



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV angle valve, Series 284, DN 160
Ordering No. 28444-QE21-CVK1

Description

Flange		ISO-K 160
Actuator		Pneumatic, single acting with closing spring – without solenoid valve – with position indicator
Feedthrough		Bellows
Options	CVK =	– Product: valve type ITER 22 – Actuator: seal material EPDM – Gate: seal material EPDM – Position indicator: double; Glenair 4 pin connector; 120°C – Compressed air connection: female 1/8" ISO/NPT

Technical data¹

Leak rate	– Valve body – Valve seat	$\leq 1 \cdot 10^{-8}$ mbar ls ⁻¹ $< 1 \cdot 10^{-8}$ mbar ls ⁻¹
Leak rate (accidental condition)	– Valve body – Valve seat	$\leq 1 \cdot 10^{-8}$ mbar ls ⁻¹ n/a
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.5 bar (abs)
Differential pressure on the plate ²	– In opening direction – In closing direction	≤ 1.2 bar ≤ 1.5 bar
Differential pressure at opening		≤ 1 bar
Conductance (molecular flow)		1000 ls ⁻¹
Closing time		≤ 1.5 sec.
Cycles until first service (T _{max} 80 °C, under clean conditions)		10 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Position indicator	≤ 150 °C ≤ 120 °C ≤ 120 °C
Material	– Valve body – Actuator – Plate – Bellows	AISI 316L (1.4404) Aluminum AISI 316L (1.4404) AISI 316L (1.4404), AISI 316 Ti (1.4571)
Seal	– Bonnet – Plate – Actuator	metal EPDM EPDM
Weight		14 kg / 31 lbs
Mounting position		any
Radiation resistance		10^6 Gy (10^8 rad)
Maximum magnetic field levels		≤ 150 mT

¹ Values according technical specification D_R8752R v.1.1

² Deviation to technical specification D_R8752R v.1.1 in agreement with responsible IO department

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Modified by: Phil Schneider	Release date: 15.02.2021	957800EB



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Volume of pneumatic actuator		0.65l / 0.023 ft ³
Compressed air min. – max. overpressure		4.5 – 7 bar / 65 – 102 psi
Compressed air connection		1/8" female ISO/NPT
Behavior in case of compressed air pressure drop	– Valve closed – Valve open – During actuation	valve remains closed and leaktight valve closes leaktight valve closes leaktight
Behavior in case of power failure	– Valve closed – Valve open – During actuation	depending on customer installation depending on customer installation depending on customer installation
Assembly cleanliness level		ISO Class 8

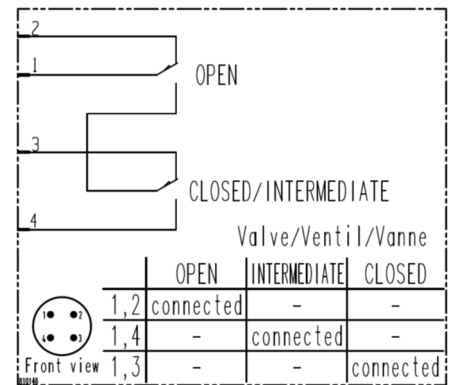
Related documents

Dimensional drawing No.	956292
STEP file No.	956291

Electrical connections

Position indicator (2x)

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current	5 – 100 mA
Short circuit protected	No
Connector on the valve:	8070-2530-02Z16-4GA
Mating connector:*	8070-3039-01Z16-4KA (pins compatible with AWG 20 wire)



Wiring diagram

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

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