

Storagetech

Biogas Safety Selector Valve (SSV)



Product Description

The **Biogas Safety Selector Valve (SSV)** is an innovative, cost-effective alternative to traditional three-way plug valves. Designed to meet the challenging conditions of biogas systems, it ensures optimal operation of pressure and vacuum relief valves while minimizing gas leakage and operational risks.

Key Features and Benefits

Enhanced Safety and Maintenance

- Allows side-by-side installation of two Pressure and Vacuum Relief Valves (PVR) with Flame Arresters, ensuring uninterrupted operation during maintenance.
- Integrated bleed valves on both process connections enable safe venting of trapped gases and field testing of PVR valve adjustments.



Minimized Pressure Loss

- The optimized plug design significantly reduces pressure drop, with losses typically less than 1/10th of traditional three-way valve and elbow assemblies.
- Maintains low-pressure systems effectively, even with the complexities of biogas flow.

Compact and Cost-Effective Design

- Reduces the need for isolation valves, elbows, and additional piping, minimizing field installation costs and space requirements.
- Ideal for urban applications, with the capability to pipe vented gases to odor scrubbers for improved environmental compliance.

Durability and Security

- Constructed for harsh biogas environments to ensure long-term reliability.
- Features a bright red process connection indicator and dual padlocking for operational security and to prevent unauthorized access.



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Applications

Pressure and Vacuum Relief Systems

- Used in digester systems to isolate one valve assembly while maintaining uninterrupted operation of the other.

Biogas Piping Systems

- Efficiently manages gas flows in venting systems, odor absorption scrubbers, metering lines, and maintenance bypass lines.

Urban and Industrial Settings

- Reduces installation complexity and enhances odor control by directing vented gases to treatment systems.



Technical Specifications

Parameter Specification Pressure Drop <math><1/10\text{th}</math> of traditional three way plug valves
Flow Profile Optimized for minimal turbulence
Material High durability alloys for biogas resistance
Size Options Customiz able to meet design requirements
Locking Mechanism Dual padlock system for secure operation
Indicator Bright red active process connection marker

Design Advantages

Superior Flow Efficiency

- Avoids the high inlet pressure loss associated with traditional three-way valves and pipe elbows, ensuring consistent and efficient gas flow.

Simplified Maintenance

- Compact and streamlined design eliminates the need for additional isolation valves, reducing downtime and operational costs.

Optimized for Biogas Systems

- Specifically designed to manage the low-pressure, high-moisture conditions of biogas environments.



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Why Choose Storagetech (SSV)?

Pressure and Vacuum Relief Systems

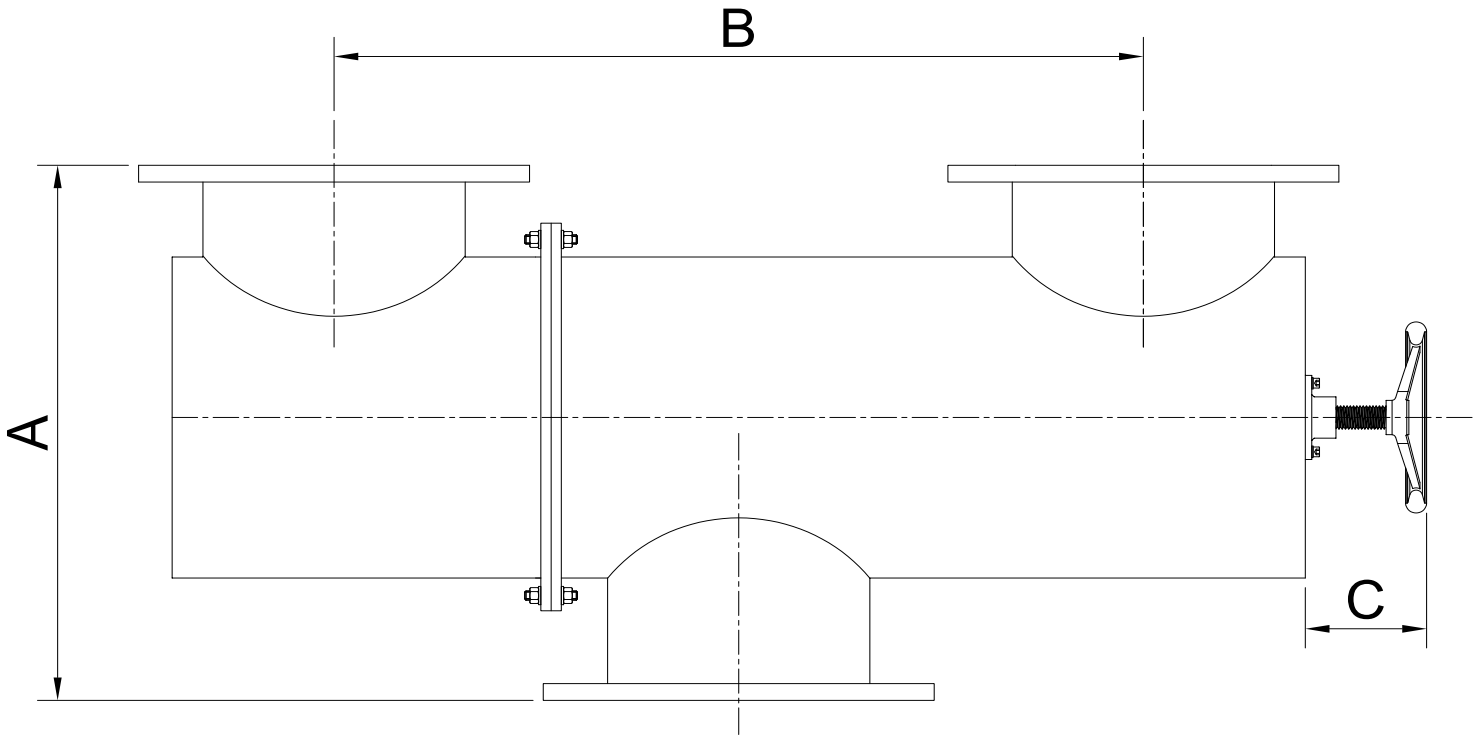
The Storagetech Biogas Safety Selector Valve combines innovation, efficiency, and reliability to offer unmatched performance in biogas applications. Its advanced features and robust design ensure optimal safety, ease of use, and reduced lifecycle costs for end-users.

For more information, visit storagetech.de or contact us directly to discuss your project requirements.



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Size	A	B	C	Weight (App.)
Inch (mm)	mm	mm	mm	kg
2 (50)	310	274	100	41
3 (80)	400	274	100	48
4 (100)	460	348	120	68
6 (150)	600	429	120	87
8 (200)	760	530	150	137
10 (250)	900	650	150	180
12 (300)	1000	700	150	200

Product Recommendations

Storagetech™ manufactures storage tank equipment, such as flame arrestors, breather valves, gauge hatches, floating roofs, and floating suction pipe.



Flame Arrestor

End-Of-Line,
With Automatic
Opening Hood,
Deflagration

Model: 312

Storagetech™ Flame Arrestors (End-of-line, with Automatic Opening Hood) are passive devices that prevent the propagation of a flame or fire from entering into an opening in a pipeline or vessel discharging flammable vapor. As different from model 310, Model 312 end of line flame arrestor's weather hood is designed to react fire instantly tanks to its fusible link, which is melted during the fire and let the weather hood release the gas/fire to the atmosphere.



Pressure Vacuum Relief Valve With Flame Arrestor

End-Of-Line,
Weight Loaded,
Combination,
Atmospheric Deflagration
Proof

Model: 330

Storagetech™s Model 330 Pressure Vacuum Relief Valve with Flame Arrestor provides protection to bulk storage tanks and vessels from over and under pressurization.



Flame Arrestor

Vertical,
In-Line,
Deflagration

Model: 300

Storagetech™s Model 300 Vertical In-line Deflagration Flame Arrestor (also called flame arrestor or fire arrestor) is intended for pipeline installation close to the source of any potential ignition source by minimising flame speed and the development of an explosive pressure.



Flame Arrestor

Horizontal,
In-Line,
Detonation

Model: 321

Storagetech™s Model 321 In-line Detonation Flame Arrestor (also called flame arrestor or fire arrestor) is designed for installation in gas pipelines. Detonation occurs when a flame travelling through the pipeline reaches supersonic velocities, usually as a result of the pipeline configuration or pipeline surface roughness. Changes in gas density and pressure causes the flame velocity to metamorphose from subsonic to supersonic.

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data sheet series

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