



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 250 (ID 10'')**  
**Ordering No. 14048-PE28-0001**

### Description

Flange	ISO-F 250
Actuator	Pneumatic, with 3-position actuator – with position indicator
Feedthrough	Rotary feedthrough

### 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	21'690 ls <sup>-1</sup>
	– Min. adjustable	12.5 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	$\leq 150$ °C
	– 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), AISI 316L (1.4404)
Seal	– Bonnet	FKM (Viton®), O-ring
	– Gate	FKM (Viton®), O-ring
	– Actuator	FKM (Viton®), NBR
Mounting position		any
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	$\leq 6$ s
	– opening	$\leq 6$ s
Weight		69 kg / 151 lbs

Created by: BISS	Release date: 2020-10-24	1 of 2
Modified by:	Release date:	<b>876955EA.DOCX</b>



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

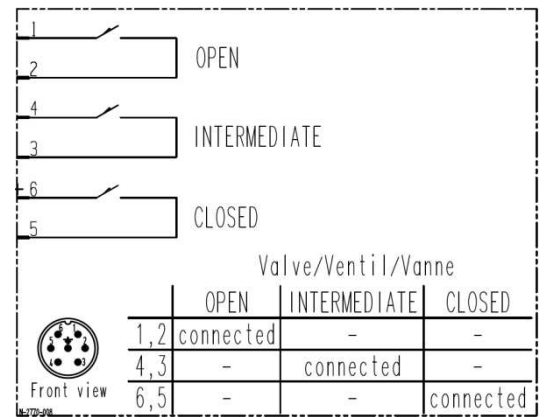
**HV gate valve, Series 140, DN 250 (ID 10'')**  
**Ordering No. 14048-PE28-0001**

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

### Electrical connections

#### Position indicator

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



Wiring diagram