



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**"Easy close" all-metal angle valve**  
**Series 541, 16 (ID 5/8")**  
**Ordering No. 54124-GE02-0001**

### Description

Flange	DN 16 CF-R
Actuator	manual, hexagon head SW 10 mm or inside $\square$ 1/4"
Feedthrough	bellows

### Technical data

Leak rate	
- To the outside	$< 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
- Seat	$< 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
Molecular flow conductance	5 ls <sup>-1</sup>
Pressure range	XHV to 2 bar (abs)
Test pressure	1 bar
Differential pressure on the gate	
- in closing and opening direction	$\leq 2$ bar
Max. differential pressure at opening	
- in closing and opening direction	1 bar (> 1 bar with reduced cycle life)
Lifetime	$\geq 1'000$ cycles
Bake-out temperature (incl. actuator)	$\leq 300^{\circ}\text{C}$ (open and closed)
Heating and cooling rate	$\leq 60^{\circ}\text{C h}^{-1}$
Material	
- Body, Mechanism (in contact with media)	1.4404 / 1.4435, AISI 316L
- Bellows	1.4404, AISI 316 L
Seal	
- Bonnet	metal
- Plate	metal
Mounting position	any
Radiation resistance	
- Valve / actuator	$10^8$ Gy ( $10^{10}$ rad)
Turns per stroke	6
Weight	0.4 kg / 0.9 lbs

### Attachments

Dimensional drawing No. 528338

### Comments

The VAT «Easy close» all-metal angle valves Series 54 are sealed with patented sealing system (hard to hard).

During the specified lifetime no service is necessary under clean operating conditions.

VAT Series 54 all-metal angle valves use a hexagon head for closing. The valve has not to be closed with a specific closing torque, it is closed to a mechanical stop. No torque wrench is needed to operate the valve.

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