HIGH PERFORMANCE BUTTERFLY VALVE
McCANNALOK SERIES

OVERVIEW

Featuring Bray's patented, award-winning design, this double offset high performance butterfly valve is precision engineered to deliver **quality**, **value**, and **reliability** in high temperature, high pressure, high cycle, and critical service applications.

APPLICATIONS
- Caustic
- Chilled Water
- Pressure Swing Adsorption (PSA)
- Seawater
- Sour Gas (NACE)
- Steam
- Vacuum

MEDIA
- Acids
- Alkalis
- Corrosive Chemicals
- Dry Chlorine (Gas or Liquid)
- Gases
- Hydrogen
- Oxygen
- Water

SPECIFICATIONS

Size Range	NPS 2 to 66 (DN 50 to 1500)	
Body Style	Wafer | Lug | Double Flanged	
Temperature Range	Resilient Seated	-62 to 500°F (-52 to 260°C)
	Firesafe	-62 to 500°F (-52 to 260°C)
	Metal Seated	up to 900°F (up to 482°C)
Pressure Ratings	ASME Class 150 | 300 | 600	
	PN 10 | 16 | 25 | 40 | 63 | 100	
Leakage Rate	Resilient Seated	Zero Leakage
	Metal Seated	FCI 70-2 Class IV

NOTE
- Firesafe or metal seated control options available; not in all sizes and pressure classes.

FEATURES AND BENEFITS

1 DOUBLE OFFSET STEM AND DISC DESIGN
- Reduced seat wear | lower torque | extended service life

2 BLOWOUT-PROOF STEM
- Does not rely on actuation to prevent stem blowout

3 ADJUSTABLE STEM PACKING
- Easy access | field serviceable | low fugitive emissions

4 ENERGIZED RESILIENT SEAT DESIGN
- Zero leakage | self-adjusting | isolated from line media

5 BIDIRECTIONAL PRESSURE ASSISTED SEALING
- Optimal sealing performance for low and high pressures

6 FULL-FACED SEAT RETAINER
- Secured outside sealing area | easy seat replacement

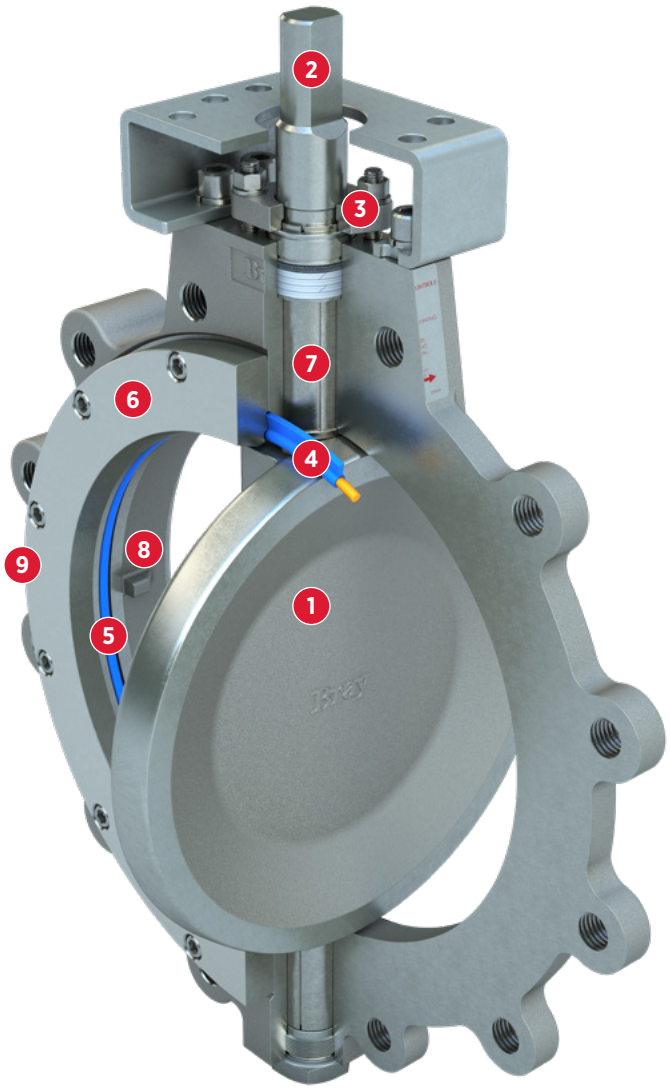
7 STEM BEARINGS
- Stem support | minimizes deflection | corrosion resistant

8 INTERNAL OVER-TRAVEL STOP
- Minimizes possible seat damage | extends service life

9 DEAD END SERVICE
- Bidirectional full rating for lug and double-flanged bodies

FIRESAFE DESIGN OPTION (API 607)
- Inconel® metal seat | graphite packing | bidirectional

METAL SEATED CONTROL VALVE AVAILABLE
- Inconel® metal seat



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DESIGN STANDARDS

Valve Design	ASME B16.34
	MSS SP 68
	ASME VIII
	API 609 Category B
	EN 593
	EN 12516
Top Flange	ISO 5211
Flange Drilling[1]	ASME B16.5
	ASME B16.47
	EN 1092-1
Seat Tightness Test	API 598
	MSS SP 61
	EN 12266
	ISO 5208
Face-to-Face	ASME B16.10
	API 609 Category B
	EN 558
	ISO 5752

NOTE
1 Additional flange drilling options available.

CERTIFICATIONS & APPROVALS

Certifications	CE: PED 2014/68/EU | ANSI/NSF 61 | SIL
Fire Test	API 607 | ISO 10497
Fugitive Emissions	API 641 | ISO 15848-1 | TA-Luft VDI 2440
Approvals	ABS Type | ATEX 2014/34/EU | Bureau Veritas Type | China Classification Society (CCS) Type | CRN | DNV | EC1935 | TR CU (GOST)

NOTE
> A complete listing of certifications and approvals can be found at BRAY.COM.

MATERIAL OPTIONS

Body Materials	Carbon Steel
	Stainless Steel
	Nickel Aluminum Bronze
	Hastelloy® C
	Titanium
Disc Materials	Stainless Steel
	Nickel Aluminum Bronze
	Monel®
Stem Materials	Stainless Steel
	Monel® K500
	Inconel® 718
Seat Materials	RPTFE with Resilient Energizer
	PTFE with Resilient Energizer
	UHMWPE with Resilient Energizer
	TFM with Low Temperature Resilient Energizer
	(Firesafe) Inconel® & RPTFE with Resilient Energizer

NOTE
> Other materials are available on request.

SERIES 40/41
ASME Class 150
NPS 2 to 66
DN 50 to 1650

SERIES 42/43
ASME Class 300
NPS 2 to 54
DN 50 to 1350

SERIES 44/45
ASME Class 600
NPS 3 to 36
DN 80 to 900

SERIES 4A
ASME Class 150
NPS 2 to 54
DN 50 to 1350

SERIES 4B
ASME Class 300
NPS 3 to 42
DN 80 to 1050

NOTE
> Firesafe, high cycle, or metal seated control options available; not in all sizes and pressure classes.