



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**All-Metal Angle Valve, Series 57, DN 100 (ID 4")**

**OSL-Article No. 57040-GE41-0005**

### Description

Flange	DN 100 CF-R
Actuator	pneumatic single acting with closing spring, with position indicator, with solenoid
Feedthrough	bellows

### Technical data

Leak rate	
- To the outside	$\leq 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
- Seat	$\leq 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
Molecular flow conductance	380 ls <sup>-1</sup>
Pressure range	(T= 200°C) extreme UHV to 5 bar (abs)
	(T= 450°C) extreme UHV to 3.5 bar (abs)
Test pressure	1 bar
Differential pressure on the gate	
- in closing and opening direction	$\leq 5$ bar
Max. differential pressure at opening	
- in closing and opening direction	1 bar (any differential pressure at opening might reduce the lifetime of the valve)
Cycles until first service	10'000
Bake-out temperature	
Valve body	
- open	$\leq 450^\circ\text{C}$
- closed	$\leq 350^\circ\text{C}$
Pneumatic actuator (spring closing)	$\leq 150^\circ\text{C}$
Position indicator	$\leq 80^\circ\text{C}$
Solenoid	$\leq 80^\circ\text{C}$
Heating and cooling rate	$\leq 60^\circ\text{C h}^{-1}$
Material	
- Body, Mechanism (in contact with media)	1.4306, AISI 304 L; 1.4435, AISI 316 L,
- Bellows	1.4404, AISI 316 L
- actuator	aluminium
Seal	
- Bonnet, Plate	metal
- actuator	FKM (Viton®)
Mounting position	any
Solenoid	
- Supply voltage	according to P.O.
- Power required	2.5 W
Position indicator contact rating	$\leq 50$ V AC / DC; $\leq 1.2$ A

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### Radiation resistance

- Valve	10 <sup>8</sup> Gy (10 <sup>10</sup> rad)
- Actuator	10 <sup>5</sup> Gy (10 <sup>7</sup> rad)
- Position indicator	10 <sup>5</sup> Gy (10 <sup>7</sup> rad)
- Solenoid	10 <sup>4</sup> Gy (10 <sup>6</sup> rad)

### Compressed air pressure

6 – 9 bar / 85-130 psig (over pressure)

### Compressed air connection

R 1/8"

### Volume compressed air cylinder

1.8 l / 0.064 ft<sup>3</sup>

### Behaviour in case of power failure

Valve closed	Valve remains closed and leaktight
Valve open	Valves closes

### Behaviour in case of compressed air pressure drop

Valve closed	Valve remains closed and leaktight
Valve open	Valve closes

### Opening and closing time

4 s

### Weight

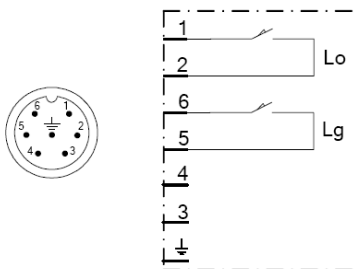
35 kg / 77 lbs

## Dimensions

Dimensional drawing No. 501508

## Connection diagrams

Standard position indicator with  
make contact switches



Lo = position indicator open  
Lg = position indicator closed

Solenoid (SV)

