

Bray®

YOUR GLOBAL FLOW CONTROL PARTNER™



BRAY CONTROLS PRODUCT PROFILE



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



Bray[®] CONTROLS

INTRODUCTION

At Bray Controls, Inc., our business is helping our customers with their flow control requirements. Our modular product line of butterfly 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 in all aspects of Bray's products and their applications and provide personal attention to every customer. To serve you locally, each region maintains a factory certified sales and service network for all Bray International products.

COMMITMENT TO QUALITY

Bray 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
- Delivery
- Customer Service
- Cost of Ownership

"Bray Controls 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 www.bray.com.



TRI LOK® TRIPLE OFFSET Quarter Turn Valves

High Pressure • Zero Leakage • Metal-To-Metal Sealing

- **SEAT & SEAL RING**

Fully replaceable seat and seal ring system extends the overall life of every Tri Lok valve minimizing downtime, without the need for costly offsite repairs or total replacement.

- **STEM**

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

- **BEARINGS**

Standard bearing seals minimize ingress of media into the journal.

- **PACKING**

Fully adjustable stem seal system (packing gland) eliminates fugitive emissions and is also field replaceable.

Size Range:	3" – 48" (80mm – 1200mm)
Body Style:	Wafer, Lug, Flanged, Gate, Butt Weld
Temperature Range:	-320°F to 842°F (-196°C to 450°C)
Pressure Rating:	ASME Class 150, 300, 600
Shutoff Class:	Zero Leakage
Body Materials:	Carbon Steel, Stainless Steel
Disc Materials:	Carbon Steel, Stainless Steel
Stem Materials:	Stainless Steel
Body Seat Materials:	Stainless Steel
Disc Seal Materials:	Laminated Stainless Steel/Graphite
Applications:	High Pressure, Critical Service, Cryogenic Service

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



BRAY/McCANNALOK

High Pressure & Temperature

The Bray/McCannalok's innovative design offers rugged reliability and extremely easy maintenance in the field. Independent and internal tests prove Bray/McCannalok's superior service life capability, with zero leakage Shutoff. The Bray/McCannalok High Performance Valve delivers the highest quality and highest value available for meeting today's demanding requirements.

Available with proven bidirectional fire safe seats for reliable control of flammable and hazardous fluids in petroleum, petrochemical, chemical and other high-risk applications. The fire safe design combines superior performance, extended service life and compliance with the most demanding worldwide fire-test standards – before, during and after a fire!

Size Range:	2½" – 60" (65mm – 1500mm)
Body Style:	Wafer, Lug, Double Flanged
Temperature Range:	-20°F to 500°F (-29°C to 260°C)
Pressure Rating:	ASME Class 150, 300 and 600
Shutoff 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 - RTFE with Resilient Energizer, PTFE with Resilient Energizer Fire Safe – RTFE and Inconel [®] with Resilient Energizer
Applications:	High Pressure, High Temperature, Critical Service

Resilient Seated Butterfly Valves

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 Shutoff	to 150 psi (10.3 Bar)
	Body (CWP)	150 psi (10.3 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	

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 Shutoff	to 150 psi (10.3 Bar)
	Body (CWP)	150 psi (10.3 Bar)
Body Materials:	Ductile Iron, Carbon Steel, Stainless Steel	
Disc/Stem Materials:	Stainless Steel, PTFE/SS, UHMWPE/SS, UHMWPE/DI, Hastelloy [®] , Titanium	
Seat Materials:	PTFE, Conductive PTFE, UHMWPE	
Applications:	Highly Corrosive, Toxic Media	

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 Shutoff	to 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	
Applications:	Potable Water, Wastewater, Seawater, HVAC	

*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..

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

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 Shutoff	250 psi (17.2 Bar)
	Body (CWP)	250 psi (17.2 Bar)
Body Materials:	Cast Iron, 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" – 20" (50mm – 500mm)	
Body Style:	Lug	
Temperature Range:	0°F to 212°F (-18°C to 100°C)	
Pressure Ratings:	Bidirectional Bubble-Tight Shutoff	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 Shutoff	to 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:	Wastewater, Seawater	



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

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Resilient Seated Butterfly Valves

SERIES 32/33 & 35/36

Size Range:	S32/33 – 22" – 36" (550mm – 900mm) S35/36 – 22" – 120" (550mm – 3000mm)	
Body Style:	Full Flanged	
Temperature Range:	-20°F to 250°F (-29°C to 121°C)	
Pressure Ratings:	Bidirectional Bubble-Tight Shutoff	to 150 psi (10.3 Bar)
	Body (CWP)	150 psi (10.3Bar)
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:	Wastewater, Seawater	

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 Shutoff	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	
Stem Materials:	17-4 PH Stainless Steel	
Seat Materials:	Bonded BUNA-N, Bonded EPDM	
Applications:	High Pressure, HVAC, Dead-End Service	

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 Shutoff	75 psi (5.2 Bar)
	Body (CWP)	150 psi (10.3 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	



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



EPDM	-20°F to 250°F	-29°C to 121°C	PTFE-Lined EPDM (Standard)	-20°F to 250°F	-29°C to 121°C
BUNA-N	0°F to 212°F	-18°C to 100°C	PTFE-Lined EPDM (High-Temp)	-20°F to 302°F	-29°C to 150°C
FKM	0°F to 400°F	-18°C to 204°C	Virgin PTFE & Conductive PTFE	0°F to 392°F	-18°C to 200°C
Polyurethane	-20°F to 176°F	-29°C to 80°C	UHMWPE	0°F to 185°F	-18°C to 85°C

EPDM Food Grade seats are standard and perfectly suitable for sanitary applications as well as standard industrial uses.

BUNA-N is an excellent general purpose seat material which is particularly suitable for hydrocarbon service.

FKM has improved acid, oil, and temperature resistance over standard seat materials.

POLYURETHANE will withstand severe impact, recover its original shape after distortion and resist abrasion better than other elastomers.

PTFE LINED EPDM seats are usually used where BUNA-N and EPDM seats are not chemically suitable, especially in corrosive services.

VIRGIN PTFE inherent molecular bonding provides optimum protection against permeation of the line media.

CONDUCTIVE PTFE seats combine electrostatic discharge protection and the excellent chemical resistance properties of PTFE.

UHMWPE provides exceptional chemical resistance, and are the ideal choice for highly abrasive chemical applications.

Seat material availability depends on valve size and series. Please consult your local Bray representative for your specific application.

Abrasive Service Butterfly Valves

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)
Shutoff 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



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

SERIES 70 *ELECTRIC*

Torque	300 to 18,000 Lb-in (34-2030 N-m)
Voltage	VAC: 24, 120, 220 VDC: 12, 24
Standard Enclosure	NEMA 4, 4X
Explosion Proof:	NEMA 4, 4X, 7 and 9

The Series 70 is a low profile, compact and powerful actuator with customer-friendly features.

- Manual declutchable handwheel
- Local high visibility position indicator
- Digital interface available
- Optional microprocessor based modulating control



SERIES 92/93 *PNEUMATIC*

Bray pneumatic actuators are rack and pinion, opposed-piston actuators available in two versions: double acting and spring return.

- Maximum pressure rating of 140 psi (9.7 Bar) and a temperature range of -20°F (-29°C) to 200°F (95°C)
- Two independently adjustable travel stop screws and a cam on the output shaft to permit precise bidirectional adjustment of movement in both the open and closed positions for quarter turn valves (+5° to -5° limit adjustment)
- Integral porting
- Standard units have anodized aluminum bodies with polyester coated end caps
- Special coatings and materials available for corrosive environments
- NAMUR accessory compatible





SERIES 50 - Valve Status Monitors

- 10 amps at 125 or 250 volts AC
- Internal travel switches that are prewired to a terminal block



SERIES 52 - Valve Status Monitors

- ProxSensor provides 2 proximity sensors in one fully sealed, compact enclosure
- AC, DC, Intrinsically Safe and BUS Network versions are offered



SERIES 63 - 3 & 4 way solenoids

- Waterproof (NEMA 4, 4X) and explosion proof (NEMA 7, 9) housings are standard
- NPT and IP65 DIN connections are offered with both single and dual coils



SERIES 6A

Electro-Pneumatic Positioners

- Precise, microprocessor driven flow control and advanced communication
- For use with either double or single acting actuators



Serial Bus Communication

- Bray offers several products featuring serial bus communication
- Multiple protocols available. Consult your local Bray representative

Manual Operators



SERIES 1 - Handle & Notch Plate



SERIES 4 - Gear Operator



SERIES 5 - Declutchable Gear Operator

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Global Manufacturing, Service Around the Corner

To serve you locally, each region maintains a
factory certified sales and service network
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▼ BRAY CONTROLS - CHINA - Office & Manufacturing



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