



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV angle valve**  
**Series 284, DN 40 (ID 1 1/2")**  
**Ordering No. 28432-GE21-CQD1**

### Description

Flange		CF-R 40
Actuator		Pneumatic, single acting with closing spring – without solenoid valve – with position indicator
Feedthrough		Bellows
Options	CQD =	– Product: valve type ITER 21

### Technical data<sup>1</sup>

Leak rate	– Valve body	$\leq 1 \cdot 10^{-8}$ mbar ls <sup>-1</sup>
	– Valve seat	$< 1 \cdot 10^{-8}$ mbar ls <sup>-1</sup>
Leak rate (accidental condition)	– Valve body	$\leq 1 \cdot 10^{-8}$ mbar ls <sup>-1</sup>
	– Valve seat	n/a
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.5 bar (abs)
Differential pressure on the plate	– In either direction	$\leq 1.5$ bar
Differential pressure at opening		$\leq 1$ bar
Conductance (molecular flow)		45 ls <sup>-1</sup>
Closing time		$\leq 0.55$ sec.
Cycles until first service (Tmax 80 °C, under clean conditions)		10 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body	$\leq 150$ °C
	– Actuator	$\leq 150$ °C
	– Position indicator	$\leq 120$ °C
Material	– Valve body	AISI 304 (1.4301)
	– Actuator	Aluminum
	– Plate	AISI 316L (1.4404)
	– Bellows	AISI 316L (1.4404, 1.4435), AISI 316 Ti (1.4571)
Seal	– Bonnet	metal
	– Plate	EPDM
	– Actuator	EPDM
Weight		1.5 kg / 3.3 lbs
Mounting position		any
Radiation resistance		$10^6$ Gy ( $10^8$ rad)
Maximum magnetic field levels		$\leq 150$ mT
Volume of pneumatic actuator		0.035 l / 0.0012 ft <sup>3</sup>
Compressed air min. – max. overpressure		5 – 8 bar / 73 – 116 psi
Compressed air connection		1/8" female ISO/NPT

<sup>1</sup> Values according technical specification D\_R8752R v.1.1

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Behavior in case of compressed air pressure drop	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve open</li> <li>- During actuation</li> </ul>	<ul style="list-style-type: none"> <li>valve remains closed and leaktight</li> <li>valve closes leaktight</li> <li>valve closes leaktight</li> </ul>
Behavior in case of power failure	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve open</li> <li>- During actuation</li> </ul>	<ul style="list-style-type: none"> <li>depending on customer installation</li> <li>depending on customer installation</li> <li>depending on customer installation</li> </ul>
Assembly cleanliness level		ISO Class 8

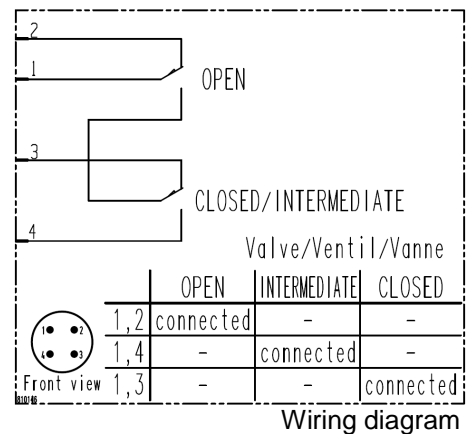
### Related documents

Dimensional drawing No.	854980
STEP file No.	854979

### Electrical connections

#### Position indicator

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current	5 – 100 mA
Short circuit protected	No
Male plug (VAT valve)	4 pin
Female connector (ITER) <sup>2</sup>	8070-2201-01Z16-4SA (Glenair)



<sup>2</sup> Not included with delivery

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