



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 350 (ID 14'')**  
**Ordering No. 14051-JE44**

### Description

Flange	JIS 350
Actuator	Pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Rotary feedthrough

### Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)
Differential pressure on the gate		$\leq 1.2$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		43 000 ls <sup>-1</sup>
Cycles until first service	– Unheated and under clean conditions	200 000 (valve in horizontal position) 50 000 (valve in vertical position)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Pneumatic actuator – Solenoid valve – Position indicator	$\leq 150$ °C $\leq 50$ °C $\leq 50$ °C $\leq 80$ °C
Heating and cooling rate		50 °C h <sup>-1</sup>
Material (main components)	– Valve body – Mechanism	AISI 304 (1.4301) AISI 304 (1.4301)
Seal	– Bonnet – Gate – Actuator	FKM (Viton <sup>®</sup> ), O-ring FKM (Viton <sup>®</sup> ), O-ring FKM (Viton <sup>®</sup> ), NBR
Mounting position		any
Volume of pneumatic actuator		0.75 l / 0.025 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	4.5 s 4.5 s
Weight		112 kg / 247 lbs

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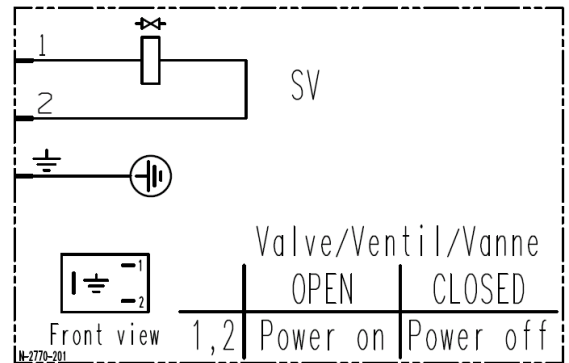
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Behavior in case of compressed air pressure drop	– Valve closed – Valve open	valve remains closed undefined
Behavior in case of power failure	– Valve closed – Valve open	valve remains closed valve closes

### Electrical connections

#### Solenoid valve

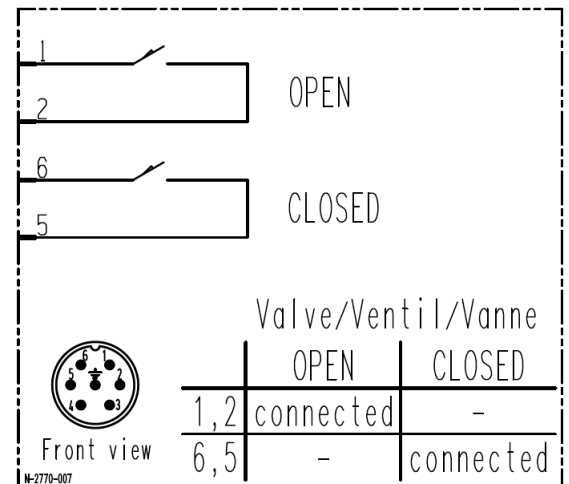
Type	5/2 way
Voltage	Defined by order



Wiring diagram

#### Position indicator

Type	Micro switch
Voltage	≤ 250 V AC    ≤ 50 V DC
Current max.	≤ 5 A            ≤ 3 A



Wiring diagram