VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve
Series 091, DN 100 (4")
Ordering No. 09140-PE24-0004

Description

Flange	ISO-F 100
Actuator	Pneumatic, double acting – 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 – Position indicator	≤ 180 °C ≤ 100 °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		7.3 kg / 16.1 lbs
Behavior in case of compressed air pressure drop	– Valve closed	valve remains closed (≥ 24h)
	– Valve open	undefined
	– During actuation	undefined
Behavior in case of power failure	– Valve closed	depending on customer installation
	– Valve open	depending on customer installation
	– During actuation	depending on customer installation

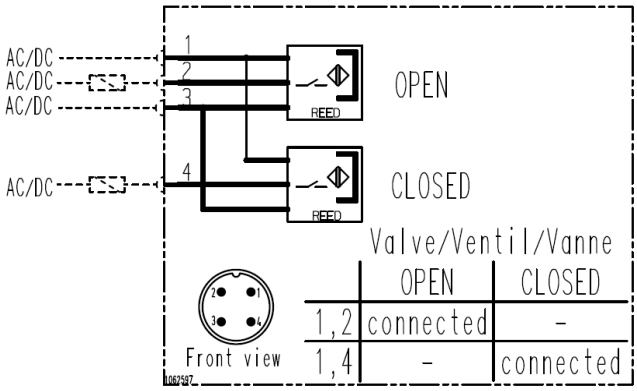
Related documents

Dimensional drawing No. 1095395

Electrical connections

Position indicator

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



Wiring diagram