VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 250 (ID 10'')
Ordering No. 10848-CE14

Description

Flange	CF-F 250
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 1.2 bar (abs)
Differential pressure on the gate		≤ 1.2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		19 990 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®), O-ring FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.35 l / 0.0122 ft^3
Compressed air min. – max. overpressure		5 – 7 bar / 73 – 102 psi
Compressed air connection		⅛'' ISO / NPT
Actuation time	– closing – opening	4 s 4 s
Weight		52 kg / 115 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 depending on customer installation