

TRIODIS – High-performance Triple-offset Butterfly Valve



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TRIODIS 150 TBT BWSE

18" with MR 200



TRIODIS 150 TBT Flanged 24" with MR 400



TRIODIS 600 TBT Flanged with pneumatic actuator

Applications:

- Oil & Gas
- Production (on/offshore)
- Refinery, hydrocarbons
- LNG/LPG (terminal, liquefaction train)
- Petrochemical
- Hot gas/sour gas (NACE)

Energy

 Power plants (conventional/ nuclear/solar), coal to X

Marine

- LNG/LPG tankers
- FPSO
- Chemical tankers

General industry

 Process fluids, steam, gas, oxygen, hydrogen, steel mills, chemical, bio-ethanol, sugar mills, pulp & paper, mining

More information: www.ksb.com/products

TRIODIS – High-performance Triple-offset Butterfly Valve

Perfect tightness even at cryogenic temperature

1 Solid seal, flexible seal or laminated seal All seal types are replaceable for easy maintenance

2 Extra long bearings and single-piece shaft for high pressure

Excellent bi-directional upstream/downstream shut-off performance: zero leakage, tested to API 598 standard

3 At least two independent shaft sealing devices

- Perfect tightness
- Fire-safe design (ISO 10497) and/or fugitive emissions performance tested (ISO 15848) and approved to TA-Luft (VDI 2440)

4 Stem anti-blow out system to protect operators

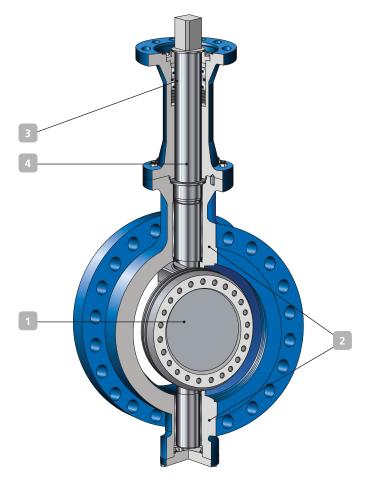
Easy maintenance

- No need for packing adjustment
- Seat can be replaced without special tools
- Fluid can be drained through plug at bottom cover (optional) Fire-safe design tested
- Graphite packing can be replaced without special tools
- Vent hole can be used as an additional tightness barrier at the shaft passage

Technical data

Nominal size	DN 80 to 1500
Pressure classes	150, 300, 600, 900
Temperature range	-250 °C to +260 °C
Body design	Wafer body, full lug body, flanged body, butt weld side entry
Face-to-face length	ISO 5752 Series 13 / 20 ISO 558.1 Series 13 / 20, ISO 558.1 Series 14 API 609 Class 150 / 300 / 600
Note: ATEX design in compliar	nce with the 94/9/EC Directive. Flanged ends to EN,

ATEX design in compliance with the 94/9/EC Directive. Flanged ends to EN, ASME. Other flanges on request. Safety requirements in compliance with the 97/23/EC European Pressure Equipment Directive. NACE. SiL3-capable to IEC 61508:2010. Optional: Lip seal for installation in any position. Drip plate for insulation.



Materials

Body	Stainless steel CF8M / 1.4408 & CF3M / 1.4409 Carbon steel WCC / 1.0619 & WCB Carbon steel LCC / 1.6220 & LCB
Stem	Stainless steel A638 gr. 660 Stainless steel A479 gr. XM19 Stainless steel A564 gr. 630 / 1.4542 Stainless steel AISI 431 / 1.4057 Stainless steel 1.4401
Valve disc	Stainless steel CF8M / 1.4408 & CF3M / 1.4409 Carbon steel WCC / 1.0619 & WCB Carbon steel LCC / 1.6220 & LCB
Seal	Replaceable solid: duplex, stainless steel, nickel alloy Laminated: graphite + duplex Flexible: copper Nickel Stainless steel 316L Inconel



KSB SE & Co. KGaA Johann-Klein-Straße 9 67227 Frankenthal (Germany) www.ksb.com