



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve, Series 091, DN 100 (ID 4'')
Ordering No. 09140-JE01

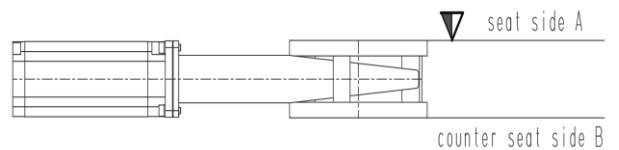
Description

Flange	JIS 100
Actuator	Manual actuator with detachable handle, self locking in any position, visual position indicator
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	$\leq 100 \text{ }^\circ\text{C}$

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Heating and cooling rate	50 °C h ⁻¹
Material	
– Valve body	AISI 304 (1.4301)
– Bonnet	EN AW-5083 (3.3547)
– Gate	AISI 304 (1.4301), (1.4308)
– Parts (in contact with media)	A2 Ni-Teflon coated, PEEK
– Bellows	AISI 633, (AM350)
Seal	
– Bonnet	FKM (Viton [®])
– Gate	FKM (Viton [®])
– Actuator	FKM (Viton [®])
Mounting position	any
Weight	approx. 9 kg / 19.8 lbs

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