



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product Data Sheet

All-Metal Angle Valve, Series 57.1, DN 40 (ID 1½")

OSL Article No. 57132-GE44-0004

Description

Flange	DN40, 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 ⁻¹
- Seat	$\leq 1 \cdot 10^{-10}$ mbar ls ⁻¹
Molecular flow conductance	50 ls ⁻¹
Pressure range	UHV to 5 bar (abs)
Test pressure	1 bar
Differential pressure on the gate	
- in closing and opening direction	≤ 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 [®]
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	≤ 50 V AC / DC; ≤ 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: 23. February 2012	Page 1 of 2
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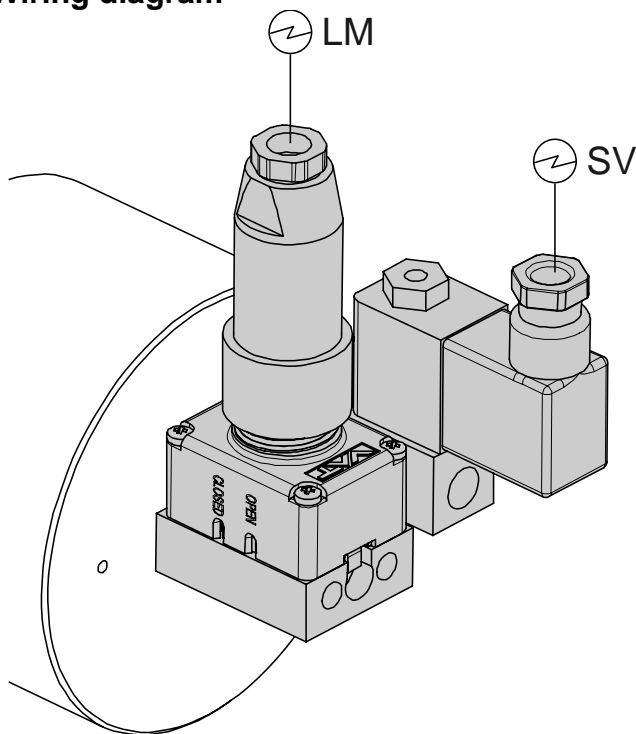
OSL Article No. 57132-GE44-0004

Compressed air pressure min. - max.	4 - 5 bar / 55 - 70 psig (overpressure)
Volume of air cylinder	0.32 l / 0.011 ft ³
Compressed air connection	R ½" (USA ½" NPT)
Action at power failure	no change
- Valve closed	valve closes
- Valve open	
Action at compressed air failure	undefined
- Valve closed	undefined
- Valve open	
Closing time	2 s
Opening time	2 s
Weight	app. 6.1 kg / 13.5 lbs

Dimensions

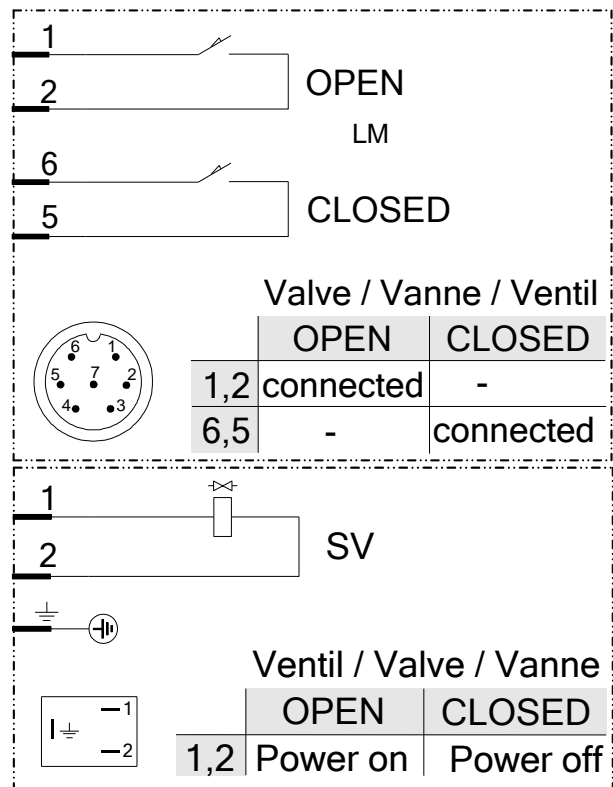
Dimensional drawing No. 236793

Wiring diagram



⚡ LM Electrical connection for position indicator

⚡ SV Electrical connection for solenoid



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