



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

All-metal angle valve Series 570, DN 63 (ID 2½")

Ordering No. 57036-RE21-AJD1

Description

Flange		Weld neck N.D. 65 schedule 40S
Actuator		Pneumatic, single acting with closing spring – without solenoid valve – with position indicator 200°C
Feedthrough		Bellows
Options	AJD =	Product: valve type ITER 51 Flange A+B: weld stub flange schedule 40S; Actuator: radiation resistant 10 ⁶ Gy; Position indicator: double; 200°C; Glenair 6 pin connector; 125 °C; radiation resistant 10 ⁶ 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	< 1 · 10 ⁻⁹ mbar ls ⁻¹
	– Valve seat	< 1 · 10 ⁻⁹ mbar ls ⁻¹
Pressure range		XUHV to 5 bar (abs)
Differential pressure on the plate	– In opening direction	≤ 5 bar
	– In closing direction	≤ 5 bar
Differential pressure at opening		≤ 1 bar >1 bar with reduced number of cycles
Conductance (molecular flow)		80 ls ⁻¹
Cycles until first service (Maximum values: depending on operating conditions and valve contamination)	– Normal conditions ¹	20 000
	– Extreme conditions ²	1 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body	≤ 240 °C
	– Actuator	≤ 140 °C (for max. 100h)
	– Position indicator	≤ 200 °C
Heating and cooling rate		≤ 10 °C h ⁻¹
Material	– Valve body	AISI 316L ESR
	– Gate	AISI 316L ESR
	– Bellows	AISI 316L
	– Actuator	AISI 303; AISI 6150 aluminium
Seal	– Bonnet	metal, silver plated
	– Gate	metal, silver plated
	– Actuator	EPDM
Mounting position		any
Radiation resistance	– Valve body	10 ⁸ Gy (10 ¹⁰ rad)
	– Actuator	10 ⁶ Gy (10 ⁸ rad)
	– Position indicators	10 ⁶ Gy (10 ⁸ rad)

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

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

Created by: Kurt Sonderegger	Release date: 23.10.2019	1/2
Modified by: Phil Schneider	Release date: 12.02.2021	1008597EB



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Maximum magnetic field levels		≤ 150 mT
Volume of pneumatic actuator		0.6 l / 0.021 ft ³
Compressed air min. – max. overpressure		6 – 9 bar / 87 – 131 psi
Compressed air connection		G ½" / (USA: ½" 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	22.9 kg / 50.5 lbs 10.9 kg / 24.0
Behavior in case of compressed air pressure drop	– Valve closed – Valve open	Valve stays closed Valve closes
Behavior in case of power failure	– Valve closed – Valve open	Depends on control Depends on control

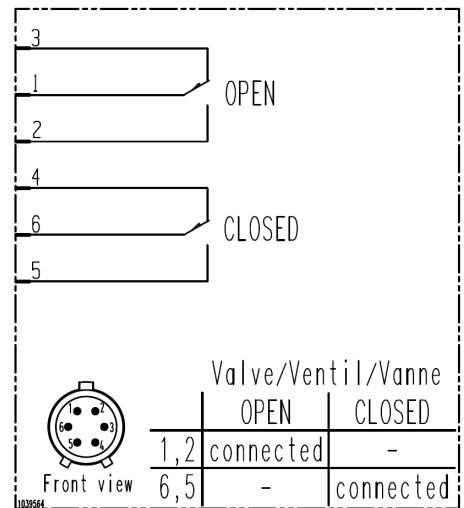
Related documents

Dimensional drawing No.	994203	Rev A
STEP file No	994202	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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