



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV inline valve, Series 285, DN 25 (ID 1")**  
**Ordering No. 28528-KE21-CQD1**

### Description

Flange		ISO-KF 25
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	$\leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1}$
	– Valve seat	$< 1 \cdot 10^{-8} \text{ mbar ls}^{-1}$
Leak rate (accidental condition)	– Valve body	$\leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1}$
	– Valve seat	n/a
Pressure range		$1 \cdot 10^{-8} \text{ mbar to } 1.5 \text{ bar (abs)}$
Differential pressure on the plate	– In either direction	$\leq 1.5 \text{ bar}$
Differential pressure at opening		$\leq 1 \text{ bar}$
Conductance (molecular flow)		$14 \text{ ls}^{-1}$
Closing time		$\leq 0.2 \text{ sec.}$
Cycles until first service (Tmax 80 °C, under clean conditions)		10 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body	$\leq 150 \text{ °C}$
	– Actuator	$\leq 150 \text{ °C}$
	– Position indicator	$\leq 120 \text{ °C}$
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		0.65 kg / 1.433 lbs
Mounting position		any
Radiation resistance		$10^6 \text{ Gy (} 10^8 \text{ rad)}$
Maximum magnetic field levels		$\leq 150 \text{ mT}$
Volume of pneumatic actuator		0.011 l / 0.0004 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 – 8 bar / 58 – 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	– 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

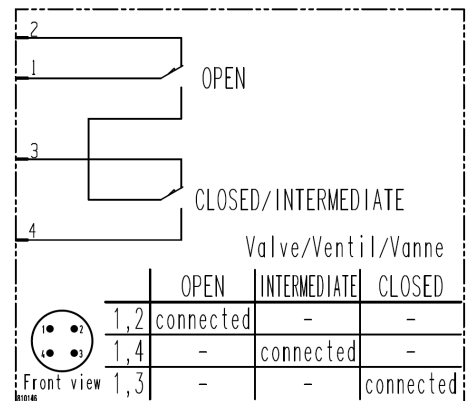
### Related documents

Dimensional drawing No.	821293
STEP file No.	921292

### 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)



Wiring diagram

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

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