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TRIPLE ECCENTRIC BUTTERFLY VALVES

Triple Eccentric Design Key

- High pressure, bi-directional, tight shut off.
- Valve shaft offset against the seat and the centre line of the body.
- Greatly reduced seat wear and maintenance.
- Wide temperature and pressure range
- Minimum seat deformation, coupled with excellent media resistance.
- Lower torque figures.
- Seat removal without disconnecting shaft and disc.
- Laminated Metal Seal secured to disc with bolt on clamp ring
- Three different patterns available - Wafer, Lugged and Flanged.
- Wide range of operating methods including lever, gearbox and electric / pneumatic / hydraulic actuated packages.

Technical Specification

Body type & end connection	Size range	Pressure range	Operating temperature range:
Wafer / Lugged / Flanged	50 NB to 3000 NB	Up to 1500lb	Solid metal seals; -253 to 815°C Laminated metal seals; -40 to 650°C

Available material of construction (MOC):	
Carbon Steels inc Low Temp	e.g. WCB, LCB
Austenitic/Super Austenitic Stainless steels	e.g. CF8, CF8M, CF3M, 6MO
Copper alloys	e.g. Aluminium bronze
Duplex/Super Duplex alloys (1A-6A)	e.g. CD3MWCuN, CD4MCuN
Superalloys	e.g. Hastelloy® B, C, Inconel
Nickel alloys	e.g. Monel®, Alloy 20
Others upon request	e.g. Titanium

Shaft:	Testing Standards:
AISI 410, AISI316, 17-4Ph, Monel® K500, UNS32760, Titanium	API 598 (Others on request i.e. API 6D)
Seat	**Applicable Design Standards:**
Various laminated and solid metallic seals Stellite overlay on body seat.	API609 Category B, ASME B16.34, BS EN593

Approvals dependant on range/model

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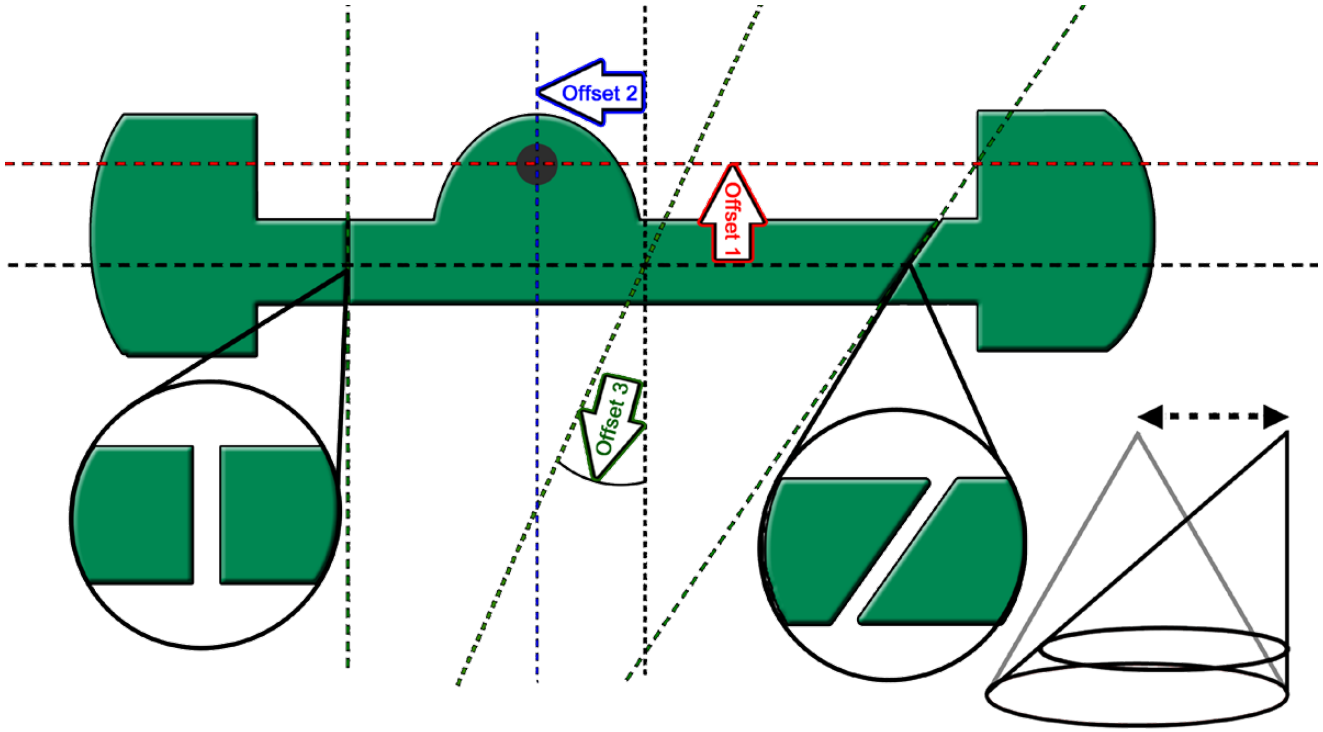

Offset One:

The shaft is offset from the centre of the seal.

Offset Two:

The shaft is offset from the centre of the bore.

Offset Three:

The geometry of the disc eliminates friction during operation by ensuring that contact is only made at the final point of closure - extending seat life.

Disc Geometry:

A right angled, conical profile is created by machining the edges of the disc into a continuously changing slope.

Mechanical Stop:

The disc profile acts as a mechanical stop to prevent over travel of the disc. This also negates the need for stops in the body.

Solid Metal Seat

Laminated Graphite Seat

Approvals dependant on range/model