



Benefit from our experience to increase your success!

When it comes to manufacturing or processing foodstuffs and beverages, having the right valve in the right place is essential if things are to run smoothly. The requirements are always high: Reliable functionality, good cleanability, no dead space and exact control quality are just a few examples.

With Schubert & Salzer valves, you can be sure you have made the right choice. We have many years of experience as the trusted partners of a broad range of successful companies working in the food and beverage industry and our valves are used for a wide variety of applications. Our valves are used in production plants for beverages and dairy products, for instance. They also regulate the steam, hot water, refrigerants, CIP cleaning media or gases which are required for the temperature control, sterilisation, autoclaving, carbonation or pasteurization of different products. They are also

often used in fermentation, smoking, cleaning and drying processes, as well as for the provision of fresh water or the treatment of waste water.

Whatever the challenges in your process might be, you can rely on Schubert & Salzer to be a competent partner at your side. We do not just sell you an off-the-shelf product; we offer professional support and a valve solution which is designed to fit your individual requirements.

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Sliding Gate Control Valve



The GS-Valve and its applications – See the movie at:
controlsyste.ms.schubert-salzer.com/en/gs-film

Media such as steam, hot or cooling water are used in heating, cooling, sterilising, autoclaving or pasteurising processes. Sliding gate valves are ideal when it comes to regulating these media. They are also used for process gases such as air, CO₂ or liquid nitrogen. Likewise with very high or very low temperatures, high pressure or when fast cycle times, high control precision or a high rangeability is required. Users appreciate the significantly reduced energy consumption, facilitated through the small actuator and the very short valve stroke of just 6-9 mm.

Principle of the sliding gate control valve:

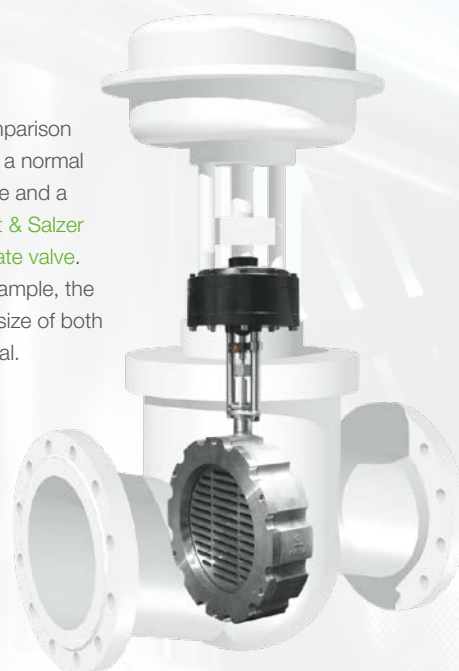
A sealing disc (3) fixed in the body (1) at right angles to the flow direction has a certain number of crossways slots of equal height. A rotationally fixed disc (2) with the same slot arrangement moves vertically along the fixed disc (3) thereby changing the flow cross section. The prevailing differential pressure presses the moving disc (2) against the fixed disc (3) and seals it.



Summary of your benefits:

- Compact construction and simple installation.
- 10 times less actuation force reduces energy consumption and is kinder for the climate and environment.
- Highest control performance and response sensitivity thanks to the smart positioner; fast reaction times due to the short stroke.
- Very simple servicing by exchanging the easily accessible disc pair.
- Minimal spare parts requirements.
- Minimised wear and tear in cavitation applications due to optimised flow guidance.
- Compact, integrated positioner with no permanent consumption of control air.
- It is easy to optimise or adjust the regulation as the K_{vs} values can be altered simply by exchanging the fixed disc.
- Short strokes reduce wear and tear and extend the life of the part.
- Maintenance-friendly replacement of the integrated positioner. Smart diagnostics software in the positioner as a valuable aid.
- Low heat or cooling loss due to a reduced body surface.
- Reduced noise emissions.
- As a compact control valve with positioner 8049 optionally with analogue input, IO-Link, Ex and FM approval.

Size comparison between a normal seat valve and a Schubert & Salzer sliding gate valve. In the example, the nominal size of both is identical.



Seat Valves

Seat valves are used when liquid and gaseous media have to be shut off or precisely controlled safely and without hydraulic shock.

Summary of your benefits:

- All-rounder with a long service life, switching frequencies of over 1 million and high tightness even with slightly contaminated media.
- As a compact control valve with positioner 8049 optionally with analogue input, IO-Link, Ex and FM approval.
- Complete design in stainless steel possible, incl. all actuator components.
- All wetted parts are FDA compliant and meet the requirements of EC regulation 1935/2004 and EU plastic regulation 10/2011.
- Temperature range of -100°C to 220°C.
- Dead space-free design possible.
- Hygienic valves type 7015 and 7025 optionally with $R_a < 0.8 \mu\text{m}$.
- Space-saving weld-in bodies and flexible pilot air connection thanks to an actuator bonnet which can rotate 360°.
- Very simple to maintain: body remains in the pipeline when replacing wearing parts such as valve actuators or seat seals.



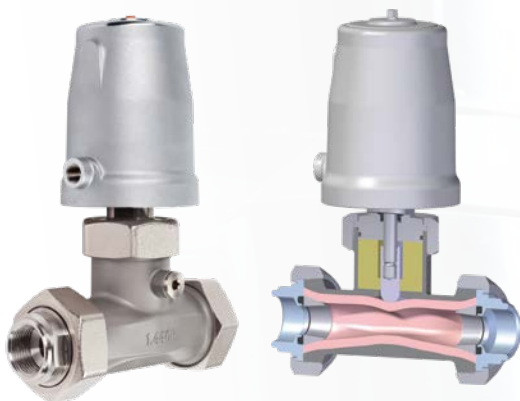
The **hygienic angle seat valves type 7015 and 7025** have been designed without dead space. The batch numbers of all wetted stainless steel parts are traceable. The wetted plastics are FDA-compliant and conform to the EC Regulation 1935/2004 as well as the EU Plastic Regulation 10/2011.

The modular system enables numerous actuator variations and designs. The angle seat, straight seat, flanged, right angle and 3/2-way designs can be used, for example, for manual valves, pneumatic stop or control valves, as well as for valves with motorised actuators.



Pinch Valves

Using Schubert & Salzer pinch valves, sterile media but also solid-bearing, paste-like and abrasive liquids can be reliably shut off and controlled.



Summary of your benefits:

- The cutting-edge stainless steel body design with straight tube passage ensures maximum K_{vs} values.
- Highly compact construction with 360° rotating piston actuator.
- All wetted parts are made of stainless steel, elastomer or polymers.
- FDA-compliant for hygienic applications.
- Fibre reinforced tubes ensure a long service life.
- Quick exchange of tubing (wear and tear part) through the axial removal of the valve body.
- Possible connections: inner threads, welding ends, tri-clamp or bonded socket joints.
- As a compact control valve with positioner 8049 optionally with analogue input, IO-Link, Ex and FM approval.

Aseptic & Hygienic Right Angle Valves

The EHEDG-certified aseptic right angle valve 6051 and the hygienic right angle valve 6053 are specialists in sterile processes. Particularly maintenance-friendly, easy to clean and trimmed for rangeability and control accuracy, the 6051 and 6053 are suitable for shutting off and controlling liquids and gases where it comes down to the highest purity.


Summary of your benefits:

- The self-draining CIP and SIP-compatible bodies are made out of 1.4435 stainless steel. Surface roughness of up to $Ra < 0.4 \mu m$.
- Dead space-free internal and external sealing thanks to a highly efficient diaphragm (6051) and spindle seal (6053).
- Suitable for medium temperatures from $-20^{\circ}C$ to $140^{\circ}C$ (6051) or $-25^{\circ}C$ to $170^{\circ}C$ (6053).
- With a control range of 50:1, the 6051 achieves highest control performance. (Type 6053: 40:1)
- Fast and easy maintenance among others due to the clamp connection between actuator and body.
- All wetted plastics are FDA compliant and meet the requirements of USP Class VI, of EC regulation 1935/2004 and EU plastic regulation 10/2011.
- Available in a complete stainless steel version (including actuator and positioner).
- As a compact control valve with positioner 8049 optionally with analogue input, IO-Link, Ex and FM approval.

Aseptic Right Angle Valve Type 6051 (EHEDG-certified) and Hygienic Right Angle Valve Type 6053:



Ball sector valves

 The ball sector valve and its applications – See the movie at: controlsyste.ms.schubert-salzer.com/en/bsvt-film

Schubert & Salzer ball sector valves are used when particularly high K_{vs} values are required or abrasive media need to be precisely controlled or safely shut off.

Three-way ball sector valves offer significant advantages over conventional designs when it comes to controlling heating and cooling media as well as gases and product flows.

Ihre Vorteile im Überblick:

- Very high K_{vs} values
- Large control spread with a rangeability of 300:1
- Three-way ball sector valves with virtually constant total flow rate in every valve position.
- Wetted parts made of stainless steel or FDA-compliant plastic.
- As a compact control valve with positioner 8049 optionally with analogue input, IO-Link, Ex and FM approval.



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