

SERIES 59.0

ALL-METAL VARIABLE LEAK VALVE



Gas inlet valve for smallest gas flows to control the process pressure.

- Resistant to corrosive and aggressive gases
- Precise, reproducible adjustment of the gas flow
- Repeatable and reliable leaktight closing

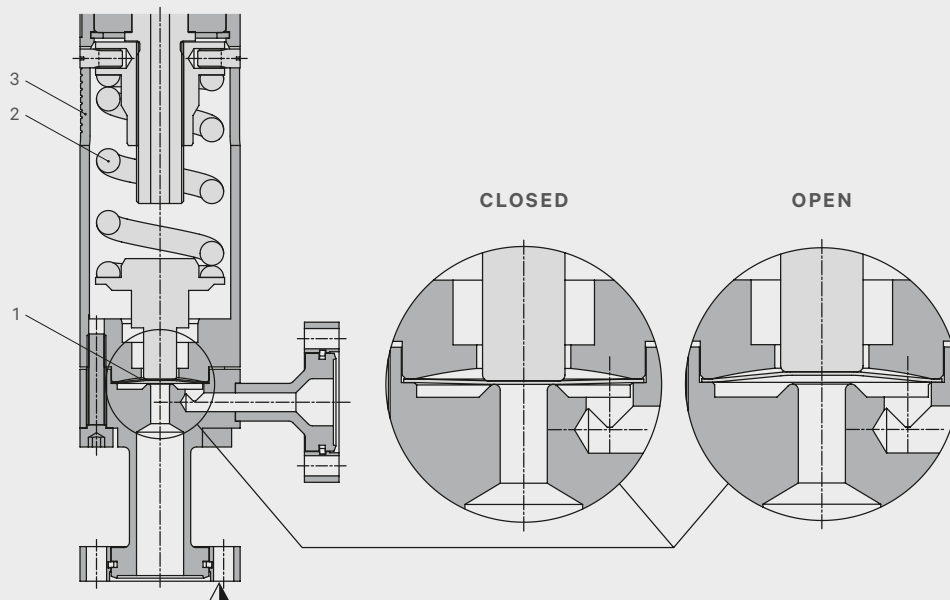
GENERAL INFORMATION

Leak rate (valve body, valve seat)		$< 1 \times 10^{-10} \text{ mbar ls}^{-1}$
Pressure range		UHV to 10 bar (abs)
Differential pressure at opening		$\leq 10 \text{ bar}$
Dead volume	Seat side	2.7 cm^3
	Side port	1.1 cm^3
Cycles		20 000
Bake-out temperature ¹⁾	Valve body	$\leq 300 \text{ }^\circ\text{C}$
	Manual actuator	$\leq 300 \text{ }^\circ\text{C}$
	Stepper motor	$\leq 50 \text{ }^\circ\text{C}$
Heating and cooling rate		$\leq 60 \text{ }^\circ\text{C h}^{-1}$
Material	Valve body	AISI 660 (1.4943), AISI 316L (1.4404)
	Diaphragm	AISI 301 (1.4310), gold-plated
Mounting position		Any
Valve position indication		Visual (scale)
Conductance (molecular flow)		0.05 ls^{-1}
Adjustable gas flow (air, 1 bar, RT)		$1 \times 10^{-10} \text{ mbar ls}^{-1}$ to 500 mbar ls^{-1}
Position resolution (automated version)		100 000
Closing time (automated version)		3.5 s

1) Maximum values: depending on operating conditions and sealing materials

2) Several interfaces possible for automated version

Functional principle



- 1 Sealing diaphragm
- 2 Closing spring
- 3 Scale

▼ Valve seat side

Find out more and connect to
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