



# ***Valdisk TX3 Triple Offset Butterfly Control Valve***



***Experience In Motion***

## Flowserve® – Solutions to Keep You Flowing

Flowserve is one of the world's leading providers of control valves. Our engineers work with customers to understand even the most challenging applications. This way, Flowserve partners with customers to develop industry leading technical solutions that help customers keep their process flowing.



## Flowserve Valtek Valdisk TX3

The Valdisk TX3 is a high performance triple offset butterfly control valve capable of closing with zero leakage. The precision seat and seal are machined at an offset angle creating even seat loading around the entire seat ring and eliminating rubbing between the seat and seal during opening and throttling. This design provides repeatable long-lasting zero leakage shut-off.

The Valdisk TX3 high performance design includes the following features:

- API 598 Zero Leakage
- Robust Sealing Options
- Variety of Body Styles
- Industry Certifications



### Valdisk TX3 Features

<b>Sizes</b>	NPS: 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24
<b>Pressure Class</b>	ANSI Class 150, 300, 600, 900, 1500
<b>Temperature Rating</b>	-320 to 1500°F (-196 to 820°C)
<b>Body Style</b>	Wafer, lug, double flange, top entry cryo
<b>Body Material</b>	Carbon steel, stainless steel, duplex stainless steel, Inconel 625, Monel, Hastelloy C, Alloy 20
<b>Seal Ring</b>	Laminated metal-graphite Solid metal
<b>Shut-off Rating</b>	API 598, MSS SP-68 ISO 5208 (EN 12266): Rate A ANSI/FCI 70-2: Class IV, V, VI
<b>Actuator</b>	Limitorque LPS, Automax RG-Series, Supernova, Valtek VR
<b>Industry Standards</b>	ASME B16.34, ANSI FCI 70-2, API 609, API 607, API 598



## Wide Range of Industries

The Valdisk TX3 is designed for applications in a wide range of industries including oil and gas, chemical, power generation, and various general industries.

## Solving Applications

### API 598 Zero Leakage

Valdisk TX3 valves have been tested to the industries most stringent seat leak test requirements demonstrating the ability to shut-off with zero leakage. Test standards include:

- API 598: Valve Inspection and Testing
- MSS SP-68: High Pressure Butterfly Valves with Offset Design
- ISO 5208 (EN 12266): Industrial valves – Pressure testing of metallic valves
- ANSI/FCI 70-2: Control Valve Seat Leakage

### Robust Sealing Options

The Valdisk TX3 laminated seal ring provides bubble tight shut-off even in gas applications. Each individual layer performs an independent sealing function and unaffected by the damage to other layers. Additionally, for high temperature applications a solid metal seal ring is available, and for low temperature applications the solid metal seal can be replaced with a PTFE seal ring.

### Variety of Body Styles

Valdisk TX3 is suited for a range of applications and is available with several different body styles to suit the needs of each application. The valve body can be configured in wafer, lug, double flanged short or long (ASME B16.10), butt weld, cryogenic, and offset top entry.

### Industry Certifications

Valdisk TX3 valves have obtained numerous industry certifications so that the valve can be used around the world. Certifications include:

- API 609: Butterfly Valves: Double-flanged, Lug and Wafer-type
- PED: Pressure Equipment Directive
- TRCU: Technical Regulation Conformity
- IEC 61508 (SIL3): Functional Safety of Electronic Safety-related Systems
- API 607: Fire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats



## Valdisk TX3

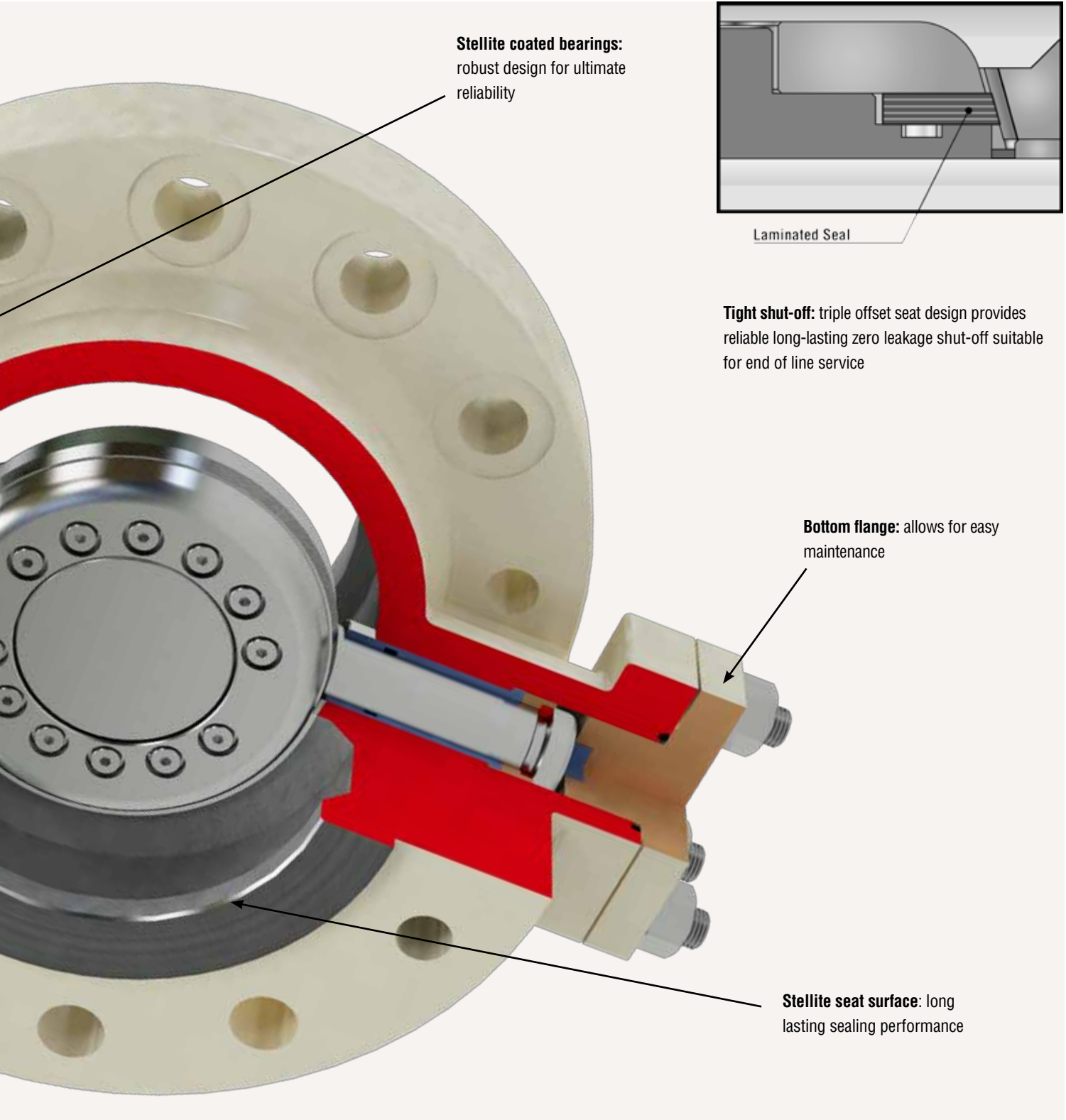
**Fire-safe:** tested to meet API 607 requirements

**Fugitive Emission Packing:** multiple packing options including PTFE, graphite

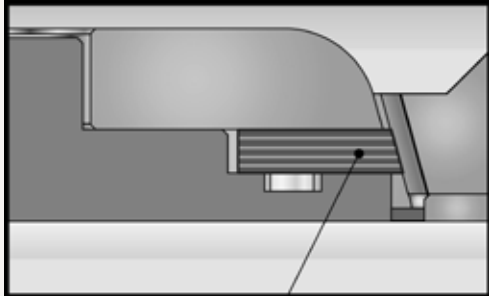
**Anti-blowout shaft:** required by ASME B16.34, ensuring a safe work environment for technicians

**Variety of body styles:** allows the valve to work in many different applications and provides the option of a smaller lighter body or a longer body that can replace a ball valve without requiring any piping changes.





**Stellite coated bearings:**  
robust design for ultimate  
reliability



Laminated Seal

**Tight shut-off:** triple offset seat design provides  
reliable long-lasting zero leakage shut-off suitable  
for end of line service

**Bottom flange:** allows for easy  
maintenance

**Stellite seat surface:** long  
lasting sealing performance



*Accurate, Easy to Use  
Process Control -  
Operated with a robust  
actuator and precise  
Logix digital positioner.*

## **Integrated Control Valve Solution**

### **LPS Scotch Yoke Rotary Actuator**

The Flowserve LPS scotch yoke rotary actuator delivers up to 300 kNm (221,000 ft-lbs) of precisely controlled torque - safely automating valves for all types of applications. Enhanced performance achieved by using a superior scotch yoke support design that significantly reduces transvers loads.



### **Supernova Rack & Pinion Rotary Actuator**

The Flowserve SuperNova rack & pinion rotary actuator is designed for reliability, versatility and safety. Rugged, yet compact construction combined with technical solutions make this product extremely reliable in the severest of operating conditions.



### **VR Spring Cylinder Rotary Actuator**

The Flowserve VR spring cylinder rotary actuator combines high torque and pneumatic stiffness with excellent throttling capabilities. These characteristics are designed into a lightweight, rugged and compact assembly, making the Flowserve spring cylinder rotary actuator an excellent choice for quarter-turn applications



### **Logix 500 Series Digital Positioner**

The most advanced digital positioner from Flowserve. Increased flow rates, and added LCD display make it flexible enough for most applications.



Performs basic configurations using available DIP switches, and more complex configurations using the LCD menu system. 24/7 diagnostics are available with ValveSight Software DTM.

### **Logix 400 Series Digital Positioner**

The Logix 420 is the latest addition to the digital positioner family from Flowserve. When mounted to the MaxFlo 4 eccentric rotary plug control valve, Logix 420 provides the user with a cost competitive solution for the general service, explosion proof market.



### **Logix 3000 Series Digital Positioner**

Easiest calibration and configuration of any positioner available. Single, push-button calibration and DIP switch configuration allow you to fully commission the positioner in a matter of minutes. Using ValveSight Software DTM brings the availability of 24/7 diagnostics.





## ***Flowserve - Solutions to keep you flowing***

### ***PNxt! Valve Sizing and Selection***

PNxt! Valve Sizing and Selection is the right tool for the right product – first time, every time. This comprehensive set of next generation engineering tools allow you to size and select Flowserve control valve products best suited to your application and service conditions. In just seconds, you get the answers you need to ensure you make the right choice.



### ***ValveSight™ Diagnostic Software – Prevention Delivered***



ValveSight is a diagnostic solution for control valves that can be seamlessly integrated into a host control and/or plant asset management system. The power of ValveSight is the intelligent diagnostic engine -- which detects an emerging

condition in the valve, actuator, positioner, and control signal -- that may indicate a performance, safety, or environmental problem. ValveSight advises which corrective actions to take to prevent a failure.

### ***Flowserve is Everywhere You Are***

Flowserve manufacturing sites and quick response service centers are located all around the world so customers have on-the-spot availability for technical support and experienced field service technicians. Wherever your operations are, Flowserve is there to help your operations be successful





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