



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Fast closing valve, Series 75.0, DN 100 (4'')**

**Ordering No. 75040-CE44-0004**

### Description

Flange	DN 100 CF-F
Actuator	Pneumatic double acting - with solenoid valves - with position indicator
Feed through	Bellows
Option	none

### Technical data

Leak rate	- Valve body	$< 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
	- Valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		UHV to 2 bar (abs)
Test pressure		1 bar
Differential pressure on the closed gate	- in closing direction	$\leq 2$ bar
	- in opening direction	$\leq 1.2$ bar
Differential pressure at opening	- in closing direction	$\leq 180$ mbar
	- in opening direction	$\leq 1$ bar
Conductance (molecular flow)		700 ls <sup>-1</sup>
Cycles until first service		2 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve	$\leq 200$ °C (for max. 200h)
	- Actuator	$\leq 50$ °C
	- Solenoid valve	$\leq 50$ °C
	- Position indicator	$\leq 50$ °C
Heating and cooling rate		$\leq 80$ °C h <sup>-1</sup>
Material	- Valve body	1.4435, AISI 316 L
	- Flange	1.4435, AISI 316 L
	- Gate	Titanium
	- Bellows	1.4404/1.4435, AISI 316 L
Seal	- Bonnet	metal, silver plated
	- Gate	FKM
	- Actuator	NBR, PTFE/NBR
Mounting position		Any, marked seat side against the air inrush direction
Radiation resistance	- Body/Gate	$10^5$ Gy ( $10^7$ rad)
	- Actuator	$10^4$ Gy ( $10^6$ rad)
	- Position indicator	$10^5$ Gy ( $10^7$ rad)
	- Solenoid	$10^4$ Gy ( $10^6$ rad)

Created by: Daniel Brandner	Release date: 2010-04-20	1 of 2
Modified by: René Brulc	Release date: 2014-12-04	<b>280719ED</b>



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Volume of pneumatic actuator		3 l / 0.11 ft <sup>3</sup>
Compressed air min. – max. overpressure		5 - 8 bar / 73 - 116 psig
Compressed air connections		R 1/8" (USA: 1/8" NPT)
Actuation time	– Closing	≤ 15 ms
	– Opening	≤ 7 s
Weight		29 kg / 64 lbs
Behavior in case of compressed air pressure drop	– Valve closed	Valve remains in closed position
	– Valve open	Valve remains in open position
Behavior in case of power failure	– Valve closed	Valve remains in closed position *
	– Valve open	Valve remains in open position *

\* depends on fast valve controller settings

### Related documents

Dimensional drawing No. 415042

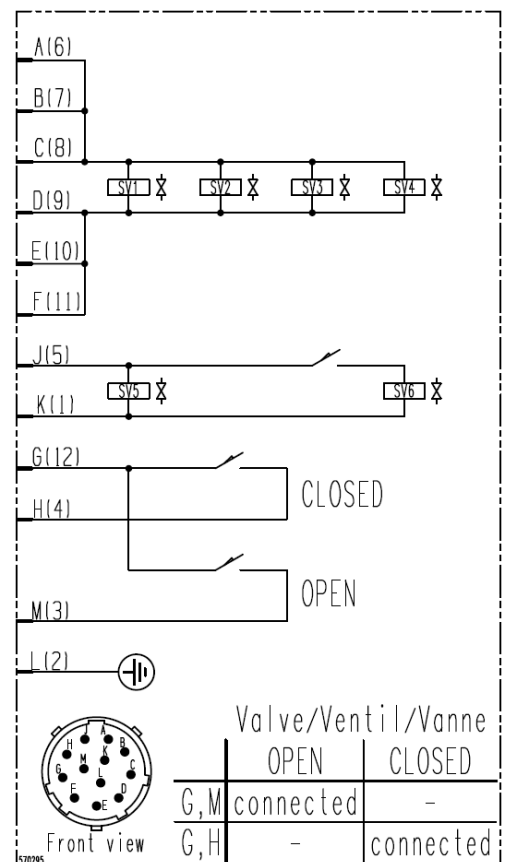
### Electrical connections

#### Position indicator

Type	micro switch
Voltage	≤ 50 V AC / DC
Current max.	≤ 1.2 A

#### Solenoid

Voltage	≤ 24 V DC
Power consumption max.	≤ 30 W



Wiring diagram