VAT Vakuumventile AG
CH-9469 Haag, Schweiz

# Product data sheet

## HV gate valve
## Series 091, DN 63 (2 1/2")
## Ordering No. 09136-PE14-0003

## Description

| | |
|---|---|
| Flange | ISO-F 63 |
| Actuator | Pneumatic, double acting |
| Feedthrough | Bellows |

## Technical data

| | | |
|---|---|---|
| Leak rate | – Valve body<br>– Valve seat | $< 1 \cdot 10^{-9}$ mbar ls$^{-1}$<br>$< 1 \cdot 10^{-7}$ mbar ls$^{-1}$ |
| Pressure range | | $1 \cdot 10^{-8}$ mbar to 1.2 bar (abs) |
| Differential pressure on the plate | | ≤ 1.2 bar |
| Differential pressure at actuation | – In opening direction<br>– In closing direction | ≤ 1 bar[1]<br>≤ 30 mbar (1 bar with reduced cycle life)[2] |
| Conductance (molecular flow) | | 430 ls$^{-1}$ |
| Cycles until first service | | 5 000 (unheated and under clean conditions) |
| Temperature<br>(Maximum values: depending on operating conditions and sealing materials) | – Valve body<br>– Actuator | ≤ 180 °C<br>≤ 100 °C |
| Heating and cooling rate | | 50 °C h$^{-1}$ |
| Material | – Valve body<br>– Gate<br>– Bellows<br>– Small parts | AISI 304 (1.4301)<br>AISI 304 (1.4301, 1.4308)<br>AISI 633 (AM350)<br>A2 Ni-PTFE coated, PEEK |
| Seal | – Bonnet<br>– Gate<br>– Actuator | FKM<br>FKM<br>FKM, PU |
| Mounting position | | any |
| Volume of pneumatic actuator | | 0.17 l / 0.006 ft$^3$ |
| Compressed air<br>min. – max. overpressure | | 4 – 7 bar / 58 – 102 psi |
| Compressed air connection | | G1/8” (NPT for USA) |
| Actuation time | | ≤ 0.35 s |
| Weight | | 5.7 kg / 12.6 lbs |

[1] Differential pressure supports gate to open
[2] Differential pressure supports gate to stay closed. Therefore cycle life reduced due to increased wear of gate seal

| | | |
|---|---|---|
| Behavior in case of compressed air pressure drop | – Valve closed | valve remains closed (≥ 24h) |
| | – Valve open | undefined |
| | – During actuation | undefined |
| Behavior in case of power failure | – Valve closed | depending on customer installation |
| | – Valve open | depending on customer installation |
| | – During actuation | depending on customer installation |

### Related documents

| | |
|---|---|
| Dimensional drawing No. | 1095667 |