



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Low particle HV gate valve, Series 151, DN 100 (ID 4'')
Ordering No. 15140-PA44

Description

Flange	ISO-F 100
Actuator	Pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Bellows

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 1 bar (abs)
Differential pressure on the gate		≤ 1.2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		1 700 ls ⁻¹
Cycles until first service		500 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Solenoid valve – Position indicator	≤ 120 °C (bake-out max. 24h) ≤ 100 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
Material (main components)	– Valve Body – Gate – Bellows	EN AW-6082 (3.2315) EN AW-6082 (3.2315) AISI 633 (AM350)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®) FKM (Viton®), vulcanized FKM (Viton®)
Mounting position		Any
Volume of pneumatic actuator		0.32 l / 0.011 ft ³
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " (1/8" NPT for USA)

Created by: MAY	Release date: 03.10.2014	1/2
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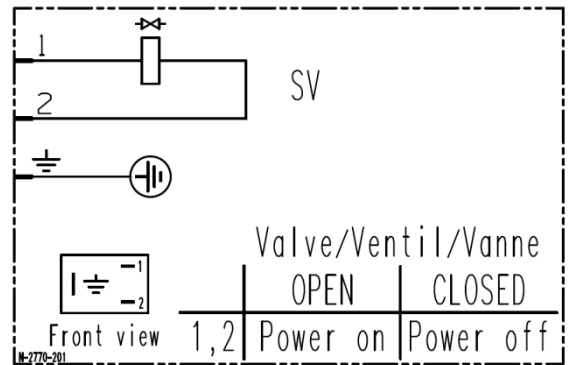
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Actuation time	- closing	≤ 2.8 s
	- opening	≤ 2.8 s
Weight		10.2 kg / 22.5 lbs
Behavior in case of compressed air pressure drop	- Valve closed	- Undefined (not mechanically locked)
	- Valve open	- Undefined (not mechanically locked)
Behavior in case of power failure	- Valve closed	- Valve remains closed
	- Valve open	- Valve closes

Electrical connections

Solenoid valve

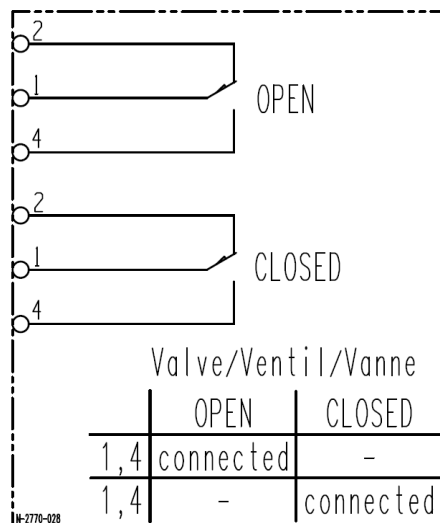
Type	4/2 way
Voltage	Defined by order



Wiring diagram

Position indicator

Type	Micro switch	
Voltage	≤ 250 V AC	≤ 50 V DC
Current max.	≤ 2 A	≤ 1.2 A



Wiring diagram

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