



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 160 (ID 6'')**  
**Ordering No. 14044-PE44**

### Description

Flange	ISO-F 160
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 2 bar (abs)
Differential pressure on the gate		$\leq 2$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		5 150 ls <sup>-1</sup>
Cycles until first service	– Unheated and under clean conditions	200 000
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), AISI 316L (1.4404)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®), O-ring FKM (Viton®), O-ring FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.28 l / 0.01 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	2.5 s 2.5 s
Weight		23.4 kg / 51.6 lbs

Created by: MAEM	Release date: 2013-08-23	1 of 2
Modified by:	Release date:	<b>603790EA</b>



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

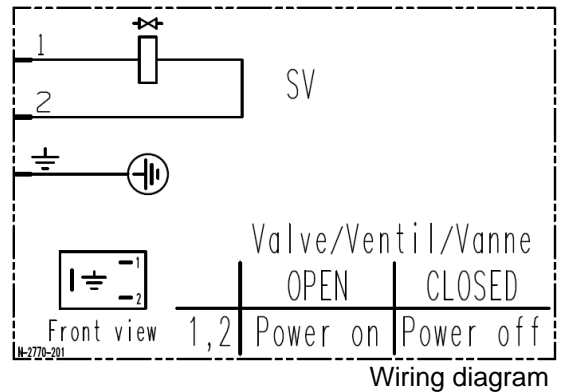
**HV gate valve, Series 140, DN 160 (ID 6'')**  
**Ordering No. 14044-PE44**

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



#### Position indicator

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

