



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 400 (16")**  
**Ordering No. 14052-AE28**

### Description

Flange	DN 400 (16")
Actuator	Pneumatic, double acting, with 3-position actuator – with position indicator
Feedthrough	Rotary feedthrough
Option	– Flange : ASA-150 lb/sqin (compatible with ANSI B. 16.5)

### Technical data

Leak rate	– Valve body	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
	– Valve seat	$< 1 \cdot 10^{-9}$ 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)	– Nominal	52'050 ls <sup>-1</sup>
	– Min. adjustable	20 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	$\leq 150$ °C
	– Pneumatic actuator	$\leq 50$ °C
	– Position indicator	$\leq 80$ °C
Heating and cooling rate		50 °C h <sup>-1</sup>
Material (main components)	– Valve body	AISI 304 (1.4301)
	– Mechanism	AISI 304 (1.4301), AISI 301 (1.4310)
Seal	– Bonnet	FKM (Viton®), O-ring
	– Gate	FKM (Viton®), O-ring
	– Actuator	FKM (Viton®), NBR
Mounting position		horizontal
Volume of pneumatic actuator		2.6 l / 0.093 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " ( $\frac{1}{8}$ " NPT for USA)
Actuation time	– closing	$\leq 10$ s
	– opening	$\leq 10$ s
Weight		164 kg / 360 lbs

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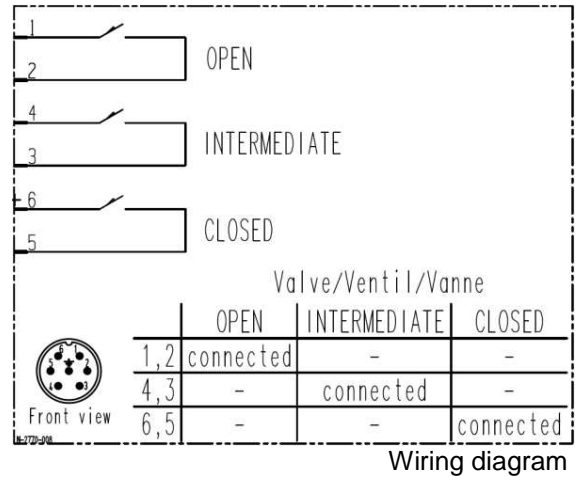
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Behavior in case of compressed air pressure drop	– Valve closed – Valve open – Middle position	valve remains closed undefined undefined
Behavior in case of power failure	– Valve closed – Valve open – Middle position	depending on customer installation depending on customer installation depending on customer installation
Valve position indication		visual (mechanical)

### Position indicator

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



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