



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**All-metal angle valve, Series 570, DN 160 (ID 6'')**

**Ordering No. 57044-GE44-0003**

### Description

Flange		DN 160 CF-R
Actuator		Pneumatic double acting - with solenoid valve - with position indicator
Feed through		Bellows
Option	=	Standard

### Technical data

Leak rate	- Valve body - Valve seat	$< 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>
Pressure range	- T = 200°C - T = 450°C	XUHV to 5 bar (abs) XUHV to 3.5 bar (abs)
Test pressure		1 bar
Differential pressure on the gate		≤ 5 bar
Differential pressure at opening		≤ 1 bar, > 1 bar with reduced cycle life
Conductance (molecular flow)		940 ls <sup>-1</sup>
Cycles until first service		10 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve body - - Actuator - Position indicator - Solenoid	≤ 450 °C (open) ≤ 350 °C (closed) ≤ 200 °C (for max. 100h) ≤ 80 °C ≤ 80 °C
Heating and cooling rate		≤ 60 °C h <sup>-1</sup>
Material (in contact with media)	- Valve body - Mechanism - Bellows	1.4435/1.4404, AISI 316 L 1.4435 ESU, AISI 316 L ESR 1.4404, AISI 316 L
Seal	- Bonnet - Gate - Actuator	metal, silver plated metal, silver plated FKM (Viton®)
Mounting position		any
Radiation resistance	- Valve body - Actuator - Position indicator - Solenoid	10 <sup>8</sup> Gy (10 <sup>10</sup> rad) 10 <sup>5</sup> Gy (10 <sup>7</sup> rad) 10 <sup>5</sup> Gy (10 <sup>7</sup> rad) 10 <sup>4</sup> Gy (10 <sup>6</sup> rad)
Volume of pneumatic actuator		3.3 l / 0.116 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 - 5 bar / 58 - 73 psig

Created by: Martin Greuter	Release date: 2014-05-01	1 of 2
Modified by:	Release date:	<b>747979EA</b>



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### Compressed air connections

R 1/8" (USA: 1/8" NPT)

#### Actuation time

(valid for RT, Ø6mm tubing at 4 bar with flow rate of 400 l/min)

- Closing
- Opening

≤ 7.0 sec  
≤ 7.0 sec

#### Weight

65 kg / 143 lbs

Behavior in case of compressed air pressure drop

- Valve closed
- Valve open

Undefined  
Undefined

Behavior in case of power failure

- Valve closed
- Valve open

Valve remains in closed position  
Valve closes

## Related documents

Dimensional drawing No. 376579

## Electrical connections

### Position indicator

Type

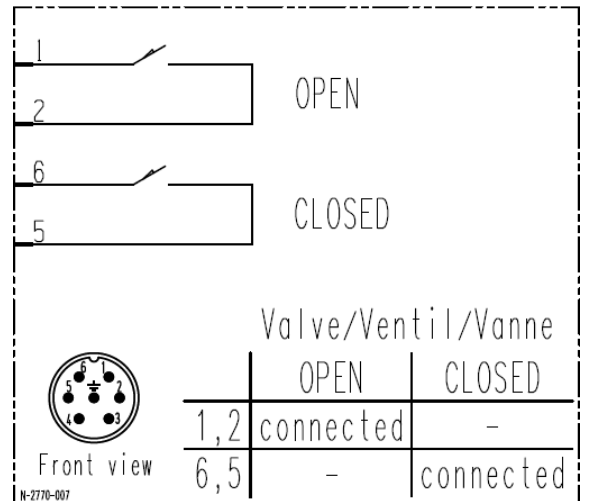
micro switch

Voltage

≤ 50 V AC / DC

Current max.

≤ 1.2 A



Wiring diagram

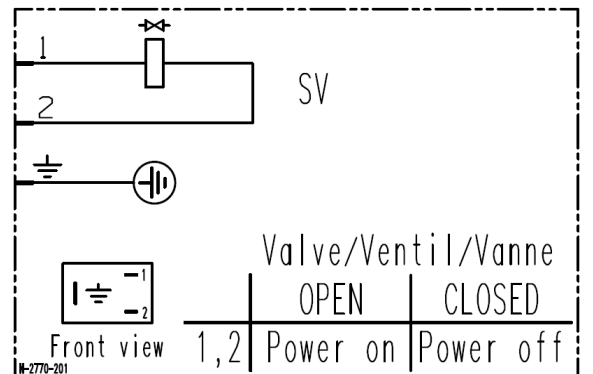
### Solenoid

Voltage

according to PO

Power consumption

≤ 2.5 W



Wiring diagram