# 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 data

1. **Leak rate**  
   - Valve body: \( \leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)  
   - Valve seat: \( < 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)  

2. **Leak rate (accidental condition)**  
   - Valve body: \( \leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)  
   - Valve seat: n/a  

3. **Pressure range**: \( 1 \cdot 10^{-8} \text{ mbar to 1.5 bar (abs)} \)  

4. **Differential pressure on the plate**  
   - In either direction: \( \leq 1.5 \text{ bar} \)  

5. **Differential pressure at opening**: \( \leq 1 \text{ bar} \)  

6. **Conductance (molecular flow)**: \( 14 \text{ ls}^{-1} \)  

7. **Closing time**: \( \leq 0.2 \text{ sec.} \)  

8. **Cycles until first service**  
   (Tmax 80 °C, under clean conditions): 10 000

9. **Temperature**  
   (Maximum values: depending on operating conditions and sealing materials)  
   - Valve body: \( \leq 150 \text{ °C} \)  
   - Actuator: \( \leq 150 \text{ °C} \)  
   - Position indicator: \( \leq 120 \text{ °C} \)  

10. **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)  
    - Bonnet: metal  
    - Plate: EPDM  
    - Actuator: EPDM

11. **Seal**  
    - Bonnet: metal  
    - Plate: EPDM  
    - Actuator: EPDM

12. **Weight**: 0.65 kg / 1.433 lbs

13. **Mounting position**: any

14. **Radiation resistance**: \( 10^6 \text{ Gy} (10^8 \text{ rad}) \)

15. **Maximum magnetic field levels**: \( \leq 150 \text{ mT} \)

16. **Volume of pneumatic actuator**: 0.011 l / 0.0004 ft³

17. **Compressed air**  
    - min. – max. overpressure: 4 – 8 bar / 58 – 116 psi

18. **Compressed air connection**: 1/8" female ISO/NPT

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1. Values according to 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

Behavior in case of power failure
- Valve closed
- Valve open
- During actuation

Assembly cleanliness level
ISO Class 8

Related documents
Dimensional drawing No. 854970
STEP file No. 854969

Electrical connections

Position indicator
Type: Micro switch
Voltage: \( \leq 50 \text{ V AC / DC} \)
Current: 5 – 100 mA
Short circuit protected: No
Male plug (VAT valve): 4 pin
Female connector (ITER) \(^2\): 8070-2201-01Z16-4SA (Glenair)

\(^2\) Not included with delivery