Compressor Anti-Surge Valve

Protection Against Process Upsets

Compressors are a crucial part of many processes where the media requires compression in order to move along the system. These compressors are set for particular conditions and any upsets in the line can greatly affect the performance of the equipment as well as the integrity of the process. If the anti-surge control valves are inadequate, costly investments in the compressor will be jeopardized or even destroyed.

Rangeability, Design, Performance Unmatched

FlexStream's rangeability (rated at greater than 500.1) and design, combined with superior performance in controlling the fluid flowstream, make it the preferred choice for severe conditions. The rotary control ball valve technology is designed to control high ΔP in liquids, gases and multi-phase flow to combat energy absorption, velocity, cavitation and noise.

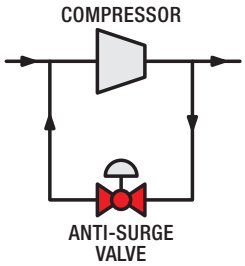
Flexstream Offers Quickness, Reliability

The MOGAS FlexStream valves can stroke to a fully open position in less than a second, and when not in its full-stroke mode, the valves still meet stroking time and stability requirements.

To compensate for slow stroking times, some companies intentionally keep their anti-surge valves open 20 percent or more to facilitate their need to respond to a surge condition. This may satisfy the need for a temporary quick opening of the valve, but it may also cause problems to compressors down the line. With the MOGAS FlexStream, this is not a consideration.

MOGAS believes its engineering, manufacturing innovations and leadership in the industry speak for themselves. MOGAS is ready to answer the call from any company looking to achieve maximum results from its control valves.

Compressor Anti-surge Valve



MOGAS anti-surge valves can withstand high temperatures, high pressures, corrosive applications, abrasive particulates, acidic products, lethal media and other critical conditions.

Design Standards	
Class:	ASME 150 – 2500
Construction:	2- or 3-piece forged body
Rangeability:	Greater than 500:1
Sizes:	2 – 36 inches (50 – 900 dn)
Shut-off:	ANSI FCI 70-2; Class IV, V, VI
Stem packing:	Live-loaded
Stem integrity:	Anti-blowout stem
Temperature:	-321 – 1652 F (-196 – 900 C)
Pressure:	Up to 43,000 psig (2964 bar g)
Valve type:	Trunnion, with bearings

MOGAS® SEVERE SERVICE BALL VALVES

Compressor Anti-Surge Valve

Protection Against Process Upsets

Comparison

Feature	MOGAS FlexStream®	Linear Globe Valve
Stroke	Quarter-turn gives excellent stability	24-inch travel allows poor control
	Quarter-turn gives excellent control	Plug mass results in poor stability
Design	Designed for overcapacity	Limited overcapacity capability
	Compact construction	Infrastructure issues due to size and weight
Rangeability	Virtually unlimited	Inefficient use of space
	Rotary construction efficiently uses space	Design not suited to compressor curve – linear

Design Features

Design parameters
- ASME / ANSI B16.34, B16.10

End connections
- Flanged
- Butt weld
- Socket weld
- Clamped

Actuation
- Pneumatic
- Hydraulic
- Electric

Sour service
- NACE MR 0175 – 2002

Pressure class
- ASME: 150 / 300 / 600 / 900 / 1500 / 2500
- API: 5000 / 10,000 / 15,000

Actuator accessories
- 4/20mA / HART / Fieldbus
- EXD – Position indicators
- EXD – Solenoid valves

Performance Features

Noise abatement
- Up to 85 dBA during recycle, 105 dBA at trip instances

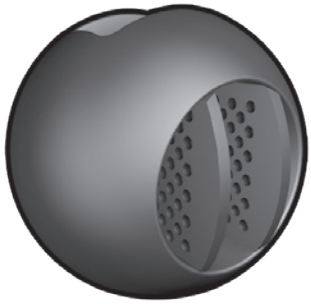
Stroke open / close
- Open in less than 1 second
- Close in less than 5 seconds

Oversizing factor
- 1.8 to 2.5 times the maximum calculated Cv

Overshoot
- Within 1 percent

Emissions
- Fugitive emissions mitigated

FlexStream DB



With Diffusion Ball (DB) technology the media is directed through a series of apertures to control its velocity.

MOGAS® SEVERE SERVICE BALL VALVES