Product data sheet

HV gate valve, Series 091, DN 50 (ID 2'')
## Ordering No. 09134-KE14

Description

Flange	ISO-KF 50
Actuator	pneumatic, double acting
Feedthrough	Bellows feedthrough

Technical data

Leak rate
– Valve body $< 1 \cdot 10^{-9}$ mbar ls^{-1}
– Valve seat $< 1 \cdot 10^{-7}$ mbar ls^{-1}

Pressure range $1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)

Differential pressure on the gate ≤ 1.2 bar

Conductance (molecular flow) 250 ls^{-1}

Max. differential pressure at opening in closing and opening direction with influence to the cycle life
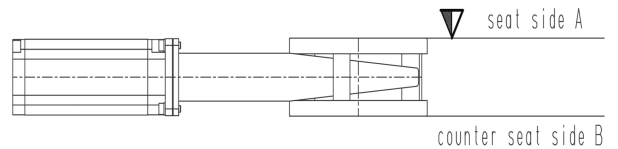
– Higher pressure on seat side A, the differential pressure acts in opening direction ≤ 1.0 bar with full cycle life

– Higher pressure on counter seat side B, the differential pressure acts in closing direction ≤ 30mbar with full cycle life

– Higher pressure on counter seat side B, the differential pressure acts in closing direction ≤ 1.0 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 ≤ 150 °C (bake-out max. 24h)
– Actuator ≤ 100 °C

Heating and cooling rate 50 °C h^{-1}

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Material
– Valve body   AISI 304 (1.4301)
– 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

Compressed air   4 – 7 bar / 58 – 102 psi
min. – max. overpressure

Volume of pneumatic actuator   0.08 l / 0.003 ft^3

Compressed air connection   M5 (10 – 32 UNF suitable)

Actuation time
– closing   ≤1.5 s
– opening   ≤1.5 s

Weight   approx. 3.4 kg / 7.5 lbs

Behavior in case of compressed   – Valve closed   Valve remains closed (≥ 24h)
air pressure drop   – Valve open   undefined
                                  – During actuation   undefined