



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 100 (ID 4'')
Ordering No. 10840-PE14

Description

Flange	ISO-F 100
Actuator	pneumatic, double acting
Feedthrough	Bellows

Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10} \text{ mbar ls}^{-1}$ $< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		$1 \cdot 10^{-10} \text{ mbar}$ to 1.6 bar (abs)
Differential pressure on the gate		$\leq 1.6 \text{ bar}$
Differential pressure at opening		$\leq 30 \text{ mbar}$
Conductance (molecular flow)		1740 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	$\leq 250 \text{ }^{\circ}\text{C}$ open / $\leq 200 \text{ }^{\circ}\text{C}$ closed (bake-out max. 24h) $\leq 200 \text{ }^{\circ}\text{C}$
Heating and cooling rate		$50 \text{ }^{\circ}\text{C h}^{-1}$
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		0.11 l / 0.0038 ft ³
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		1/8" ISO / NPT
Actuation time	– closing – opening	1.2 s 1.2 s
Weight		12.4 kg / 27.3 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

Created by: MAEM	Release date: 2013-01-16	1 of 1
Modified by:	Release date:	299103EA