



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve, Series 140, DN 100 (ID 4'')
Ordering No. 14040-PE44

Description

Flange	ISO-F 100
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 ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 2 bar (abs)
Differential pressure on the gate		≤ 2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		1 740 ls ⁻¹
Cycles until first service		200 000 Unheated and under clean conditions
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Pneumatic actuator – Solenoid valve – Position indicator	≤ 150 °C ≤ 50 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		50 °C h ⁻¹
Material (main components)	– Valve body – Mechanism	AISI 304 (1.4301) AISI 304 (1.4301)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®), Vulcanized FKM (Viton®), O-ring FKM (Viton®), NBR
Mounting position		Any
Volume of pneumatic actuator		0.13 l / 0.005 ft ³
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G1/8" (1/8" NPT for USA)
Actuation time	– closing – opening	1.5 s 1.5 s
Weight		15 kg / 33 lbs

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

valve remains closed
undefined

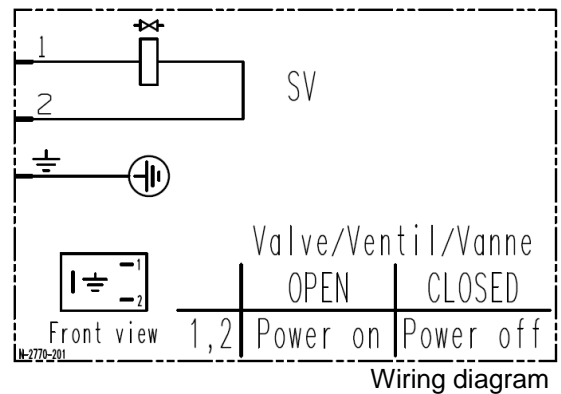
Behavior in case of power failure – Valve closed
– Valve open

valve remains closed
valve closes

Electrical connections

Solenoid valve

Type 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

