

Product data sheet

UHV gate valve, Series 108, DN 100 (ID 4") Ordering No. 10840-CE14

Description

Flange CF-F 100

Actuator pneumatic, double acting

Feedthrough Bellows

Technical data

Leak rate – Valve body $< 5 \cdot 10^{-10}$ mbar ls⁻¹

– Valve seat < 1 ⋅ 10⁻⁹ mbar ls⁻¹

Pressure range $1 \cdot 10^{-10}$ mbar to 1.6 bar (abs)

Differential pressure on the gate \leq 1.6 bar

Differential pressure at opening \leq 30 mbar

Conductance (molecular flow) 1740 ls⁻¹

Cycles until first service 50 000 (unheated and under clean conditions)

Temperature – Valve Body ≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h)

(Maximum values: depending

on operating conditions and

sealing materials)

Heating and cooling rate 50 °C h⁻¹

Material (main components) – Valve Body AISI 304 (1.4301)

- Actuator

- Mechanism AISI 316L (1.4404), AISI 304 (1.4301)

≤ 200 °C

- Bellows AISI 316L (1.4404, 1.4435)

Seal – Bonnet metal

– Gate
 – Actuator
 FKM (Viton[®]), vulcanized
 FKM (Viton[®]), NBR

Mounting position any

Volume of pneumatic actuator 0.11 I / 0.0038 ft³

Compressed air 4-7 bar / 58-102 psi

min. - max. overpressure

Compressed air connection 1/8" ISO / NPT

Actuation time - closing 1.2 s - opening 1.2 s

Weight 11.1 kg / 24.5 lbs

Behavior in case of compressed — Valve closed valve remains closed

air pressure drop - Valve open undefined

Behavior in case of power failure - Valve closed depending on customer installation

Valve open

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