

# MIL 33300 - High Performance Triple Offset Butterfly Valve

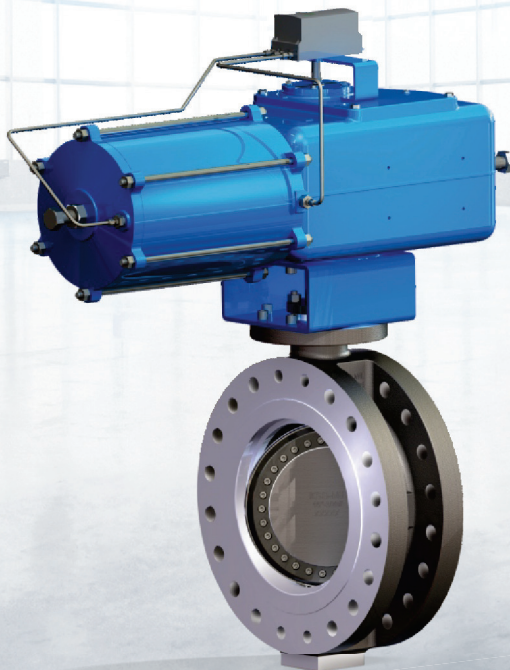
## Standard Sizes & Rating

3" to 30": ASME 150# to ASME 300#

Seat Leakage: Class IV, V & VI as per FCI 70.2 in preferred Direction

Body Seat: Stellite Weld Overlay

Disc Seal ring Types: Laminated seal & Solid Metal seal



## Applications

- **Oil & Gas / Petroleum Refineries**
  - Hydrocarbon, Rich & Lean Amine, Gas Treatment, Crude, Naphtha
- **Chemical & Fertilizer Industries**
  - Fluid Catalytic Cracking, Coal Classification, Ethylene Furnace (Decoking)
- **Water Treatment / Desalination Plants**
  - Raw / Produced Sea Water, Isolation, Formation Water
- **Paper & Pulp Industries**
  - Black / White Liquor, DM Water
- **Steam & Power**
  - Turbine Trip & throttle, Cooling Water, Molten Salts
- **Utilities (all Industries)**

More information: [www.ksb-mil.com](http://www.ksb-mil.com)



Wafer End Triple Offset Butterfly Valve with Double acting Piston Cylinder Pneumatic Actuator



Lugged End Triple Offset Butterfly Valve with Spring Return Rack & Pinion Pneumatic Actuator



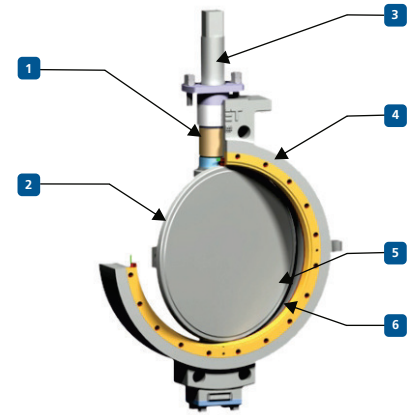
Double Flanged End Triple Offset Butterfly Valve with Spring Return Quarter turn Pneumatic Actuator

Your contact:

Form area for contact information, including fields for name, phone, and email, indicated by corner brackets.

# MIL 33300 - High Performance Triple Offset Butterfly Valve

- 1 Excellent Flow Control and Rangeability
- 2 Torque Seated Design
- 3 Laminated + metal or Metal-to-metal Seal ring ensures efficient seating force distribution around precision machined seating area
- 4 Laminated+ Metal seal rings available with Graphite & PTFE options
- 5 Robust Single-piece Stem designed to transfer/maintain torque efficiently
- 6 Stellite Weld Overlay Seat provide excellent durability
- 7 Low-operating torque for compact, cost-effective actuation
- 8 Field Replaceable Disc Seal Ring, Spiral wound gaskets and Packing rings
- 9 Meet fugitive emission requirements as per ISO 15848



- 1 Bearing Area
- 2 Laminated / Solid Metal Disc Seal ring
- 3 Stem
- 4 Valve Body
- 5 Disc
- 6 Stellite Weld overlay seat in Body

## Model Decodification

1 <sup>st</sup> -	2 <sup>nd</sup> -	3 <sup>rd</sup> 3	4 <sup>th</sup> 3	5 <sup>th</sup> -	6 <sup>th</sup> -	7 <sup>th</sup> -
Actuator Type		Body Series		Design Variant	End Connections	Seat Type
37. Spring diaphragm for fail close and open 67. Direct piston cylinder 68. Reverse piston cylinder 75. Rack and Pinion Double Acting 76. Rack and Pinion Spring Return 85. Scotch Yoke Double Acting 86. Scotch Yoke Spring Return 90. Electrical actuator 95. Link actuator Double acting 96. Link actuator Spring return		33. High Performance Butterfly Control Valves		0. Undefined 2. Double Offset 3. Triple Offset	0. Undefined 1. Wafer 2. Lugged 3. Flanged	0. Undefined 3. Stellite Weld Overlay Seat in body and Laminated seal in Disc 4. Stellite Weld Overlay Seat in body and Solid metal seal in Disc

\* For more details, consult KSB MIL

## General Data\*

### Materials

Body	ASTM A216 WCB / ASTM A351 CF8M
Disc	CF8M / CF8
Stem	17-4-Ph / SS316 / Duplex
Seat	Stellite weld overlay seat in Body
Disc Seal ring	Laminated / Solid Metal

### Actuator Options

Diaphragm Actuators
Single / Double acting Rack & Pinion Actuators
Electrical Actuators
Hydraulic Actuators
Single / Double Acting Scotch Yoke Actuators
Single / Double Acting Link Actuators

### Note

Additional accessories or Instruments like Solenoid Valve, Limit Switches, Air Filter Regulator & Positioner (Pneumatic / Electro-Pneumatic / Smart) can be supplied along with valve depending upon the requirement.

### Technical Data

Size	3" - 30" (DN 80 to 750)**
Pressure class	150# to 300# **
Temperature Range	-29°C to 250°C **
Leakage class	Class II, III, IV & V, VI (as per FCI 70-2) in preferred direction alone
Body Connection Type	Wafer, Lugged, Double Flanged (Short and Long Patterns)
Characteristics	Inherent (Mod. Equal %)
Valve Face to Face Standard	API 609 Cat B
Disc Orientation	Counter Clockwise to Open & Clockwise to Close
Design Standard	ASME B16.34 & API 609
Angle of Rotation	90 Degree & 60 Degree

\*\*Consult KSB MIL



**KSB MIL Controls Limited**  
Meladoor, Annamanada, Pin - 680741  
Thrissur District, Kerala, India  
Tel. +91 480 2695700, Fax. +91 480 2890952  
E-mail: sales.mil@ksb.com, www.ksb-mil.com

You can also visit us at:  
[www.ksb.com/socialmedia](http://www.ksb.com/socialmedia)