



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Mini UHV gate valve, Series 010, DN 50 (ID 2")
Ordering No. 01034-KE14

Description

Flange	ISO-KF 50
Actuator	pneumatic, double acting
Feedthrough	Bellows

Technical data

Leak rate	– Valve body	$< 5 \cdot 10^{-10}$ mbar ls ⁻¹
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-10}$ mbar to 2 bar (abs)
Differential pressure on the gate		≤ 2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		160 ls ⁻¹
Cycles until first service		50 000
Temperature	– Valve Body	≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h)
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	≤ 200 °C
Heating and cooling rate		≤ 50 °C h ⁻¹
Material	– Valve Body	AISI 304 (1.4301), AISI 316L (1.4435)
	– Gate	AISI 304 (1.4301)
	– Bellows	AISI 316L (1.4404, 1.4435)
Seal	– Bonnet	metal
	– Gate	FKM (Viton®), vulcanized
	– Actuator	FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		0.06 l / 0.002 ft ³
Compressed air		5 – 7 bar / 73 – 102 psi
min. – max. overpressure		
Compressed air connection		1/8" ISO / NPT
Actuation time	– closing	0.7 s
	– opening	0.7 s
Weight		2.2 kg / 4.85 lbs

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Behavior in case of compressed air pressure drop	– Valve closed – Valve open	valve remains closed depending on customer installation
Behavior in case of power failure	– Valve closed – Valve open	depending on customer installation depending on customer installation

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