



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

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

OSL-Article No. 57040-GE44-0003

Description

Flange	DN 100 CF-R
Actuator	pneumatic double acting, with position indicator, with solenoid
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	380 ls ⁻¹
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	≤ 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	$\leq 200^\circ\text{C}$ (for 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)	1.4306, 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	≤ 50 V AC / DC; ≤ 1.2 A

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Radiation resistance

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

Compressed air pressure

4 – 5 bar / 55-70 psig (over pressure)

Compressed air connection

R 1/8"

Volume compressed air cylinder

1.5 l / 0.053 ft³

Behaviour in case of power failure

Valve closed
Valve open

Valve remains closed and leaktight
Valves closes

Behaviour in case of compressed air pressure drop

Valve closed
Valve open

undefined, no more leaktight
undefined

Opening and closing time

4 s

Weight

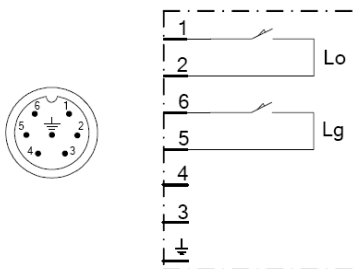
26.5 kg / 59 lbs

Dimensions

Dimensional drawing No. 371396

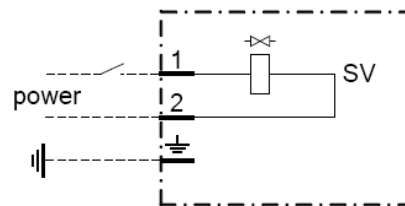
Connection diagrams

Standard position indicator with
make contact switches



Lo = position indicator open
Lg = position indicator closed

Solenoid (SV)



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