VAT Vakuumventile AG
CH-9469 Haag, Schweiz

PRODUCT DATA SHEET No. 219986EA

High Vacuum Gate Valve, Series 14, DN 320

Ordering No. 14050-PE24

Description

Flange	ISO-F flanges
Actuator	pneumatic, double acting with position indicator, without solenoid
Feedthrough	Rotary feedthrough

Technical data

Leak rate	
- To the outside	$< 1 \cdot 10^{-9}$ mbar ls^{-1}
- Seat	$< 1 \cdot 10^{-9}$ mbar ls^{-1}
Molecular flow conductance	30‘000 ls^{-1}
Pressure range	$1 \cdot 10^{-8}$ mbar to 1,2 bar (abs)
Differential pressure on the gate	
- in closing direction	1,2 bar
- in opening direction	1,2 bar
Max. differential pressure at opening	
- in closing direction	30 mbar
- in opening direction	30 mbar
Cycles until first service	200'000
Bake-out temperature	
- Valve	< 150°C
- Actuator	< 50°C
- Solenoid	< 50°C
- Position indicator	< 80°C
Heating and cooling rate	< 50°C h^{-1}
Material	
- Body	1.4301, AISI 304
- Gate	1.4301, AISI 304
- Mechanism (in contact with media)	1.4301, AISI 304 1.4310, AISI 301 1.4034, AISI 420
Seal	
- Bonnet	Viton
- Gate	Viton
- Actuator	Nitrile
Mounting position	any

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Position indicator Contact rating	 5 A /250 V AC
Compressed air pressure min. - max.	4 - 7 bar / 55 - 95 psig (overpressure)
Volume of air cylinder	0.75 l / 0.010ft^3
Compressed air connection	R 1/8“ (1/8" NPT for USA)
Action at power failure - Valve closed - Valve open	 valve remains closed valve closes
Action at compressed air failure - Valve closed - Valve open	 valve remains closed valve position is undefined
Closing time	approx. 6 s
Opening time	approx. 6 s
Weight	112 kg / 246 lbs

Attachments

Dimensional drawing No. 219978

Wiring diagram

Position indicator
Lo = position indicator «open»
Lg = position indicator «closed»