



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve

Series 091, DN 100 (4")

Ordering No. 09140-TE44-0002

Description

Flange	ASA-LP 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 $< 1 \cdot 10^{-7}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)
Differential pressure on the plate		≤ 1.2 bar
Differential pressure at actuation	– In opening direction – In closing direction	≤ 1 bar ¹ ≤ 30 mbar (1 bar with reduced cycle life) ²
Conductance (molecular flow)		1 700 ls ⁻¹
Cycles until first service		5 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	≤ 180 °C ≤ 100 °C ≤ 50 °C ≤ 70 °C
Heating and cooling rate		50 °C h ⁻¹
Material	– Valve body – Gate – Bellows – Small parts	AISI 304 (1.4301) AISI 304 (1.4301, 1.4308) AISI 633 (AM350) A2 Ni-PTFE coated, PEEK
Seal	– Bonnet – Gate – Actuator	FKM FKM FKM, PU
Mounting position		any
Volume of pneumatic actuator		0.25 l / 0.009 ft ³
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G1/8" (NPT for USA)
Actuation time		≤ 0.5 s

¹ Differential pressure supports gate to open

² Differential pressure supports gate to stay closed. Therefore cycle life reduced due to increased wear of gate seal

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Weight		8.9 kg / 15.2 lbs
Behavior in case of compressed air pressure drop	<ul style="list-style-type: none"> - Valve closed - Valve open - During actuation 	valve remains closed ($\geq 24h$) undefined undefined
Behavior in case of power failure	<ul style="list-style-type: none"> - Valve closed - Valve open - During actuation 	valve remains closed ($\geq 24h$) valve closes valve closes

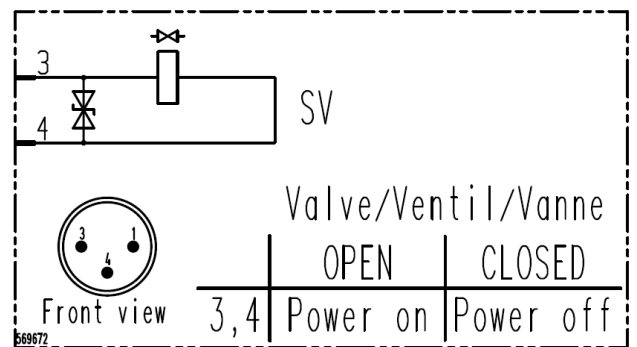
Related documents

Dimensional drawing No. 1151038

Electrical connections

Solenoid valve

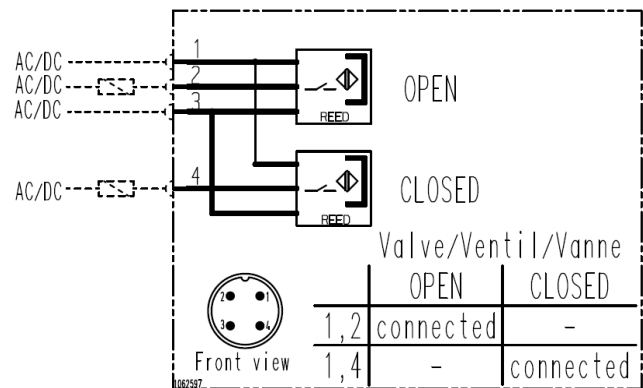
Type 5/2 way
Voltage 24 V DC



Wiring diagram

Position indicator

Type Reed (NO with LED)
Voltage 24 V AC/DC
Current max. ≤ 0.5 A



Wiring diagram

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