PRODUCT DATA SHEET No. 223643EA
High Vacuum Gate Valve, Series 14, DN 250
Ordering No. 14048-PE44

Description

Flange
ISO-F flanges

Actuator
pneumatic, double acting
with position indicator, with solenoid

Feedthrough
Rotary feedthrough

Technical data

Leak rate
- To the outside < 1 \cdot 10^{-9} \text{ mbar ls}^{-1}
- Seat < 1 \cdot 10^{-9} \text{ mbar ls}^{-1}

Molecular flow conductance
22'000 \text{ ls}^{-1}

Pressure range
1 \cdot 10^{-8} \text{ mbar to 1,2 bar (abs)}

Differential pressure on the gate
- in closing direction \leq 1,2 \text{ bar}
- in opening direction \leq 1,2 \text{ bar}

Max. differential pressure at opening
- in closing direction \leq 30 \text{ mbar}
- in opening direction \leq 30 \text{ mbar}

Cycles until first service
200'000

Bake-out temperature
- Valve \leq 150^\circ\text{C}
- Actuator \leq 50^\circ\text{C}
- Solenoid \leq 50^\circ\text{C}
- Position indicator \leq 80^\circ\text{C}

Heating and cooling rate
\leq 50^\circ\text{C h}^{-1}

Material
- Body 1.4301, AISI 304
- Gate 1.4301, AISI 304
- Mechanism (in contact with media) 1.4301, AISI 304
- Gate 1.4310, AISI 301
- Gate 1.4034, AISI 420

Seal
- Bonnet Viton
- Gate Viton
- Actuator Nitrile

Mounting position
any
Solenoid 24 V DC, 2.5 W

Position indicator
- Contact rating 5 A /250 V AC, 3 A/50 V DC
- Compressed air pressure min. - max. 4 - 7 bar / 55 - 95 psig (overpressure)
- Volume of air cylinder 0.75 l / 0.025ft³
- Compressed air connection R 1/8” (1/8” NPT for USA)

Action at power failure
- Valve closed valve remains closed
- Valve open valve closes

Action at compressed air failure
- Valve closed valve remains closed
- Valve open valve position is undefined

Closing time approx. 4 s
Opening time approx. 4 s
Weight 62 kg / 137 lbs

Attachments
Dimensional drawing No. 85715

Wiring diagram
Lo = position indicator «open»
Lg = position indicator «closed»