



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve

Series 091, DN 100 (4")

Ordering No. 09140-CE24-0004

Description

Flange	CF-F 100
Actuator	Pneumatic, double acting – with position indicator
Feedthrough	Bellows

Technical data

Leak rate	– Valve body	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
	– Valve seat	$< 1 \cdot 10^{-7}$ 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	≤ 1 bar ¹
	– In closing direction	≤ 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	– Valve body	≤ 180 °C
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	≤ 100 °C
	– Position indicator	≤ 70 °C
Heating and cooling rate		50 °C h ⁻¹
Material	– Valve body	AISI 304 (1.4301)
	– Gate	AISI 304 (1.4301, 1.4308)
	– Bellows	AISI 633 (AM350)
	– Small parts	A2 Ni-PTFE coated, PEEK
Seal	– Bonnet	FKM
	– Gate	FKM
	– Actuator	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	<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 	depending on customer installation depending on customer installation depending on customer installation

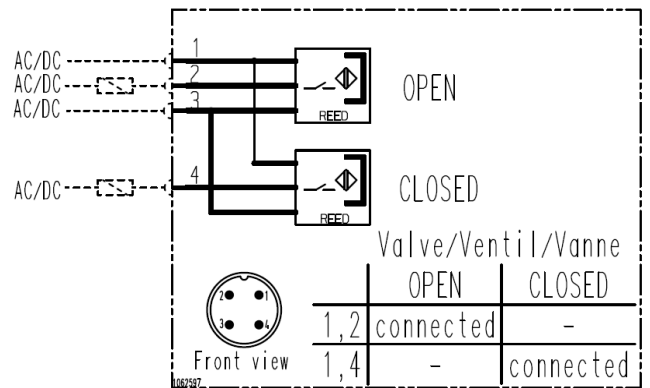
Related documents

Dimensional drawing No. 1096152

Electrical connections

Position indicator

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



Wiring diagram

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