RF Flanged, Threaded, Socket Weld, Butt Weld, Extended Socket Weld or Butt Weld, Tri-Clamp	
Body Materials:	Stainless Steel, Carbon Steel, Alloys	
Seat Materials:	Standard: Tek-Fil®	Optional: PEEK, Metal
Applications:	Flow Control, Level Control, Temperature Control, Low Pressure Steam Control	

SERIES 19 SEGMENTED

Port:	Segmented V-Ball
Body Style:	1 Piece
Size Range:	1" – 16" (25mm - 300mm)
Temperature Range:	-40°F to 500°F (-40°C to 260°C)
Pressure Rating:	ASME Class 150, 300, 600
End Connections:	RF Flanged ASME Class 150, 300, 600 & Wafer ASME Class 150, 300
Body Materials:	Stainless Steel, Carbon Steel, Optional Special Alloys
Seat Materials:	Metal, Tek-Fil®
Applications:	Pulp & Paper, Suspended Solids, HVAC, Light Abrasive Fluids

FLANGED SERIES F15/F30, RF15/RF30

Ports:	Full, Standard Port	
Body Style:	F15/F30 2 Piece, RF15/RF30 1 Piece	
Size Range:	1/2" – 12" (15mm - 300mm)	
Temperature Range:	-50°F to 750°F (-46°C to 400°C)	
Pressure Rating:	ASME Class 150, 300 (PN10 to PN40)	
End Connections:	ASME Class 150, 300 (PN10 to PN40)	
Body Materials:	Stainless Steel, Carbon Steel, Alloys	
Seat Materials:	Standard: TFM 1600	Optional: Tek-Fil®, PEEK, UHMWPE, RPTFE, Metal, Cavity Fillers
Applications:	General Service, Process, Tank Farms, Fueling, Oil & Gas, NACE, Fire Safe	

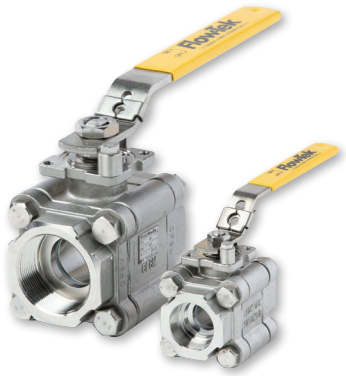
MULTI-PORT SERIES (MPT / MPC / MPS / MPB / MPF)

Ports:	Full, Standard Port	
Body Style:	3 & 4 Way	
Size Range:	1/4" – 12" (8mm - 300mm)	
Temperature Range:	-25°F to 500°F (-31°C to 260°C)	
Pressure Ratings:	ASME Class 150, 300 & 1000 psi CWP (69 bar)	
End Connections:	Threaded, Tri-Clamp, Socket Weld, Butt Weld, RF Flanged	
Body Materials:	Stainless Steel, Carbon Steel, Alloys	
Seat Materials:	Standard: TFM 1600	Optional: Tek-Fil®, UHMWPE, RPTFE, PTFE, Cavity Fillers
Applications:	Diverting, Mixing, Blending, and Bypassing	

Pressure/Temperature ratings and material availability depend on valve size and series. Please consult your local Bray representative for your specific application.

TRUNNION SERIES

Ports:	Full, Standard Port
Body Style:	2 Piece Cast, 3 Piece Forged
Size Range:	2" – 36" (50mm - 900mm)
Temperature Range:	-50°F to 400°F (-46°C to 200°C)
Pressure Rating:	ASME Class 150, 300, 600, 900, 1500
End Connections:	ASME Flanged, Butt Weld
Body Materials:	Stainless Steel & Carbon Steel
Seat Materials:	RPTFE, Nylon, Metal
Applications:	Chemical, Petroleum, Pipeline, Fuel Gas, CO_2



TRIAD SERIES

Ports:	Full, Standard Port	
Body Style:	3 Piece	
Size Range:	1/4" – 4" (8mm - 100mm)	
Temperature Range:	-50°F to 550°F (-46°C to 287°C)	
Pressure Rating:	2200 psi CWP (151 bar), Triad HP to 5000 psi CWP (344 bar)	
End Connections:	Threaded, Socket Weld, Butt Weld, 600# Flanged, Extended Socket Weld or Butt Weld	
Body Materials:	Stainless Steel, Carbon Steel, Optional Special Alloys	
Seat Materials:	Standard: TFM 1600	Optional: Tek-Fil®, PEEK, UHMWPE, RPTFE, Metal, Cavity Fillers
Applications:	General Service, Process, Steam, Fire Safe, Industrial Gases, Critical Service	

SERIES 7000 / 8000

Port:	Full Port	
Body Style:	3 Piece	
Size Range:	1/4" – 12" (8mm - 300mm)	
Temperature Range:	-50°F to 550°F(-46°C to 287°C)	
Pressure Rating:	1/4" - 4": 1000 psi CWP (69 bar), 6" - 12": 400 psi CWP (27 bar)	
End Connections:	Threaded, Socket Weld, Butt Weld, Flanged, Extended Socket Weld or Butt Weld	
Body Materials:	Stainless Steel (7000), Carbon Steel (8000)	
Seat Materials:	Standard: RPTFE	Optional: TFM 1600, Tek-Fil®, UHMWPE, Cavity Fillers
Applications:	General Service, Process, OEM Equipment	

SERIES 5000 / 6000

Port:	Full Port
Body Style:	3 Piece
Size Range:	1/4" – 4" (8mm - 100mm)
Temperature Range:	-50°F to 450°F (-46°C to 232°C)
Pressure Rating:	1/4" - 2" 1000 psi CWP (69 bar), 2-1/2" - 4" 800 psi CWP (55 bar)
End Connections:	Threaded, Socket Weld
Body Materials:	Stainless Steel (5000), Carbon Steel (6000)
Seat Materials:	RPTFE
Applications:	General Service, OEM Equipment

MICRO PURE SERIES

Port:	Tube Bore	
Body Style:	3 Piece	
Size Range:	1/2" – 4" (15mm - 100mm)	
Temperature Range:	-50°F to 450°F (-46°C to 232°C)	
Pressure Rating:	To 1000 psi CWP (69 bar)	
End Connections:	Tri-Clamp, Extended Tube, JIC	
Body Materials:	Stainless Steel CF3M	
Seat Materials:	Standard: PTFE	Optional: TFM 1600, UHMWPE, Cavity Fillers
Applications:	High Purity, Semi Conductor, Food & Beverage	

THREADED SERIES S85

Port:	Full Port	
Body Style:	2 Piece	
Size Range:	1/2" – 3" (15mm - 80mm)	
Temperature Range:	-50°F to 450°F (-46°C to 232°C)	
Pressure Ratings:	1000 psi CWP (69 bar) - 150 psi WSP (10.3 bar)	
End Connections:	Threaded	
Body Materials:	Stainless Steel	
Seat Materials:	Standard: RPTFE	Optional: UHMWPE
Applications:	General Service, Air, Water, Oil & Gas	

THREADED SERIES S70/S90, S80, S20, S40, S51

Ports:	Full, Standard, Reduced Port
Body Style:	1 Piece & 2 Piece
Size Range:	1/4"– 4" (8mm - 100mm)
Temperature Range:	-20°F to 450°F (-29°C to 232°C)
Pressure Ratings:	Through 2000 psi CWP (138 bar)
End Connections:	Threaded
Body Materials:	Stainless Steel, Carbon Steel, Brass
Seat Materials:	RPTFE
Applications:	General Service, Air, Water, Oil & Gas

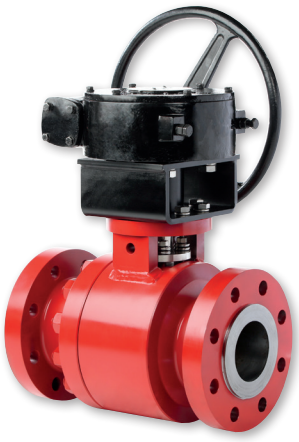
CRYOGENIC SERVICE

Ports:	Full, Standard Port
Body Style:	3 Piece, Flanged
Size Range:	1/4" – 4" (8mm - 100mm)
Temperature Range:	-260°F to 500°F (-162°C to 260°C)
Pressure Ratings:	ASME Class 150, 300, 600
End Connections:	Threaded, Socket Weld, Butt Weld, RF Flanged
Body Materials:	Stainless Steel
Seat Materials:	Polar®
Applications:	LNG, Air Separation, Liquefied Gases, Food & Beverage Processing

Pressure/Temperature ratings and material availability depend on valve size and series. Please consult your local Bray representative for your specific application.

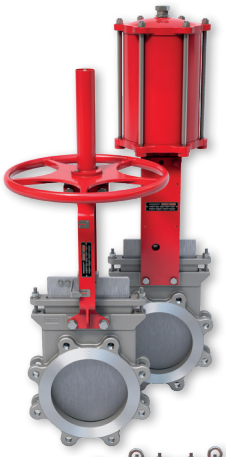
SERIES M1 - SEVERE SERVICE

Design Standards:	ASME B16.34 ASME Section VIII - Div 1, Appendix 2
Sizes:	½ - 36 in. (DN 15 - 900), custom and larger sizes upon request
Pressure Ratings:	ASME 150 - 4500, custom higher pressures upon request
Temperature:	Standard design rated up to 1100 °F (593 °C), can be customized for higher temperatures
End Connections:	Raised Face and Ring Type Joint (ASME B16.5 and DIN 2501) Butt welds (ASME B16.25) Socket weld (ASME B16.11) Hubs & Custom Ends Available
End-To-End:	ASME B16.10 (Long Pattern)
Testing:	MSS SP-61, API 598, ANSI/FCI Class VI Custom Tests available
Critical Applications:	Refining, Power Generation, Mining, Chemical, Synthetic Fuels, Petrochemical



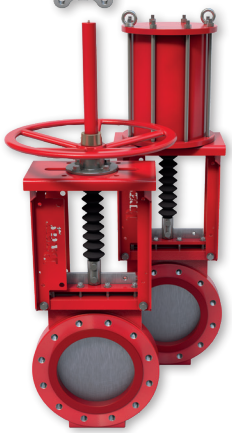
SERIES M4 - SEVERE SERVICE

Size Range:	NPS ½ - 2½ SW or BW - DN 15 - 65, NPS 3 & 4 BW - DN 80 & 100
Bore Sizes:	0.63", 1.03", 1.56"
Body Materials:	A105, A182-F22 Cl.3, A182-F91
Ball Materials:	410 SS/HVOF Chromium Carbide, Inconel® 718/Fused Chromium Carbide
Seat Materials:	410 SS/HVOF Chromium Carbide, Inconel® 718/HVOF Chromium Carbide
Pressure Ratings:	ASME 1700, 3100, 4500 ½" thru 2½", Limited Class 3" and 4" Standard Class
Temperature:	Up to 1100°F (593°C)
End Connections:	SW per ASME B16.11, BW per ASME B16.25
Design Standards:	ASME B16.34, Bore sizes per ASME TDP-1
Testing:	Meets and exceeds API 598, or per customer request
Characteristics:	On/Off, Zero Leakage
Applications:	High Pressure and Temperature Steam



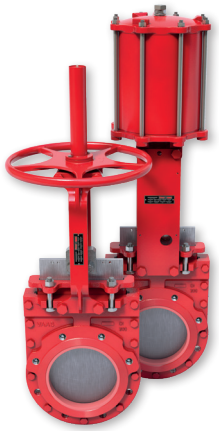
SERIES 740 Bidirectional Knife Gate Valves

Size Range:	2" - 36" (50 - 900mm)	**Body Materials:**	CF8, CF8M, WCB
Pressure Rating:	2"-24" 150psi (10bar), 30"-36" 100psi (7bar)	**Gate Materials:**	304, 316SS
Body Style:	One-piece (Wafer, Lug)	**Seat Materials:**	Buna-N
Design:	MSS SP-81	**Packing Materials:**	PTFE impregnated synthetic fiber
Testing:	MSS SP-81		
Face-to-face:	MSS SP-81	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Certification:	Canadian CRN		
Drilling:	ASME B16.5 CL150, ASME B16.47 CL150		
Applications:	On/off service and isolation of clean, dirty, corrosive or viscous media in pulp & paper, chemical, mining, power and wastewater applications.		



SERIES 746 Bidirectional Polyurethane Lined Slurry Valves

Size Range:	2" to 24" (50 - 600mm)	**Body Materials:**	Ductile Iron
Pressure Rating:	240psi (16bar)	**Gate Materials:**	316SS
Body Style:	One-piece (Wafer)	**Liner Materials:**	Polyurethane
Design:	Manufacturer Standard	**Packing Materials:**	PTFE impregnated synthetic fiber
Testing:	MSS SP-81		
Face-to-face:	MSS SP-81	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Drilling:	ASME B16.5 CL150		
Applications:	On/off service handling corrosive or abrasive media in pulp & paper, chemical, mining and power applications.		



SERIES 755 Bidirectional Urethane Lined Slurry Valves

Size Range:	2" to 24" (50 - 600mm)	**Body Materials:**	CF8, CF8M, WCB, DI
Pressure Rating:	150psi (10bar), 240psi (16bar), 300psi (20bar)	**Gate Materials:**	304, 316SS
Body Style:	Two-piece bolted (Wafer)	**Seat Materials:**	Buna-N
Design:	Manufacturer Standard	**Packing Materials:**	PTFE impregnated synthetic fiber
Testing:	MSS SP-81		
Face-to-face:	MSS SP-81	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Certification:	Canadian CRN		
Drilling:	ASME B16.5 CL150		
Applications:	Heavy-duty on/off service and isolation of dirty, corrosive, abrasive or viscous media in chemical, mining and power applications.		

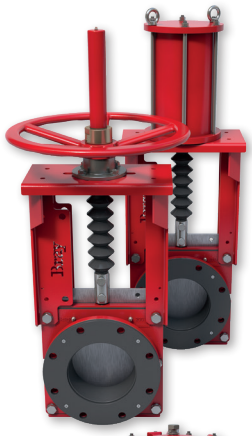
SERIES 760 Bidirectional Heavy Duty Slurry Valves

Size Range:	2" - 30" (50 - 750mm)	**Body Materials:**	Ductile Iron
Pressure Rating:	2"-24" 100psi (7bar), 30" 75psi (5bar)	**Gate Materials:**	304SS
Body Style:	Two-piece bolted (Flanged)	**Seat Materials:**	Natural Rubber
Design:	Manufacturer Standard	**Wiper Materials:**	Polyurethane
Testing:	MSS SP-81		
Face-to-face:	Per Industry Standard	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Certification:	Canadian CRN		
Drilling:	ASME B16.5 CL150, ASME B16.47 CL150		
Applications:	On/off service and isolation of clean, dirty, corrosive or viscous media in pulp & paper, chemical, mining, power and wastewater applications.		

Pressure/Temperature ratings and material availability depend on valve size and series. Please consult your local Bray representative for your specific application.

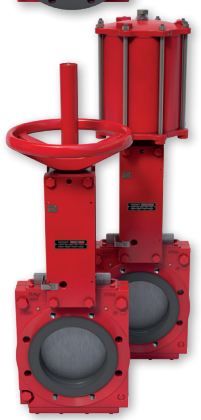
SERIES 762 Bidirectional Heavy Duty Slurry Valves

Size Range:	3" to 24" (80 - 600mm)	**Body Materials:**	Ductile Iron
Pressure Rating:	240psi (16bar)	**Gate Materials:**	316SS
Body Style:	Two-piece bolted (Flanged)	**Seat Materials:**	Natural Rubber
Design:	Manufacturer Standard	**Wiper Materials:**	Polyurethane
Testing:	MSS SP-81		
Face-to-face:	Per Industry Standard	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Drilling:	ASME B16.5 CL150		
Applications:	Heavy-duty on/off service and isolation of dirty, corrosive, abrasive or viscous media in chemical, mining and power applications.		



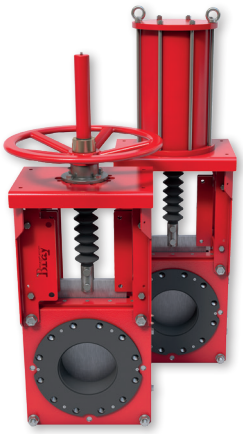
SERIES 765 Bidirectional Slurry Valves

Size Range:	2" to 24" (50 - 600mm)	**Body Materials:**	Ductile Iron
Pressure Rating:	150psi (10bar)	**Gate Materials:**	304SS
Body Style:	Two-piece bolted (Wafer)	**Seat Material:**	Natural Rubber
Design:	Manufacturer Standard	**Wiper Material:**	EPDM
Testing:	MSS SP-81		
Face-to-face:	MSS SP-81	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Certification:	Canadian CRN		
Drilling:	ASME B16.5 CL150		
Applications:	Heavy-duty on/off service and isolation of dirty, corrosive, abrasive or viscous media in chemical, mining and power applications.		



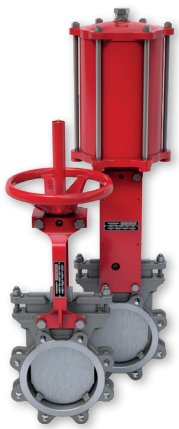
SERIES 767 Bidirectional High Pressure Slurry Valves

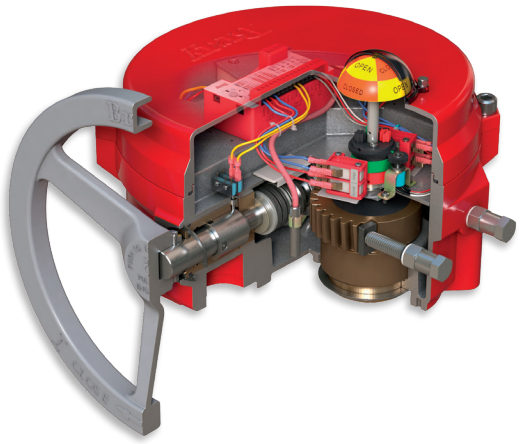
Size Range:	3" to 30" (80 - 750mm)	**Body Materials:**	Ductile Iron
Pressure Rating:	3"-24" 375psi (25bar), 26"-30" 300psi (20bar)	**Gate Materials:**	316SS
Body Style:	Two-piece bolted (Wafer)	**Seat Materials:**	Natural Rubber
Design:	Manufacturer Standard	**Wiper Materials:**	Polyurethane
Testing:	MSS SP-81 / MSS SP-135		
Face-to-face:	Per Industry Standard	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Drilling:	ASME B16.5 CL300 ASME B16.47 CL300		
Applications:	High pressure on/off service and isolation of dirty, corrosive, abrasive or viscous media in chemical, mining and power applications.		



SERIES 940 Unidirectional Knife Gate Valves

Size Range:	2" to 36" (50 - 900mm)	**Body Materials:**	CF8, CF8M, WCB
Pressure Rating:	2"-24" 150psi (10bar), 30"-36" 100psi (7bar)	**Gate Materials:**	316, 304SS
Body Style:	One-piece (Lug)	**Seat Materials:**	Integral
Design:	MSS SP-81	**Packing Materials:**	PTFE Impregnated synthetic fiber
Testing:	MSS SP-81		
Face-to-face:	MSS SP-81	**Actuator Options:**	Handwheel Bevel Gear Pneumatic Hydraulic Electric
Certification:	Canadian CRN		
Drilling:	ASME B16.5 CL150, ASME B16.47 CL150		
Applications:	General purpose on/off service and isolation of clean, dirty, corrosive, abrasive, viscous and high temperature media in power, mining, pulp & paper, cement, carbon black and chemical applications.		





SERIES 70 ELECTRIC ACTUATOR

Low profile, compact, high output actuator for quarter turn applications

- On/Off or modulating (Servo NXT)
- Manual declutchable handwheel
- High visibility dome position indicator
- Network protocols available

Torque:	300 to 18,000 lb-ins (34 to 2030 Nm)
Voltage:	VAC: 24, 120, 220, VDC: 12, 24
Standard Enclosure:	NEMA Type 4, 4X
Explosion Proof:	NEMA Type 4, 4X, 7, 9 Class I, Div 1 & 2, Group C, D Class II, Div 1 & 2, Group E, F, and G.

Extreme High Temperature Actuator

Stainless Steel Actuator

SERIES 92/93 PNEUMATIC ACTUATOR

Bray rack and pinion actuators available in double acting and spring return

- Standard units have anodized aluminum bodies with polyester coated end caps
- Seacorr coating for harsh environments
- Integral porting
- Internal bidirectional travel stops
- SIL 3 capable

Torque:	Double Acting up to: 44,130 lb-in (4,986 Nm) Spring End Torque up to: 14,173 lb-in (1,601 Nm)	
Pressure Range:	40 - 140 psi (2.8 - 10 bar)	
Media:	Dry Compressed Air/Inert Gas*	
Temperature Range:	Standard:	-4°F to 200°F (-20°C to 93°C)
	Low:	-40°F to 176°F (-40°C to 80°C)
	High:	0°F to 300°F (-18°C to 149°C)
	Extreme High Temperature:	0°F to 482°F (-18°C to 250°C)

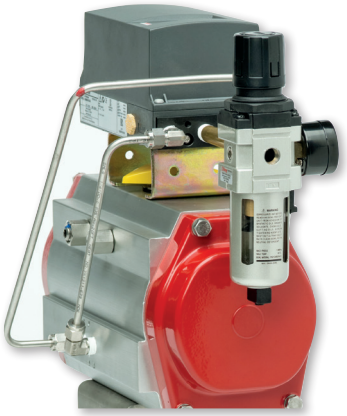
Torque:	Double Acting up to:	885,000 lb-in (100,000 Nm)
	Spring Return (Spring End) up to:	445,261 lb-in (50,306 Nm)
Pressure Range:	40 - 150 psi (2.8 - 10.3 bar)	
Media:	Dry Compressed Air/Inert Gas*	
Temperature Range:	Standard:	-4°F to 200°F (-20°C to 93°C)
	High Temperature:	Up to 300°F (149°C)
	Low Temperature:	Down to -50°F (-46°C)

SERIES 98 SCOTCH YOKE PNEUMATIC ACTUATOR

Bray scotch yoke actuator for quarter turn rotary operation

- Compact design with a high torque to weight ratio
- Modular design offers easy configuration in the field
- Optional modular components: manual overrides, hydraulic dampener for fast acting operation, lockout/PST device
- Premium epoxy/polyurethane coating as standard
- Pressure Equipment Directive (PED) 97/23/EC compliant
- Standardized interfaces: ISO 5211, VDI/VDE 3845 for accessories
- Optional Seacorr coating for harsh environments
- SIL 3 capable

**Contact Factory for other media or non-standard temperature range.*



SERIES 6A ELECTRO-PNEUMATIC POSITIONER

- Precision digital control
- Zero bleed design
- Compatible with rotary or linear actuators for single and double acting applications
- Various housing options available
- Precise, microprocessor driven flow control and advanced communication
- Non-contacting position sensor technology
- Integral volume booster
- Connective and preventative maintenance self-diagnostic checks

SERIES 6P P/P POSITIONER

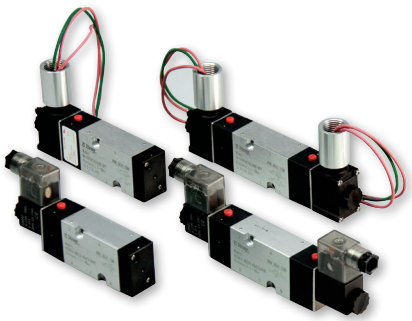
- Pneumatic to pneumatic positioner for single and double acting actuators
- Rugged aluminum diecast housing for harsh environments
- Minimal setup time for zero and span adjustment
- Split range capabilities
- High visibility dome position indicator
- Optional 2 x SPDT mechanical switches

SERIES 5A & SERIES 5B VALVE STATUS MONITORS

- Discrete status monitor for quarter turn rotary actuators
- NEMA 4, 4X and IP66 and IP67 ingress protection
- High visibility dome position indicator
- Up to 6 SPDT switches or non-contacting proximity switches
- Switches pre-wired to internal terminal block

SERIES 54 VALVE PROXIMITY SENSOR

- Dual proximity sensors for valve position
- NEMA 4, 4X and IP66, IP67, IP69K ingress protection available
- Available solenoid outputs
- 2 or 3 wire DC, AC/DC, intrinsically safe, and AS-i interface
- Pin connector or conduit versions available



SERIES 63 HIGH FLOW 3 & 4 WAY SOLENOID VALVES

- Weatherproof NEMA 4, 4X and explosion proof housings available
- Flying leads or DIN connectors
- Single or dual coil
- 5/2 or 3/2 Operation
- NAMUR mounted
- High flow up to 1.4 Cv
- Intrinsically safe versions available

Bray

TH E HIGH PERFORMANCE COMPANY

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