



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV angle valve
Series 284, DN 25 (ID 1")
Ordering No. 28428-GE21-CQD1

Description

| | | |
|-------------|-------|---|
| Flange | | CF-R 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 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 Gy (10^8 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: | 861829EB |



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| | | |
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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 |

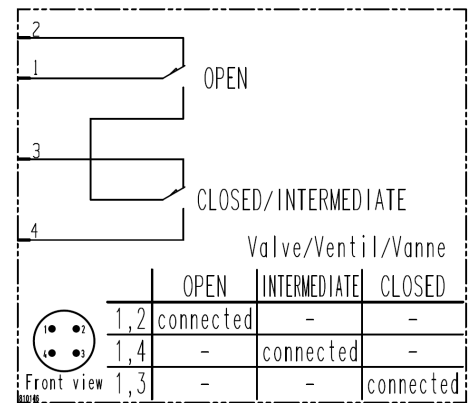
Related documents

| | |
|-------------------------|--------|
| Dimensional drawing No. | 854970 |
| STEP file No. | 854969 |

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

| | | |
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