



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**All-metal angle valve Series 571, DN 40 (ID 1½")**  
**Ordering No. 57132-KE21-AJO1**

### Description

Flange		ISO-KF 40
Actuator		Pneumatic, single acting with closing spring – without solenoid valve – with position indicator 200°C
Feedthrough		Bellows
Options	AJO =	Product: valve type ITER 51 Flange A+B: ISO-KF 40; Valve body: A dimension 65 mm; Actuator: radiation resistant 10 <sup>6</sup> Gy; Position indicator: double; 200°C; Glenair 6 pin connector; 125 °C; radiation resistant 106 Gy; Bonnet flange: vacuum feedthrough Double bellows; kind of seal double; edge seal; Helicoflex; intermediate pumping; VCR 1/4"

### 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)		49 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)

<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

Created by: Phil Schneider	Release date: 14.02.2022	1/2
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Maximum magnetic field levels		≤ 150 mT
Volume of pneumatic actuator		0.26 l / 0.009 ft³
Compressed air min. – max. overpressure		6 – 9 bar / 87 – 131 psi
Compressed air connection		G ½" / (USA: ½" NPT)
Actuation time	– Closing	≤ 2.0 sec
	– Opening	≤ 2.0 sec
Weight	– Valve complete	10.1 kg / 22.3 lbs
	– Actuator	5.5 kg / 12.1
Behavior in case of compressed air pressure drop	– Valve closed	Valve stays closed
	– Valve open	Valve closes
Behavior in case of power failure	– Valve closed	Depends on control
	– Valve open	Depends on control

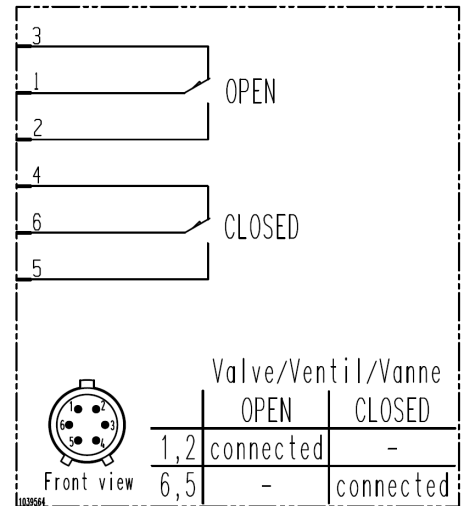
### Related documents

Dimensional drawing No.	1147589	Rev A
STEP file No	1147588	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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