Overview

The Cameron ORBIT rising stem ball valve is ideal for applications when zero leakage and frequent operation are demanded. They are used globally in gas processing plants using molecular sieve systems in switching service.

Every ORBIT rising stem ball valve incorporates a proven tilt-and-turn operation that eliminates seal rubbing, which is the primary cause of valve failure. When an ORBIT rising stem ball valve is closed, the core is mechanically wedged tightly against the seat, ensuring positive shutoff.

When a valve begins to open, the core tilts away from the seat and line flow passes uniformly around the core face. This eliminates the localized high-velocity flow that typically creates uneven seat wear in ordinary ball, gate, and plug valves. The core then rotates to the fully open position.

The absence of seal rubbing during both opening and closing means easy, low-torque valve operation and long-term reliable performance. When valve leakage cannot be tolerated, ORBIT's operating principle can be relied upon to deliver a positive shutoff.

Specifications

Standard Features

- No rub between sealing surfaces
- Injectable packing
- Single-seat design
- Long life
- Optimum flow – full port or reduced port openings give high C_V figures
- Top-entry design
- Dual stem guides
- Self-cleaning
- Low-torque operation
- Wear-resistant hard facing on core
- Mechanical cam closure

Specifications and Compliances

- API 6D
- ISO 9001:2008
- PED 97/23/EC
- ATEX Directive 94/9/EC
- GOST
- GOST-R certificate and RTN permit
- ISO 15848-1 (fugitive emission-type testing)
- Shell GSI SPE 77/300 TAT qualified and TAMAP two-star rating
- ASME B16.34