



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

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	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
- Seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Molecular flow conductance	22'000 ls ⁻¹
Pressure range	$1 \cdot 10^{-8}$ mbar to 1,2 bar (abs)
Differential pressure on the gate	
- in closing direction	$\leq 1,2$ bar
- in opening direction	$\leq 1,2$ 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	$\leq 150^{\circ}\text{C}$
- 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 1.4310, AISI 301 1.4034, AISI 420
Seal	
- Bonnet	Viton
- Gate	Viton
- Actuator	Nitrile
Mounting position	any

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Replaced by	Replacement for		
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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 / 0.025ft 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. 4 s
Opening time	approx. 4 s
Weight	62 kg / 137 lbs

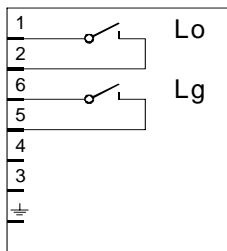
Attachments

Dimensional drawing No. 85715

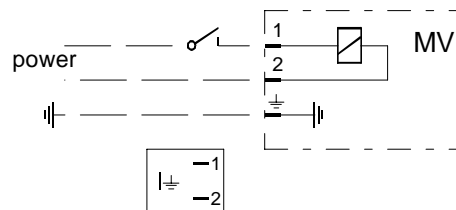
Wiring diagram

Position indicator

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



Solenoid



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