



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Vacuum gate valve, Series 08.1, DN 100 (ID 4")**  
**Ordering No. 08140-FA44**

### Description

Flange	DN 100 Flat flanges with O-ring grooves
Actuator	pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Shaft feedthrough

### Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-9}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-7}$ 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)		3 800 ls <sup>-1</sup>
Cycles until first service		200 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Solenoid valve – Position indicator	$\leq 120$ °C $\leq 80$ °C $\leq 50$ °C $\leq 80$ °C
Heating and cooling rate		50 °C h <sup>-1</sup>
Material (main components)	– Valve Body – Mechanism	EN AW-5083 (3.3547), EN AW-6061 (3.3211) AISI 304 (1.4301)
Seal	– Bonnet – Gate – Shaft feedthrough	FKM (Viton®) FKM (Viton®) FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		0.22 l / 0.0078 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " (1/8" NPT for USA)
Actuation time	– closing – opening	2 s 2 s
Weight		3.3 kg / 7.3 lbs

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Behavior in case of compressed air pressure drop – Valve closed  
– Valve open

valve remains closed  
undefined

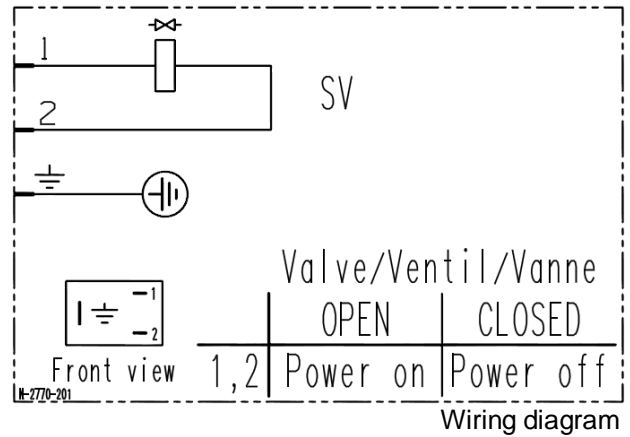
Behavior in case of power failure – Valve closed  
– Valve open

valve remains closed  
valve closes

### Electrical connections

#### Solenoid valve

Type 4/2 way  
Voltage Defined by order



#### Position indicator

Type Micro switch  
Voltage  $\leq 250$  V AC,  $\leq 50$  V DC  
Current max.  $\leq 2$  A,  $\leq 1.2$  A

