



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV angle valve**  
**Series 284, DN 16 (ID 5/8")**  
**Ordering No. 28424-GE31-0001**

### Description

Flange	CF-R 16
Actuator	Pneumatic, single acting with closing spring – with solenoid valve – without position indicator
Feedthrough	Bellows

### Technical data

Leak rate	– Valve body – Valve seat	$\leq 5 \cdot 10^{-10}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-10}$ mbar to 5 bar (abs)
Differential pressure on the plate	– In opening direction – In closing direction	$\leq 2$ bar $\leq 5$ bar
Differential pressure at opening		$\leq 1$ bar
Conductance (molecular flow)		5 ls <sup>-1</sup>
Closing time		$\leq 0.1$ sec.
Cycles until first service (T <sub>max</sub> 80 °C, under clean conditions)		3 million
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid	$\leq 150$ °C $\leq 120$ °C $\leq 80$ °C
Material	– Valve body – Actuator – Plate – Bellows	AISI 304 (1.4301) Aluminum AISI 316L (1.4435 ESU) AISI 316L (1.4404, 1.4435) AISI 316 Ti (1.4571)
Seal	– Bonnet O-ring – Plate O-ring – Actuator O-ring	Metal FKM (Viton®) FKM (Viton®)
Weight		0.5 kg / 1.102 lbs
Mounting position		any
Volume of pneumatic actuator		0.004 l / 0.0001 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 – 8 bar / 58 – 116 psi
Compressed air connection		M5 female (10-32 UNF suitable)

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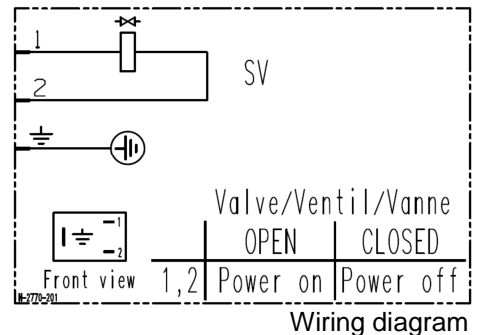
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Behavior in case of compressed air pressure drop	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve opened</li> <li>- During actuation</li> </ul>	<ul style="list-style-type: none"> <li>valve remains closed and leaktight</li> <li>valve closes leaktight</li> <li>valve closes leaktight</li> </ul>
Behavior in case of power failure	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve opened</li> <li>- During actuation</li> </ul>	<ul style="list-style-type: none"> <li>valve remains closed and leaktight</li> <li>valve closes leaktight</li> <li>valve closes leaktight</li> </ul>

### Electrical connections

#### Solenoid valve

Type	3/2-way
Voltage	See solenoid
Power	See solenoid
Connector	Rectangle plug, Type B (DIN standard)
Cable	Ø6 – 8 mm



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