VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 63 (ID 2½'')
Ordering No. 10836-PE14

Description

Flange	ISO-F 63
Actuator	pneumatic, double acting
Feedthrough	Bellows

Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10}$ mbar ls^{-1} $< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-10}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		600 ls^{-1}
Cycles until first service		50 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator	≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h) ≤ 200 °C
Heating and cooling rate		50 °C h^{-1}
Material (main components)	– Valve Body – Mechanism – Bellows	AISI 304 (1.4301) AISI 316L (1.4404), AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal FKM (Viton®), vulcanized FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.08 l / 0.0028 ft^3
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		⅛'' ISO / NPT
Actuation time	– closing – opening	1 s 1 s
Weight		9 kg / 20 lbs
Behavior in case of compressed air pressure drop	– Valve closed – Valve open	valve remains closed undefined
Behavior in case of power failure	– Valve closed – Valve open	depending on customer installation