



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV angle valve**  
**Series 284, DN 100 (ID 4'')**  
**Ordering No. 28440-GE01-CQS1**

### Description

Flange		CF-R 100
Actuator		Manual actuator
Feedthrough		Bellows
Options	CQS =	– Product: valve type ITER 25 – Gate: seal material EPDM

### 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 <sup>2</sup>	– In opening direction	$\leq 1.2$ bar
	– In closing direction	$\leq 1.5$ bar
Differential pressure at opening		$\leq 1$ bar
Conductance (molecular flow)		440 ls <sup>-1</sup>
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
	– Hand wheel	$\leq 120$ °C
Material	– Valve body	AISI 316L (1.4404)
	– Actuator	Aluminum
	– Hand wheel <sup>3</sup>	Plastic
	– Plate	AISI 316L (1.4404)
	– Bellows	AISI 316L (1.4404, 1.4435) AISI 316 Ti (1.4571)
Seal	– Bonnet	metal
	– Plate	EPDM
Weight		9 kg / 20 lbs
Mounting position		any
Radiation resistance		$10^6$ Gy ( $10^8$ rad)
Maximum magnetic field levels		$\leq 150$ mT
Assembly cleanliness level		ISO Class 8

### Related documents

Dimensional drawing No.	862106 Rev A
STEP file No.	862105 Rev A

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

<sup>2</sup> Deviation to technical specification D\_R8752R v.1.1 in agreement with responsible IO department

<sup>3</sup> Removable

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