



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV gate valve, Series 108, DN 320 (ID 12'')**  
**Ordering No. 10850-PE01**

### Description

Flange	ISO-F 320
Actuator	manual, handwheel
Feedthrough	Bellows

### Technical data

Leak rate	- Valve body	$< 5 \cdot 10^{-10} \text{ mbar ls}^{-1}$
	- Valve seat	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		$1 \cdot 10^{-10} \text{ mbar}$ to 1.2 bar (abs)
Differential pressure on the gate		$\leq 1.2 \text{ bar}$
Differential pressure at opening		$\leq 30 \text{ mbar}$
Conductance (molecular flow)		$29 \text{ 130 ls}^{-1}$
Cycles until first service		50 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve Body	$\leq 250 \text{ }^\circ\text{C}$ open / $\leq 200 \text{ }^\circ\text{C}$ closed (bake-out max. 24h)
	- Actuator	$\leq 250 \text{ }^\circ\text{C}$
Heating and cooling rate		$50 \text{ }^\circ\text{C h}^{-1}$
Material (main components)	- Valve Body	AISI 304 (1.4301)
	- Mechanism	AISI 316L (1.4404), AISI 304 (1.4301)
	- Bellows	AISI 316L (1.4404, 1.4435)
Seal	- Bonnet	metal
	- Gate	FKM (Viton <sup>®</sup> ), O-ring
Mounting position		any
Weight		90 kg / 198 lbs

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