Aseptic control valve RV

Functionality

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. An electro-pneumatic position controller enables the precise positioning of the valve stem by controlling the pneumatic actuator. A welded stainless steel folding bellow is used to hermetically seal the valve spindle from outside contamination. This special design and the durable valve seat seal made of Tefasep® enables optimum process security.

Use

- Valves are designed for use in the food, dairy and beverage, pharmaceutical, chemical, and cosmetics industries
- Used as a safe, reliable, and robust flow control device in aseptic production and bottling plants
- The modular valve design allows integration into diverse process applications
- Operating temperatures up to +150°C (+302°F), optionally increased up to +240°C (+464°F)
- CIP (Cleaning-In-Place) and SIP (Sterilizing-In-Place) capable, up to +160°C (+320°F)
- Suitable for applications with caustic or toxic products

Design Characteristics

- Modular design, consisting of the three main components: housing, internal assembly, and actuator
- The actuator and internal assembly are connected to the housing with a three-piece clamp
- Low-maintenance, service-friendly, and hygienic design
- All product contact surfaces are made of AISI 316L stainless steel (materials certificate available upon request) with a surface finish of 0.8 µm Ra that meets all common hygienic standards
- Complete actuator made of stainless steel
- Customer-specific materials and surface finishes available upon request
- Valve connections can be provided with aseptic flanges, screw connections, or clamps
- Various valve control options available (see page 7)
- All valve sizes are available in various KVS values

Valve Housing

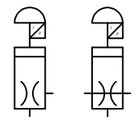
The housing is available with either two or three port connections. The valves are produced with standard butt-weld connections by default.

Internal Assembly

The internal assembly is available with a shrunk-on or screwed-on valve seat seal. In addition to the standard sealing material Tefasep®, other material options (PTFE, EPDM, Viton etc.) are available. The control cone is available in either an equal-percentage or linear design.

Actuator

The standard version of the pneumatic actuator is designed as spring-closing / air-opening (NC). Alternatively, an air-closing / spring-opening (NO) option is available.



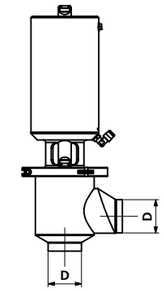
Aseptic control valve with pneumatic actuator (GRZ)

Aseptic control valve with pneumatic actuator (ORZ)

Aseptic control valve with pneumatic actuator (GRD)

Dimensions of the pipe connections (acc. to DIN 11866)

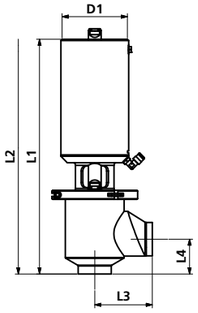
DN	15	25	40	50	65	80	100
DIN 11866 A (DIN 11850)							
Dim. Ø x s (mm)	19x1.5	29x1.5	41x1.5	53x1.5	70x2	85x2	104x2
DIN 11866 B (ISO)							
Dim. Ø x s (mm)	21.3x1.6	33.7x2	48.3x2	60.3x2	76.1x2	88.9x2.3	114.3x2.3
	¾"	1"	1½"	2"	2½"	3"	4"
DIN 11866 C (OD)							
Dim. Ø x s (mm)	19.05x1.65	25.4x1.65	38.1x1.65	50.8x1.65	63.5x1.65	76.2x1.65	101.6x2.11
Dim. Ø x s (inch)	0.75x0.065	1.0x0.065	1.5x0.065	2.0x0.065	2.5x0.065	3.0x0.065	4.0x0.083



Dimensions of the aseptic control valve RV

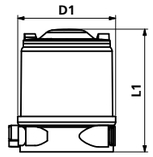
DN	15	25	40	50	65	80	100
D1	70	86	86	106	106	144	190
L1	243	273	295.5	367	367	444	372.5
L2	340	360	420	530	530	610	500
L3	40	60	75	90	90	100	135
L4	29.5	38.5	44.5	54.5	63	75.5	90

Other nominal diameters available upon request



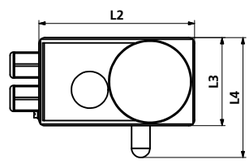
Dimensions of the position controller

DN	15	25	40	50	65	80	100
D1	91	91	91	91	91	91	91
L1	114	114	114	114	114	114	114
L2	171	171	171	171	171	171	171
L3	82	82	82	82	82	82	82
L4	111	111	111	111	111	111	111



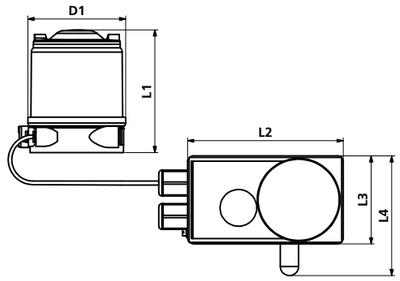
Closed Centralized Feedback System (GRZ)

Maximum hygienic option due to the centralized enclosed structure (without displacement lever, etc.). The position controller is mounted to the valve securely using a mounting kit.



Open Centralized Feedback System (ORZ)

Several open feedback systems with various functions are available. These enable the adaptation of the position controller to meet diverse customer requirements. The system is mounted to the valve using a special Aseptomag flange similar to NAMUR-mounting with a displacement lever.



Closed Decentralized Feedback System (GRD)

The position controller is connected to the distance measurement system on the valve via a cable and can therefore be placed anywhere. Decentralized feedback systems thus permit an array of design options in process-engineering plants.