

Main applications

Pressure control and isolation valve for processes with high temperatures and high pressures (e. G. SEMI, MOCVD)

Features

- Body material:
aluminum or stainless steel
- Pressure control and isolation
- External pressure controller



Ordering information

Valve with stepper motor
(external pressure controller)

Nominal I. D.	100 mm (4"), others on request
Ordering number	on request

Technical data

Leak rate ¹⁾ : valve body, valve seat	< 1 · 10 ⁻⁹ mbar ls ⁻¹
Pressure range	1 · 10 ⁻⁸ mbar to 1.2 bar (abs)
Differential pressure on the plate	1000 mbar
Cycles until first service ²⁾	
– Pressure control	2 million
– Closing/opening	100 000
Temperature ²⁾	
– Valve body, plate, bellows	≤ 200 °C
– Ambient	≤ 50 °C ³⁾
Material	
– Valve body, plate	AISI 316L (1.4404 or 1.4435)
– Bellows	AISI 316Ti (1.4571)
Seal: bonnet, plate	FKM (Viton®)
Feedthrough	bellows
Mounting position	any ⁴⁾
Conductance (molecular flow)	440 ls ⁻¹
Minimum controllable conductance (molecular flow)	0.05 ls ⁻¹
Full stroke	40 mm
Typical closing or opening time	4 s

¹⁾ Unheated on delivery

²⁾ Maximum values: depending on operating conditions and sealing materials

³⁾ < 35 °C recommended

⁴⁾ Valve seat towards chamber recommended

Pressure controller: see pages 146–149