



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum gate valve, Series 121, DN 100 (ID 4'')
Ordering No. 12140-JA14

Description

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|-------------|--------------------------|
| Flange | JIS 100 |
| Actuator | Pneumatic, double acting |
| Feedthrough | Shaft feedthrough |

Technical data

| | | |
|---|----------------|---|
| Leak rate | – Valve body | $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ |
| | – Valve seat | $< 1 \cdot 10^{-9}$ mbar ls ⁻¹ |
| Pressure range | | $1 \cdot 10^{-7}$ mbar to 1.6 bar (abs) |
| Differential pressure on the gate | | ≤ 1.6 bar |
| Differential pressure at opening | | ≤ 30 mbar |
| Conductance (molecular flow) | | 2 000 ls ⁻¹ |
| Cycles until first service | | 200 000 (unheated and under clean conditions) |
| Temperature | – Valve body | ≤ 120 °C |
| (Maximum values: depending on operating conditions and sealing materials) | – Actuator | ≤ 80 °C |
| Heating and cooling rate | | 30 °C h ⁻¹ |
| Material | – Valve body | EN AW-5083 (3.3547), -6061 (3.3211) |
| | – Mechanism | AISI 304 (1.4301) |
| Seal | – Bonnet | FKM (Viton®) |
| | – Gate | FKM (Viton®), O-ring |
| | – Actuator | FKM (Viton®), NBR (BUNA N) |
| Mounting position | | any |
| Volume of pneumatic actuator | | 0.22 l / 0.008 ft ³ |
| Compressed air min. – max. overpressure | | 4–7 bar / 58–102 psi |
| Compressed air connection | | M5 (10–32 UNF suitable) |
| Actuation time | – closing | 2.0 s |
| | – opening | 2.0 s |
| Weight | | 5.2 kg / 11.5 lbs |
| Behavior in case of compressed air pressure drop | – Valve closed | – valve remains closed |
| | – Valve open | – undefined |
| Behavior in case of power failure | – Valve closed | – depending on customer installation |
| | – Valve open | – depending on customer installation |

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