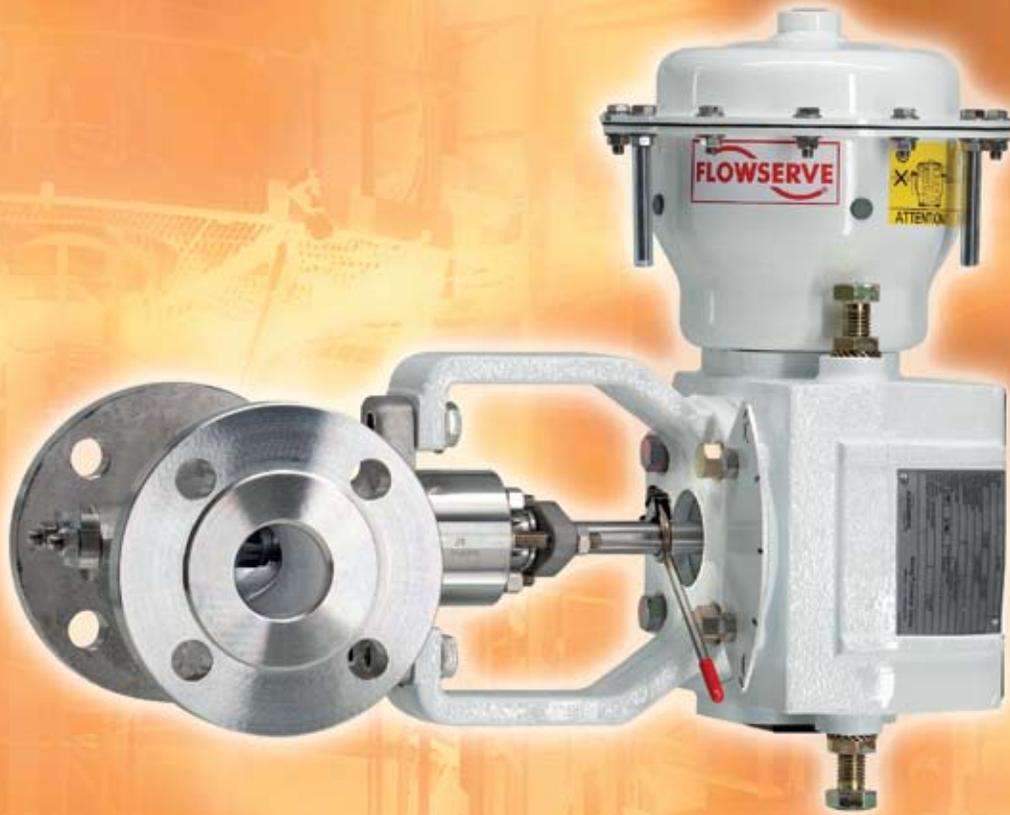


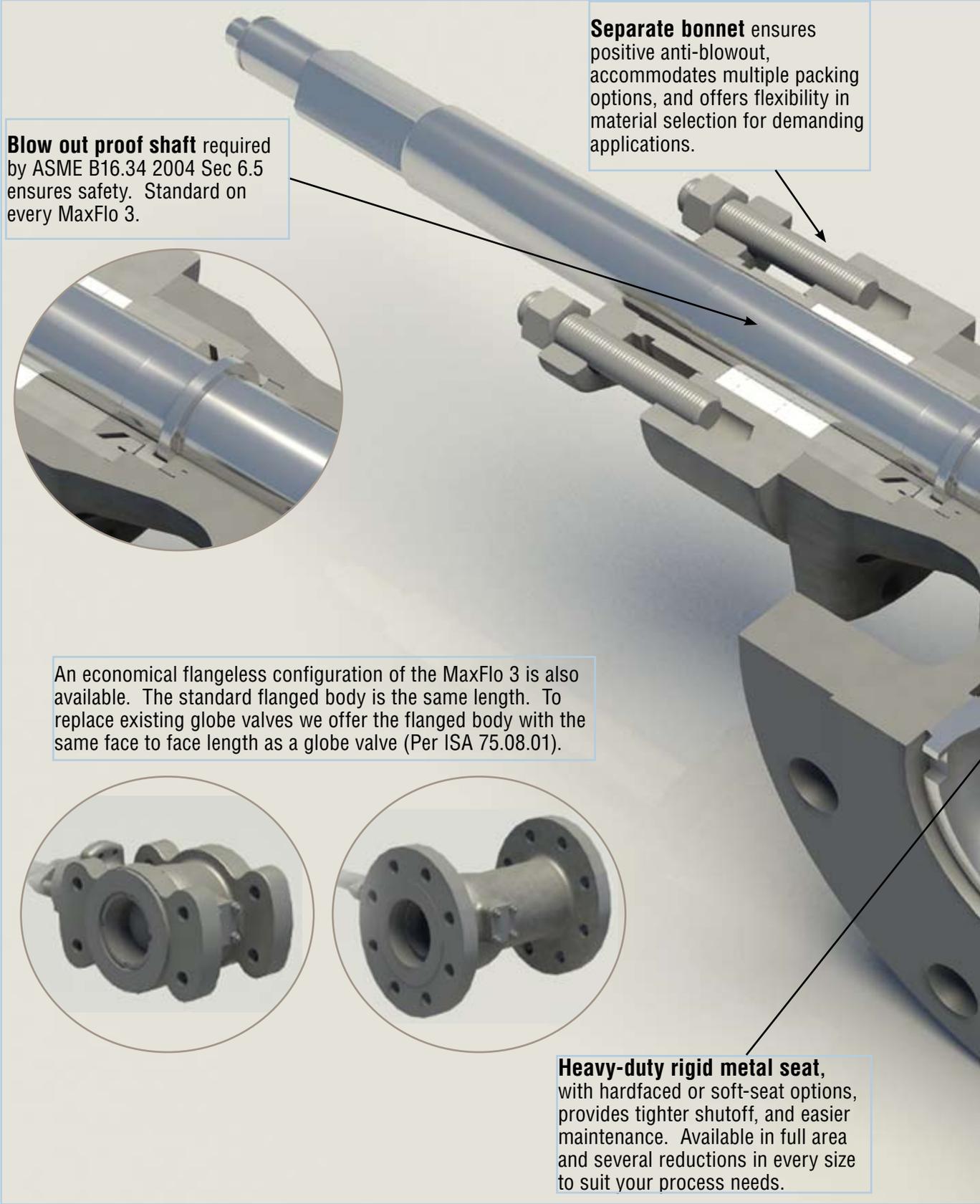


Valtek MaxFlo 3

High Capacity Eccentric Rotary Plug Control Valve



Experience In Motion

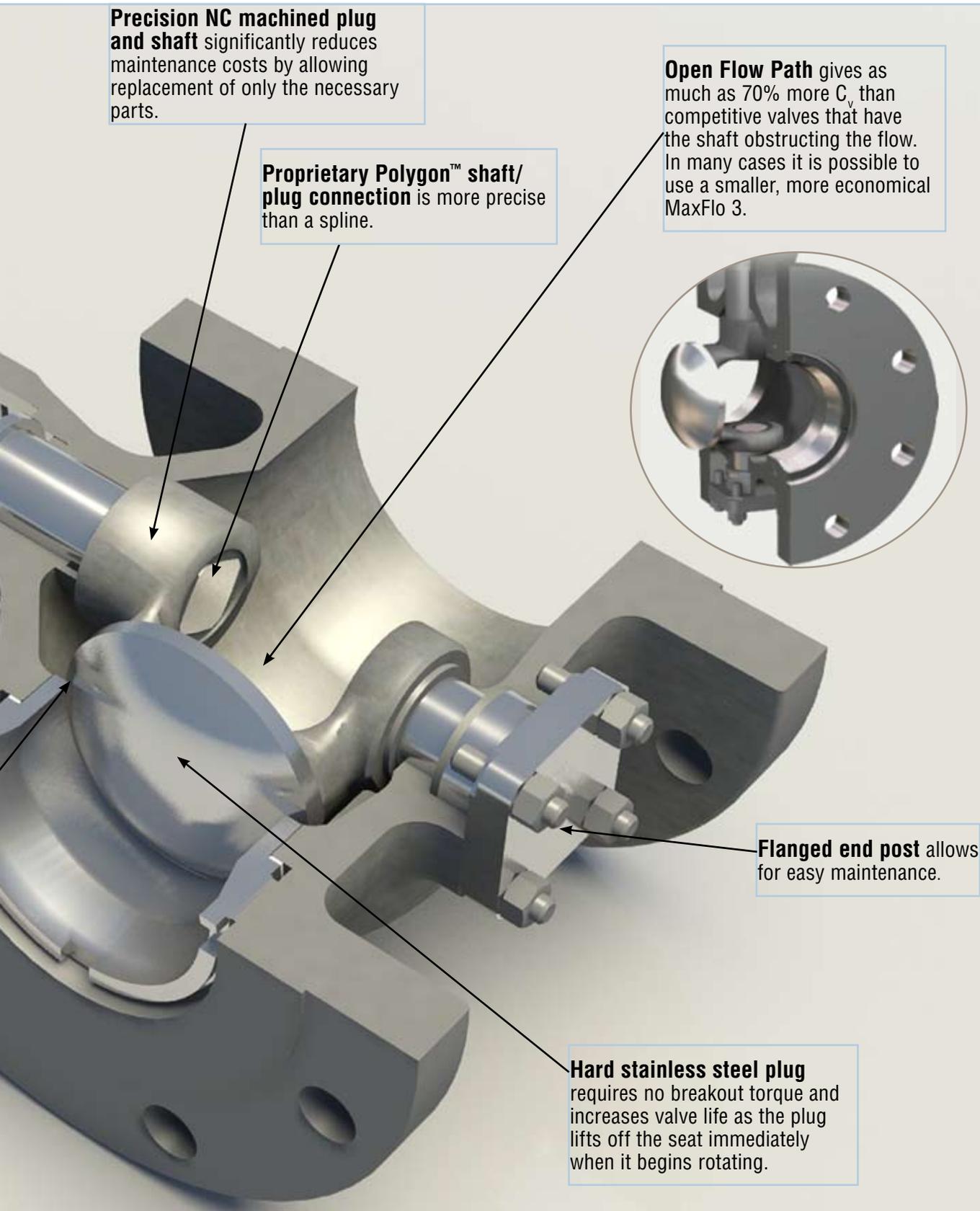


Blow out proof shaft required by ASME B16.34 2004 Sec 6.5 ensures safety. Standard on every MaxFlo 3.

Separate bonnet ensures positive anti-blowout, accommodates multiple packing options, and offers flexibility in material selection for demanding applications.

An economical flangeless configuration of the MaxFlo 3 is also available. The standard flanged body is the same length. To replace existing globe valves we offer the flanged body with the same face to face length as a globe valve (Per ISA 75.08.01).

Heavy-duty rigid metal seat, with hardfaced or soft-seat options, provides tighter shutoff, and easier maintenance. Available in full area and several reductions in every size to suit your process needs.



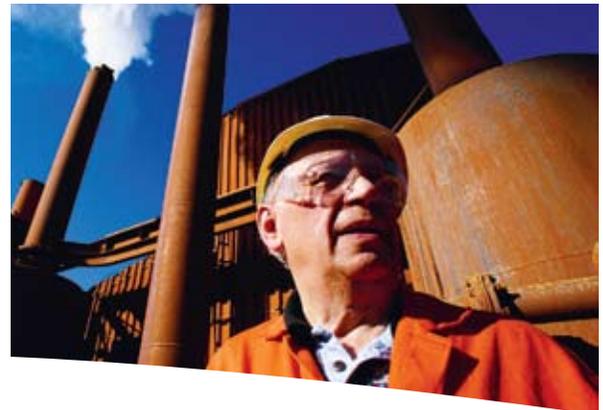
Precision NC machined plug and shaft significantly reduces maintenance costs by allowing replacement of only the necessary parts.

Proprietary Polygon™ shaft/plug connection is more precise than a spline.

Open Flow Path gives as much as 70% more C_v than competitive valves that have the shaft obstructing the flow. In many cases it is possible to use a smaller, more economical MaxFlo 3.

Flanged end post allows for easy maintenance.

Hard stainless steel plug requires no breakout torque and increases valve life as the plug lifts off the seat immediately when it begins rotating.

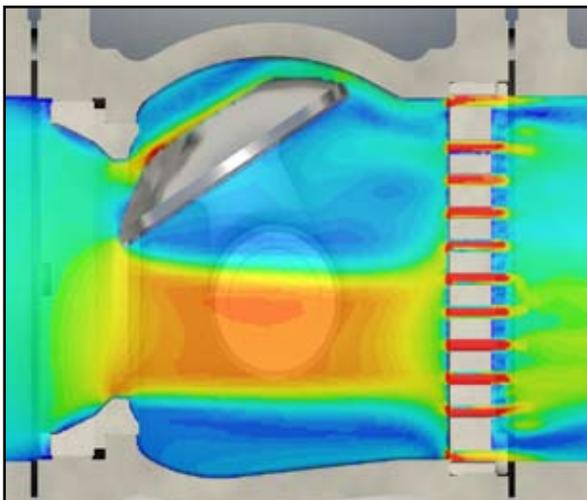
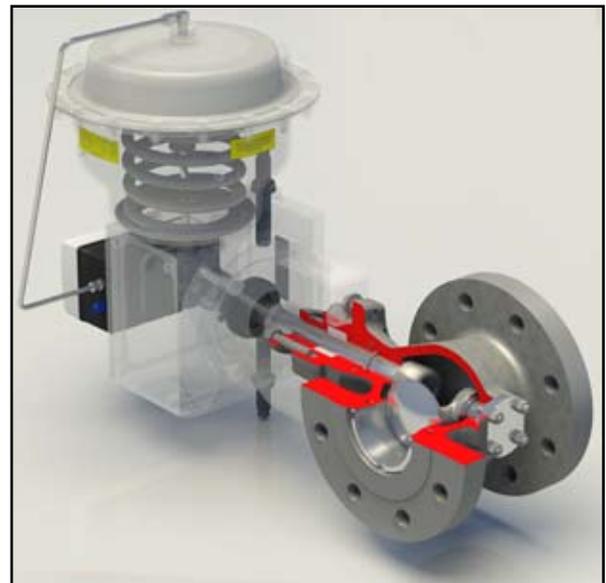


High Performance

The Valtek MaxFlo 3 control valve is a high-performance, eccentric rotary plug design capable of operating temperatures between -148 to 750 °F (-100 to 400 °C) with body ratings ASME 150 through 600 and DIN PN16 through PN63.

The MaxFlo 3 eccentric plug offers rangeability up to 160:1 – compared to 50:1 for typical globe valves and 20:1 for most butterfly valves.

The flow-path is unobstructed by the shaft, allowing higher capacity for a given valve size. A heavy-duty, non-cross-over shaft is out of the valve's flow path. This superior design allows higher flow capacity for a given valve size. It also eliminates shaft damage from erosive process fluids. Many other manufactures' designs allow the shaft to crossover the flow path, resulting in lower flow capacity and shaft wear.



Noise Reduction Plate

All these features make the MaxFlo 3 control valve the most accurate, precise, eccentric rotary plug valve on the market. High performance is the first key point in the core design principles behind the MaxFlo 3 control valve.

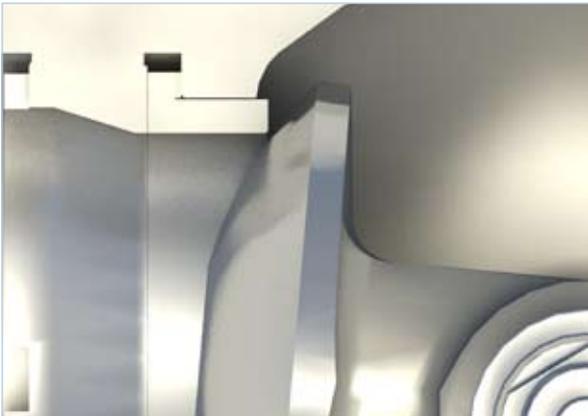
Integral Noise-Reduction Plate Option

Designed to reduce noise levels by 5 to 10 dBA, our integral plate fits into the valve body. It can be easily maintained using the same tools required for the seat retainer. It is perfectly suitable with all gases in the shaft-downstream direction, and the plate does not change the length of the valve.



Reliable Shutoff

The MaxFlo 3 double-offset eccentric plug rotates into the seat at an angle that eliminates sliding over the seat surface. This design reduces seat wear, and thereby decreases maintenance requirements and costs. At the same time, a tight ANSI Class VI shutoff is easily obtainable using the soft seat design.



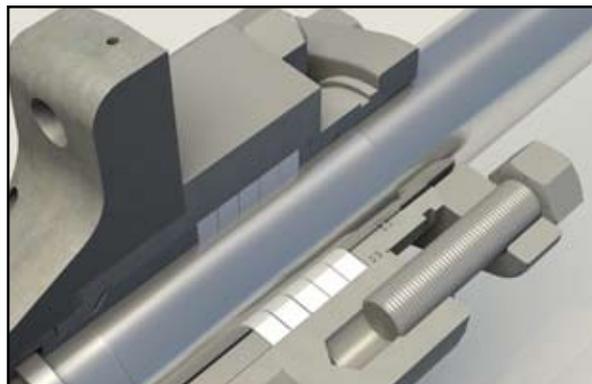
The oversized shaft eliminates shaft failures and provides a large shaft bearing surface, reducing bearing wear, improving reliability and increasing the life of the valve. The plug is produced from 1.4418 hardened material, or 316 Stainless Steel with Alloy 6 overlay, to increase plug life depending on the application requirement. This provides a tight shutoff and increase reliability in a wide range of difficult-to-handle applications (including flashing, erosive, mild cavitation and steam services).

Designed to eliminate problems associated with splines and keyed shaft attachments, the polygon connection is a proven superior method for making demanding mechanical connections that are stronger, more precise and have a substantially longer service life.

This reduces backlash and the high strength of the polygon connections makes them capable of withstanding greater shock loads under extreme torque reversal conditions.

Reduce Fugitive Emissions

Special Flowserve packing sets, such as SureGuard™ live-loaded packing, are available to control fugitive emissions and to meet Environmental Protection Agency (EPA) requirements, as well as ISO 15848 parts 1 and 2.





Increased Safety

An additional point in the core design principles behind the MaxFlo 3 control valve was increased safety. ANSI B16.34 section 6.5.1 states valves should be designed to prevent the stem from being removed while the valve is under pressure. Flowserve has taken this safety issue one step further. The unique MaxFlo 3 stem, with the integral thrust runner on the shaft, cannot be removed unless the bonnet nuts are removed.

Many other rotary control valves do not include anti-blow out protection on shaft; designs offering anti-blow out protection lack the robust character MaxFlo 3 control valves provide. Accidents, safety incidents and failures have been attributed to other valves lacking the unique features of the MaxFlo 3 control valve.

Diagnostics



The ValveSight Diagnostic Solution shows the “health” of your valve assembly on an easy to read Dashboard screen.

Positioners



Logix 500MD Series Digital Positioner

The Logix 500MD series positioner is our intrinsically safe digital positioner. It is designed primarily for single acting applications. It uses HART® communication and the ValveSight DTM.



Logix 3000MD Series Digital Positioner

The Logix 3000MD series positioner is explosion proof & intrinsically safe. It is designed for double acting applications and uses HART® or FOUNDATION Fieldbus communication protocols with the ValveSight DTM.

ValveSight Diagnostic Solution

ValveSight is a real time predictive maintenance tool using FDT/DTM technology to alert you to problems that may be developing in your valve assembly. It is easily integrated into most DCS systems.

**Please contact factory for analog positioner offerings.*



Actuators

NR Actuator



The NR is a rugged, field reversible, single-acting diaphragm actuator. The NR has unmatched resolution and sensitivity to incremental control changes.

VR Actuator



The VR is a piston actuator designed for supply pressures up to 150 psi (10.3 bar). It combines high torque and pneumatic stiffness for excellent throttling capabilities. This actuator is also field reversible.

Supernova Actuator



The Supernova is a rack and pinion style actuator for the most compact package and great durability for all high cycle requirements. This actuator is also field reversible.

Specifications

Sizes	1" - 12" / DN25 - 300
End Connection	Flanged, Flangeless (1 - 12")
Body Rating	ANSI Class 150-600/ PN 16-63
Trim Area	100% (full), 75/70% reduction, 40% reduction 25/15% reduction
Shutoff Rating	ANSI Class IV, ANSI Class VI with soft seat
Operating Temperature	-148° to 750° F (-100° to 400° C)
Pneumatic Actuator	Diaphragm: NR1, NR2, NR3 Piston: 25, 50, 100, 200 Rack and Pinion
Actuator Options	Handwheels Manually Operated Gear Boxes
Characteristics	Linear, = % by characterized positioner
Fail Mode	Air-to-close, air-to-open, lock-in-place

MaxFlo 3 Sizing Procedure and Data

Procedures and data to size MaxFlo 3 valves – including determining actuator size – are contained in the *Performance!* valve sizing program.



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To find your local Flowserve representative:

For more information about Flowserve Corporation, visit www.flowserve.com or call USA 1 800 225 6989

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