GEA ASEPTOMAG[®] ASEPTIC VALVES & COMPONENTS

Uncompromisingly aseptic



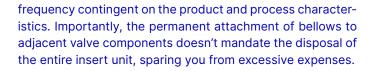


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ASEPTOMAG[®] MEETS THE HIGHEST DEMANDS FOR ASEPTIC PROCESSES

GEA Aseptomag[®] valves are designed to meet the highest demands for aseptic liquid processes in many different industries such as dairy, beverage, food, new food and biotech. The stainless steel bellows enable the highest standards according to the hygienic classes for process valves. These standards help protect human health, ensure product integrity and uphold quality standards by minimizing the risk of contamination and maintaining sterile environments.

Stainless steel bellows serve as components subject to wear and necessitate periodic replacement, with the replacement



Our established solution: Rely on GEA's send-in repair service, which involves equipping reusable parts with fresh bellows and delivering them back to you at a significantly reduced cost.



Aseptic valves with stainless steel bellows are considered the highest class of aseptic valves. This is due to the material and the permanent joint at both sides of the bellow, as well as the bellow monitoring in the process.

Application examples



Real Food

New food



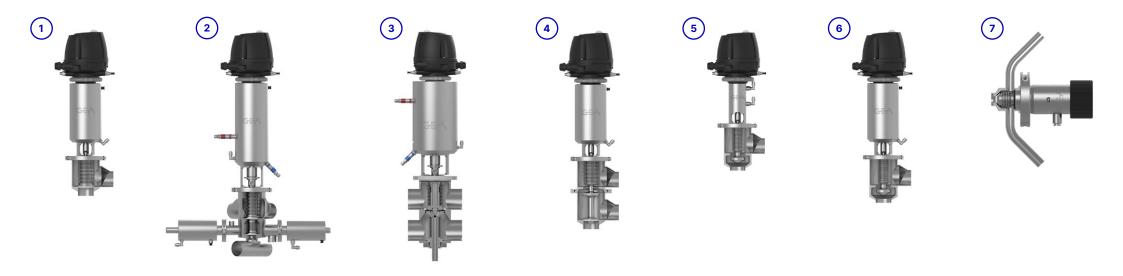
Benefits at a glance

- Hermetic sealing by stainless steel bellows
- Uncompromising detection possibilities
- Highest aseptic standard
- Easy and safe maintenance



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ASEPTOMAG[®] VALVE PORTFOLIO



1 Aseptomag® shut-off valves

Aseptic shut-off valves are used for the controlled opening and closing of pipelines in aseptic processing plants. <u>Type:</u> AV, AVBS, AMV, AF

2 Aseptomag[®] double-chamber valves

Aseptic double-chamber valves represent a special version of a double-seat valve, in which the leakage chamber is designed as a sterile chamber and hermetically separated from the environment by means of two side valves. They are used for the mixproof shut-off of incompatible products at pipe junctions in aseptic processing plants. Double-chamber valves with one sterile chamber are also available as tank-bottom executions for the uncompromising separation between aseptic tank and product pipeline. Type: DK, DKBS, DDK, AXV, ADV

3 Aseptomag[®] leakage valves

Aseptomag[®] leakage valves are mainly used for the mixproof shut-off of incompatible products at pipe junctions in UltraClean/ESL processing plants. They combine the economic advantages of a leakage chamber design and the uncompromising hermetic sealing with stainless steel bellows. Leakage valves are also available as tank-bottom and piggable executions.

<u>Type:</u> LV, LVBS

4 Aseptomag[®] divert valves

Aseptic divert valves are used for divert functions in aseptic processing plants. Type: UV

5 Aseptomag[®] back-pressure valves

Aseptic back-pressure valves are used to regulate a pre-defined pressure in aseptic processing plants. The desired closing pressure is achieved by applying compressed air to the pneumatic actuator. Type: GD, GDIN

6 Aseptomag[®] control valves

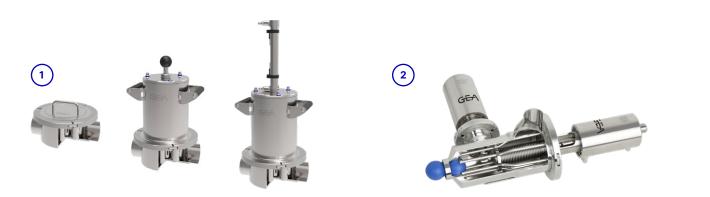
Aseptic control valves are used for the exact setting and control of parameters such as flow, pressure, temperature, or filling level in aseptic processing plants. Type: RV, RVIN

7 Aseptomag[®] sampling valves

Aseptic sampling valves are used for the safe sampling in aseptic processing plants. <u>Type:</u> PV

ASEPTOMAG[®] COMPONENTS PORTFOLIO

The Aseptomag[®] portfolio is not limited to valve technology, but also offers other components for aseptic applications.



Benefits at a glance

- Maximum process and product safety due to uncompromising hygienic design
- Strong design focus on operational safety contributes to maximum plant availability / efficiency
- Can be also used for aseptic processes thanks to operating temperatures up to 150 °C / 302 °F
- Flexibility in plant design / planning thanks to possibility of vertical and horizontal installation
- Modular principle allows cost-efficient adaption of Magnetic Separator to customer needs

1 Aseptomag[®] magnetic separators

Magnetic separators serve as protection devices for processing plants and products from foreign steel and other magnetic particles. Due to the use of multiple equally strong permanent magnets, a constant magnetic field is created in the inside of the housing, which extracts magnetic particles from the flowing product. The foreign particles remain at the rods filled with permanent magnets and can therefore no longer harm the downstream process respective to the following components and machines. Type: MAS B, MAS H, MAS PA

2 Aseptomag[®] product recovery systems

Aseptic product recovery systems are designed for use in fully automatic operations with maximum cleaning demands. They are used to recover valuable products from pipelines without mixing with any other media – an important consideration to optimize the economic efficiency of a process system. Pigging pushes the product from the pipes and returns it to the production cycle. The thin product film is easy to remove by subsequent cleaning, so that the pre-flushing time can be reduced.

A product recovery system usually comprises of a pig cleaning station, a pig catching station with propellant medium valves and a pig. 5

FINDING THE RIGHT MIXPROOF VALVE

Valves play a crucial role in connecting major process areas and ensuring product and process safety. However, always choosing the most secure standard available is not desirable as valves can also significantly impact the total cost of ownership of a processing plant - considering the efforts required towards installation, programming, operation and maintenance. Specifically when selecting double-seat valves, it is important to base the decision on a cost/ benefit analysis.

GEA Flow Components double-seat valves are classified based on their design with regards to hermetic sealing and execution of the intermediate chamber to ensure product and process safety. The higher the required safety level, the higher the expected total costs.

D, B, R, MX	MX with BCD	Sterile locks	LV	LV DA	D/DV	DK	DDK	AXV
Hermetic sealing								
Without	Without	Medium	Bellows	Bellows	Diaphragm	Bellows	Bellows	Bellows
Execution intermediate chamber								
Open	Open	Open	Open	Open	Shielded	Shielded	Shielded	Shielded
Hygienic		UltraClean / ESL		Aseptic				



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