



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve, Series 091, DN 50 (ID 2'')

Ordering No. 09134-KE24

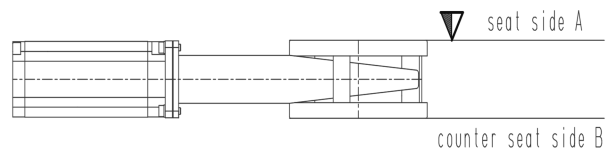
Description

| | |
|-------------|---|
| Flange | ISO-KF 50 |
| Actuator | pneumatic, double acting – with position indicator |
| 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) | 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 | $\leq 1.0 \text{ bar}$ 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 | $\leq 60 \text{ }^\circ\text{C}$ |

| | | |
|-----------------|--------------------------|-----------------|
| Created by: LOO | Release date: 19.01.2015 | 1/3 |
| Modified by: | Release date: | 783659EA |



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet
HV gate valve, Series 091, DN 50 (ID 2'')
Ordering No. 09134-KE24

| | | |
|---|--|--|
| Heating and cooling rate | | 50 °C h ⁻¹ |
| 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 |
| Volume of pneumatic actuator | | 0.08 l / 0.003 ft ³ |
| Compressed air min. – max. overpressure | | 4 – 7 bar / 58 – 102 psi |
| Compressed air connection | | M5 (10-32 UNF suitable) |
| Actuation time | | |
| – closing | | ≤ 1.5 s |
| – opening | | ≤ 1.5 s |
| Behavior in case of compressed air pressure drop | – Valve closed – Valve open – During actuation | Valve remains closed (≥ 24h) undefined undefined |
| Weight | | approx. 3.4 kg / 7.5 lbs |

| | | |
|-----------------|--------------------------|-----------------|
| Created by: LOO | Release date: 19.01.2015 | 2/3 |
| Modified by: | Release date: | 783659EA |



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet
HV gate valve, Series 091, DN 50 (ID 2'')
Ordering No. 09134-KE24

Electrical connections

Position indicator

Type

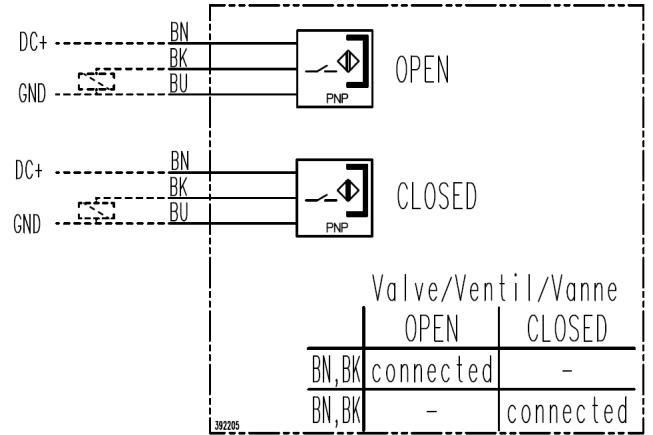
PNP

Voltage

10..30 V DC

Current max.

≤ 0.2 A



Wiring diagram