

Type 3598 FROSTY Cryogenic Valve

Severe Service

SAMSON



Developed for the future needs of our customers

Severe service in all applications (high pressure drops, flashing, cavitation)

- Rugged cage design
- Multi-stage pressure reduction with pressure drops of up to 100 bar
- Custom engineered to handle specific process conditions
- Ready for oxygen service
- Top-entry design for high energy efficiency and low cost of operation
- Small actuator sizes thanks to the standard use of pressure balancing



SMART IN FLOW CONTROL

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Oxygen service

Customer requirements	Challenge	Solution
Special purity requirements	Thorough cleaning required to remove all surface contaminants after production; completely free of oil and grease; no particles present on surfaces that come into contact with the medium	Specially controlled cleaning procedure; valve assembly in a clean room; special marking of parts and valves; trained staff
Avoid ignition sources	Careful material selection and specially engineered design	Collaboration with internationally renowned oxygen experts; good engineering practice and compliance with standards and regulations; special material database based on internal material testing; risk analyses
Severe service conditions, e.g. due to higher pressure drops, cavitation and flashing	Control severe service conditions, prevent vibration and minimize wear	Rugged cage design
Excellent energy efficiency	Considerable difference between operating and ambient temperatures	The design can be directly adapted to allow the valve to fit into the cold box. A cover plate seals the installation to the atmosphere.
Quick and easy in-line servicing	Valve is completely enclosed and insulated	Top-entry design makes it possible to access all parts subject to wear without removal from the cold box or insulation
Inclined mounting position	Cold medium rises into the cryogenic extension bonnet	The standard circulation inhibitor prevents circulation of the medium in the cryogenic extension bonnet.



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