



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**All-metal angle valve, Series 571, DN 16 (ID 5/8")**

**Ordering No. 57124-RE21-AJK1**

### Description

Flange	Weld neck N.D. 16 schedule 40S
Actuator	Pneumatic, single acting with closing spring – without solenoid valve – with position indicator 200°C
Feedthrough	Bellows
Options	AJK = Product: valve type ITER 4; Flange A+B: weld stub flange schedule 40S Actuator: radiation resistant 10 <sup>6</sup> Gy; Position indicator: double; 200 °C; Glenair 6 pin connector; 125 °C; radiation resistant 10 <sup>6</sup> Gy;

### Technical data

Leak rate	– Valve body – Valve seat	< 1 · 10 <sup>-9</sup> mbar ls <sup>-1</sup> < 1 · 10 <sup>-9</sup> mbar ls <sup>-1</sup>
Pressure range		XUHV to 5 bar (abs)
Differential pressure on the plate	– In opening direction – In closing direction	≤ 5 bar ≤ 5 bar
Differential pressure at opening		≤ 1 bar >1 bar with reduced number of cycles
Conductance (molecular flow)		4 ls <sup>-1</sup>
Cycles until first service (Maximum values: depending on operating conditions and valve contamination)	– Normal conditions <sup>1</sup> – Extreme conditions <sup>2</sup>	20 000 1 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Position indicator	≤ 240 °C ≤ 140 °C (for max. 100h) ≤ 200 °C
Heating and cooling rate		≤ 10 °C h <sup>-1</sup>
Material	– Valve body – Gate – Bellows – Actuator	AISI 316L ESR AISI 316L ESR AISI 316L AISI 303; AISI 6150 ; aluminium
Seal	– Bonnet – Gate – Actuator	metal, silver plated metal, silver plated EPDM
Mounting position		any
Radiation resistance	– Valve body – Actuator – Position indicators	10 <sup>8</sup> Gy (10 <sup>10</sup> rad) 10 <sup>6</sup> Gy (10 <sup>8</sup> rad) 10 <sup>6</sup> Gy (10 <sup>8</sup> rad)
Maximum magnetic field levels		≤ 150 mT

<sup>1</sup> Normal conditions: External pressure 0.1 MPa, pressure inside valve 0 MPa, bellows interspace pressure 0.05 MPa temperatures ambient.

<sup>2</sup> Extreme conditions: External pressure 0.2 MPa, pressure inside valve 0 MPa, bellows interspace pressure 0 MPa, temperature 100 °C

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Modified by: Phil Schneider	Release date: 12.02.2021	<b>1008738EB</b>



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Volume of pneumatic actuator		0.06 l / 0.002 ft <sup>3</sup>
Compressed air min. – max. overpressure		6 – 9 bar / 85 – 130 psi
Compressed air connection		G 1/8" / (USA: 1/8" NPT)
Actuation time (valid for RT, Ø6mm tubing at 4 bar with flow rate of 400 l/min)	– Closing – Opening	≤ 2.0 sec ≤ 2.0 sec
Weight	– Valve complete – Actuator	3.1 kg / 6.8 lbs 1.9 kg / 4.2 lbs
Behavior in case of compressed air pressure drop	– Valve closed – Valve open	Valve remains in closed position Valve closes
Behavior in case of power failure	– Valve closed – Valve open	Depends on control Depends on control

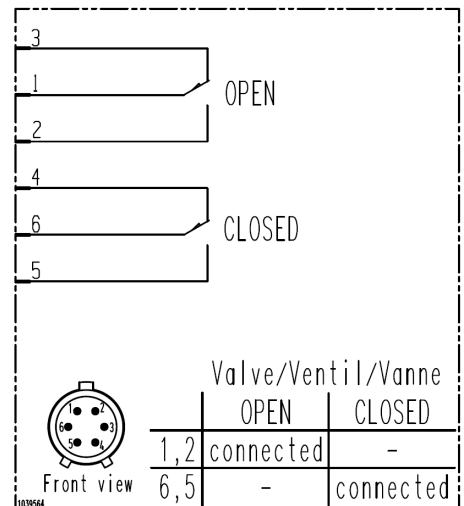
### Related documents

Dimensional drawing No. 996578 Rev A  
STEP file No 996577 Rev A

### Electrical connections

#### Position indicator (2x)

Type Micro switch  
Voltage ≤ 50 V AC/DC  
Current max. ≤ 1.0 A  
Connector on the valve: 8070-2530-02Z16-6PA  
Mating connector:\* 8070-3039-01Z16-6KA  
(pins compatible with AWG 20 wire)



Wiring diagram

### References

The product data are based on either VAT internally/externally performed lab tests or supplier product information. Relevant references listed on document 838738.

\*The mating connector is not part of the valve and needs to be ordered separately at Glenair.

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