



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product Data Sheet

**All-Metal Angle Valve, Series 57.1, DN 16 (ID 5/8")**

**OSL Article No. 57124-GE44-0002**

### Description

Flange	DN16, CF-R
Actuator	Pneumatic actuator double acting with position indicator with solenoid valve
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	5 ls <sup>-1</sup>
Pressure range	UHV to 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 (> 1 bar at reduced cycle lifetime)
Cycles until first service	10'000
Bake-out temperature	
- Valve body	$\leq 450^{\circ}\text{C}$ if valve is opened
- Valve body	$\leq 350^{\circ}\text{C}$ if valve is closed
- Pneumatic actuator	$\leq 200^{\circ}\text{C}$ (max. 100h)
- 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)	1.4435/1.4404, AISI 316 L; 1.4435, AISI 316 L, ESU
- Bellows	1.4404, AISI 316 L
Seal	
- Bonnet, Plate	metal
- Actuator	Viton <sup>®</sup>
Mounting position	any
Solenoid	
- Supply voltage	according to P. O.
- Power required	2.5 W
- 1 x 3 pole plug	
Position indicator	
- 1 switch for «open» and 1 switch for «close»	
- Contact rating	$\leq 50$ V AC / DC; $\leq 1.2$ A
- 1 x 7 pole plug	
Radiation resistance	
- Valve	$10^8$ Gy ( $10^{10}$ rad)
- Actuator	$10^5$ Gy ( $10^7$ rad)
- Solenoid	$10^4$ Gy ( $10^6$ rad)
- Position indicator	$10^5$ Gy ( $10^7$ rad)

Created by: M. Greuter	Release date: 20. February 2012	Page 1 of 2
Modified by::	Release date:	<b>293726EA</b>



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product Data Sheet

**All-Metal Angle Valve, Series 57.1, DN 16 (ID 5/8")**

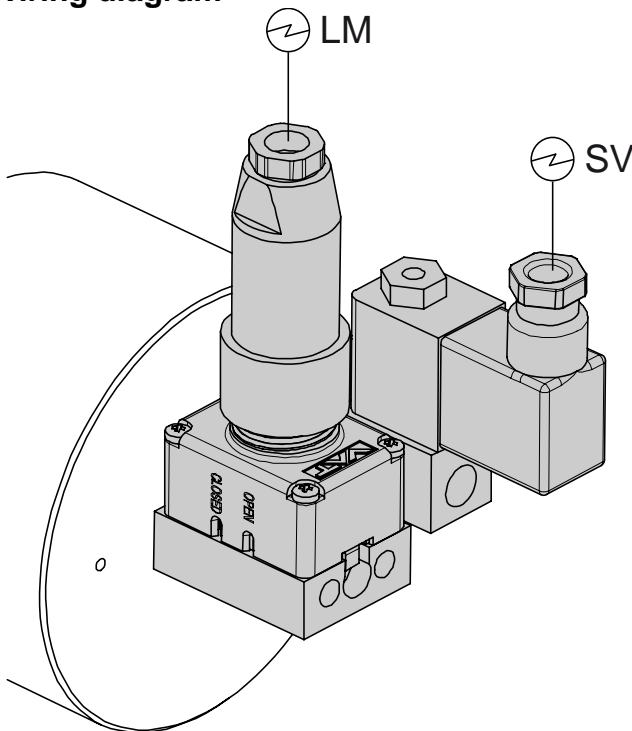
**OSL Article No. 57124-GE44-0002**

Compressed air pressure min. - max.	4 - 5 bar / 55 - 70 psig (overpressure)
Volume of air cylinder	0.08 l / 0.003 ft <sup>3</sup>
Compressed air connection	R 1/8" (USA 1/8" NPT)
Action at power failure	not defined
- Valve closed	not defined
- Valve open	
Action at compressed air failure	no change
- Valve closed	valve closes
- Valve open	
Closing time	1 s
Opening time	1 s
Weight	app. 2.4 kg / 5.3 lbs

### Dimensions

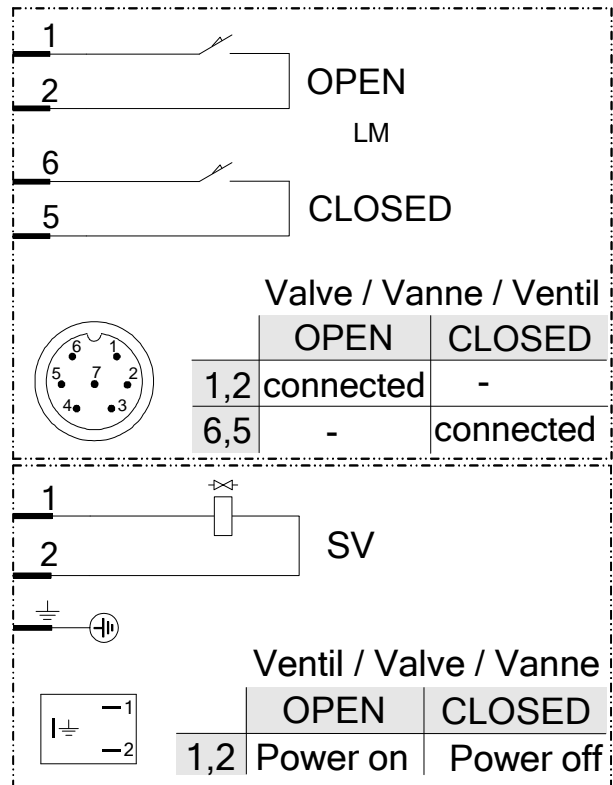
Dimensional drawing No. 316493

### Wiring diagram



⊕ LM Electrical connection for position indicator

⊕ SV Electrical connection for solenoid



Created by: M. Greuter	Release date: 20. February 2012	Page 2 of 2
Modified by::	Release date:	<b>293726EA</b>