



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 091, DN 100 (ID 4'')**  
**Ordering No. 09140-PE08**

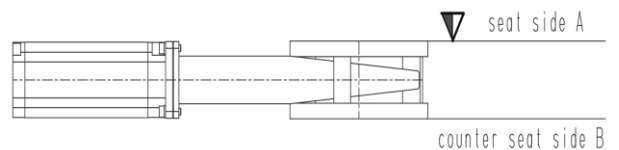
### Description

Flange	ISO-F 100
Actuator	Manual actuator with position indicator, detachable handle, self locking in any position
Number of turns needed for full stroke	39 Turns
Feedthrough	Bellows feedthrough

### Technical data

Leak rate	
– Valve body	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
– Valve seat	$< 1 \cdot 10^{-7} \text{ mbar ls}^{-1}$
Pressure range	$1 \cdot 10^{-8} \text{ mbar}$ to 1.2 bar (abs)
Differential pressure on the gate	$\leq 1.2 \text{ bar}$
Conductance (molecular flow)	$1\,700 \text{ ls}^{-1}$

Max. differential pressure at opening in closing and opening direction with influence to the cycle life



– Higher pressure on seat side A, the differential pressure acts in opening direction	$\leq 1.0 \text{ bar}$ with full cycle life
– Higher pressure on counter seat side B, the differential pressure acts in closing direction	$\leq 30 \text{ mbar}$ with full cycle life
– Higher pressure on counter seat side B, the differential pressure acts in closing direction	$\leq 1.0 \text{ bar}$ with reduced cycle life
Cycles until first service	5 000 (unheated and under clean conditions)
Bellows cycles	100 000 (unheated and under clean conditions)
Bake-out temperature	
– Valve body	$\leq 150 \text{ }^\circ\text{C}$ (bake-out max. 24h)
– Actuator	$\leq 100 \text{ }^\circ\text{C}$
– Position indicator	$\leq 60 \text{ }^\circ\text{C}$

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Heating and cooling rate

50 °C h<sup>-1</sup>

### Material

- Valve body
- Bonnet
- Gate
- Parts (in contact with media)
- Bellows

AISI 304 (1.4301)  
EN AW-5083 (3.3547)  
AISI 304 (1.4301), (1.4308)  
A2 Ni-Teflon coated, PEEK  
AISI 633, (AM350)

### Seal

- Bonnet
- Gate
- Actuator

FKM (Viton®)  
FKM (Viton®)  
FKM (Viton®)

Mounting position

any

Weight

approx. 7.6 kg / 16.8 lbs

### Position indicator

Type

Reed

Voltage

≤ 10-30 V DC

Current max.

≤ 0.5 A

