

## 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
- > Alkalies
- > Corrosive Chemicals
- > Dry Chlorine (Gas or Liquid)
- > Gases
- > Hydrogen
- > Oxygen
- > Water

## 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

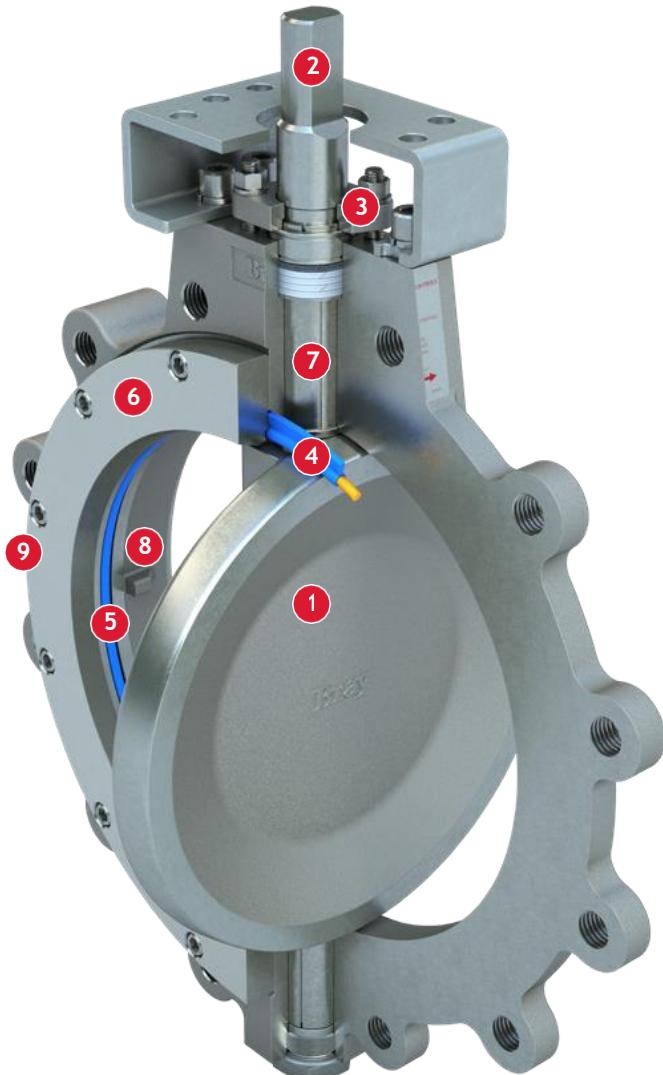
- > Inconel® metal seat

## SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 66 (DN 50 to 1500)
<b>Body Style</b>	Wafer   Lug   Double Flanged
<b>Temperature Range</b>	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)
<b>Pressure Ratings</b>	ASME Class 150   300   600
	PN 10   16   25   40   63   100
<b>Leakage Rate</b>	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.



# VTE® - HIGH PERFORMANCE BUTTERFLY VALVE

## McCANNALOK SERIES

### DESIGN STANDARDS

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

#### NOTE

<sup>1</sup> Additional flange drilling options available.

### CERTIFICATIONS & APPROVALS

<b>Certifications</b>	CE: PED 2014/68/EU   ANSI/NSF 61   SIL
<b>Fire Test</b>	API 607   ISO 10497
<b>Fugitive Emissions</b>	API 641   ISO 15848-1   TA-Luft VDI 2440
<b>Approvals</b>	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](http://BRAY.COM).

### MATERIAL OPTIONS

<b>Body Materials</b>	Carbon Steel
	Stainless Steel
	Nickel Aluminum Bronze
	Hastelloy® C
	Titanium
<b>Disc Materials</b>	Stainless Steel
	Nickel Aluminum Bronze
	Monel®
<b>Stem Materials</b>	Stainless Steel
	Monel® K500
	Inconel® 718
<b>Seat Materials</b>	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.

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