



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

All-Metal Gate Valve, Series 48.1, DN 16 (ID $\frac{5}{8}$ ")

OSL-Article No. 48124-CE44-0001

Description

Flange	DN 16 CF-F
Actuator	Pneumatic actuator double acting with position indicator with solenoid valve
Feedthrough	bellows

Technical data

Leak rate	
- To the outside	$< 1 \cdot 10^{-10}$ mbar ls ⁻¹
- Seat	$< 1 \cdot 10^{-10}$ mbar ls ⁻¹
Molecular flow conductance	10 ls ⁻¹
Pressure range	UHV to 2 bar (abs)
Test pressure	1 bar
Differential pressure on the gate	
- in closing and opening direction	2 bar
Max. differential pressure at opening	
- in closing and opening direction	1 bar
Cycles until first service	20'000
Bake-out temperature	
- Valve	$\leq 300^{\circ}\text{C}$
- Actuator	$\leq 200^{\circ}\text{C}$ (for max. 100 h)
- Position indicator	$\leq 80^{\circ}\text{C}$
- Solenoid	$\leq 80^{\circ}\text{C}$
Heating and cooling rate	$\leq 80^{\circ}\text{C h}^{-1}$
Material	
- Body	1.4435, AISI 316 L
- Flange	1.4435,ESU, AISI 316 L ESR
- Gate	1.4435, AISI 316 L
- Mechanism (in contact with media)	1.4435, AISI 316 L
- Bellows	1.4435, AISI 316 L
Seal	
- Bonnet	metal
- Gate	metal
- Actuator	viton [®]
Mounting position	any

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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 $\leq 50 \text{ V AC / DC ; } \leq 1.2 \text{ A}$
- 1 x 7 pole plug

Radiation resistance

- Valve $10^8 \text{ Gy (} 10^{10} \text{ rad)}$
- Actuator $10^5 \text{ Gy (} 10^7 \text{ rad)}$
- Position indicator $10^5 \text{ Gy (} 10^7 \text{ rad)}$
- Solenoid $10^4 \text{ Gy (} 10^6 \text{ rad)}$

Compressed air pressure min. - max.
(overpressure)

4 - 8 bar / 55 - 110 psig

Volume of air cylinder

0.01 l / 0.0033 ft³

Compressed air connection

R 1/8" (USA: 1/8" NPT)

Action at power failure

- Valve closed no change
- Valve open valve closes

Action at compressed air failure

- Valve closed no change
- Valve open undefined

Closing time

1 s

Opening time

1 s

Weight

3.8 kg / 8.4 lbs

Dimensions

Dimensional drawing No. 98721

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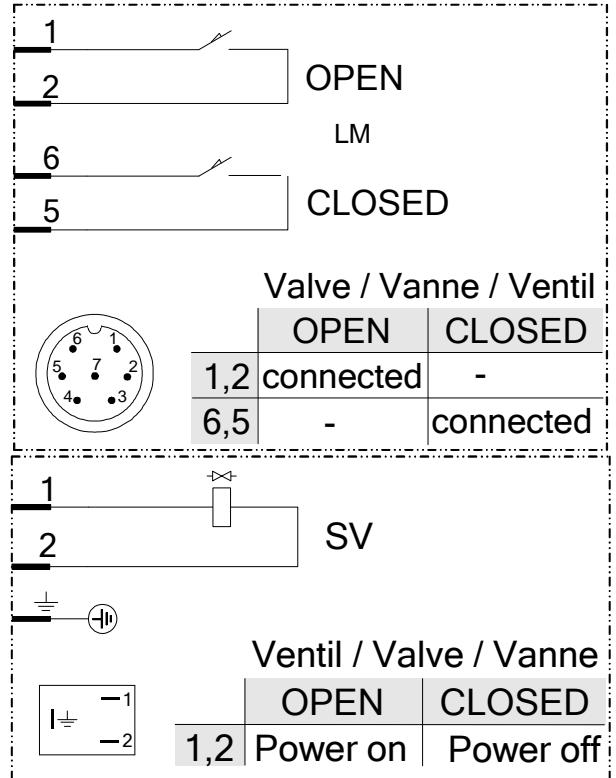
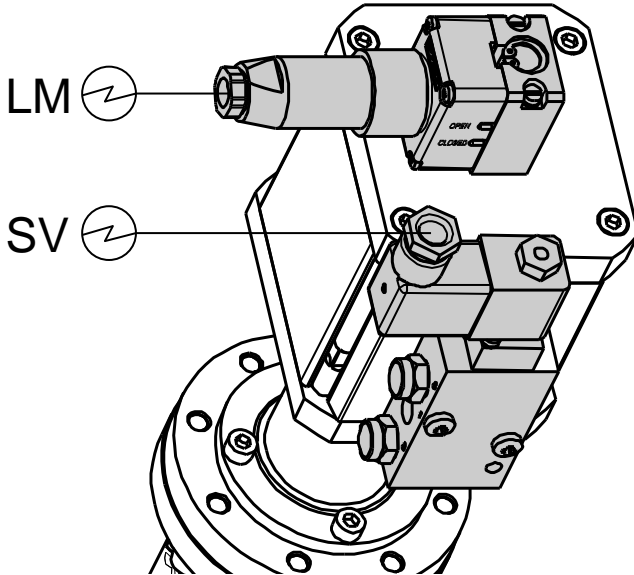
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Wiring diagram



⊖ LM Electrical connection for position indicator

⊖ SV Electrical connection for solenoid

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