



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV angle valve
Series 284, DN 25 (ID 1")
Ordering No. 28428-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 data¹

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 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 ³
Compressed air min. – max. overpressure		4 – 8 bar / 58 – 116 psi
Compressed air connection		1/8" female ISO/NPT

¹ Values according technical specification D_R8752R v.1.1

Created by: GARM	Release date: 13.02.2019	1/2
Modified by:	Release date:	893116EB



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV angle valve

Series 284, DN 25 (ID 1")

Ordering No. 28428-KE21-CQD1

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

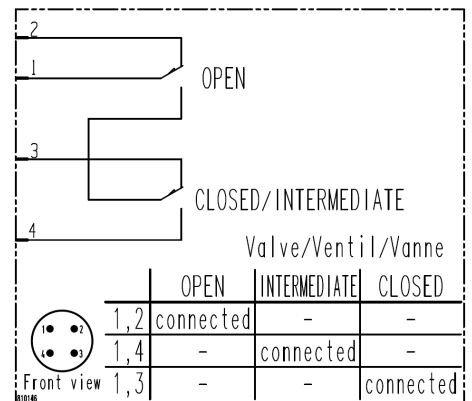
Related documents

Dimensional drawing No.	893118
STEP file No.	893117

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) ²	8070-2201-01Z16-4SA (Glenair)



Wiring diagram

² Not included with delivery

Created by: GARM	Release date: 13.02.2019	2/2
Modified by:	Release date:	893116EB