

TRIODIS – High-performance Triple-offset Butterfly Valve



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

amri

TRIODIS 300 TBT DN 400 with MR 400



TRIODIS 150 TBT BWSE
18" with MR 200



TRIODIS 150 TBT Flanged
24" with MR 400



TRIODIS 600 TBT Flanged
with pneumatic actuator

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

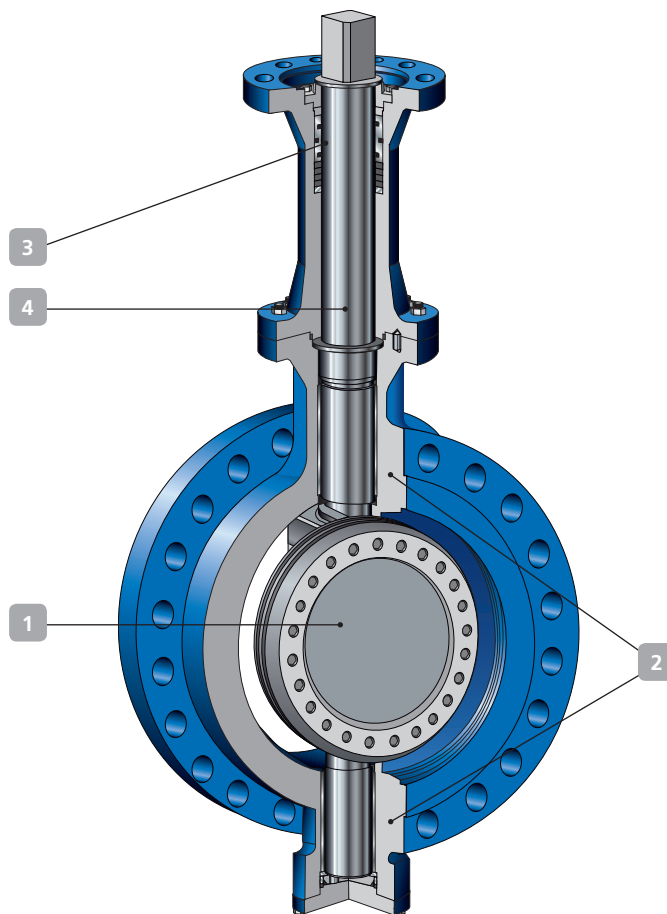
- No need for packing adjustment
- Seat can be replaced without special tools
- Fluid can be drained through plug at bottom cover (optional)
Fire-safe design tested
- Graphite packing can be replaced without special tools
- Vent hole can be used as an additional tightness barrier at the shaft passage

Technical data

Nominal size	DN 100 to 1500
Pressure classes	150, 300, 600, 900
Temperature range	-250 °C to +600 °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 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



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