



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV gate valve, Series 108, DN 160 (6" )**  
**Ordering No. 10844-PE24-BUE1**

### Description

Flange		ISO-F 160
Actuator		pneumatic, double acting – with position indicator
Feedthrough		Bellows
Options	BUE =	– Product: valve type ITER 42 – Actuator: seal material EPDM – Gate: seal material EPDM (vulcanized) – Position indicator: double; Glenair 4 pin connector; 125 °C

### Technical data<sup>1</sup>

Leak rate (nominal condition)	– Valve body – Valve seat	< 1 · 10 <sup>-8</sup> mbar ls <sup>-1</sup> < 1 · 10 <sup>-8</sup> mbar ls <sup>-1</sup>
Leak rate (accidental condition)	– Valve body – Valve seat	< 1 · 10 <sup>-8</sup> mbar ls <sup>-1</sup> n/a
Pressure range		1 · 10 <sup>-8</sup> mbar to 1.5 bar (abs)
Differential pressure on the gate	– In either direction	≤ 1.5 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		5880 ls <sup>-1</sup>
Cycles until first service (nominal condition)		10 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Position indicator	≤ 150 °C (bake-out max. 24h) ≤ 150 °C ≤ 150 °C
Heating and cooling rate		50 °C h <sup>-1</sup>
Material (main components)	– Valve Body – Mechanism – Bellows	AISI 304 (1.4301) AISI 316L (1.4404), AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal EPDM EPDM
Weight		19.4 kg / 42.8 lbs
Mounting position		any
Radiation resistance		10 <sup>6</sup> Gy (10 <sup>8</sup> rad)
Maximum magnetic field levels		≤ 150 mT
Volume of pneumatic actuator		0.14 l / 0.0049 ft <sup>3</sup>
Compressed air <sup>2</sup> (min. – max. overpressure)		4 – 7 bar / 58 – 102 psi

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

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Modified by: Phil Schneider	Release date: 12.02.2021	<b>958053EB</b>



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Compressed air connection		1/8" ISO / NPT
Actuation time	– closing	1.5 s
	– opening	1.5 s
Behavior in case of compressed air pressure drop	– Valve closed	valve remains closed and leaktight
	– Valve open	undefined
	– During actuation	undefined
Behavior in case of power failure	– Valve closed	depending on customer installation
	– Valve open	
	– During actuation	
Assembly cleanliness level		ISO Class 8

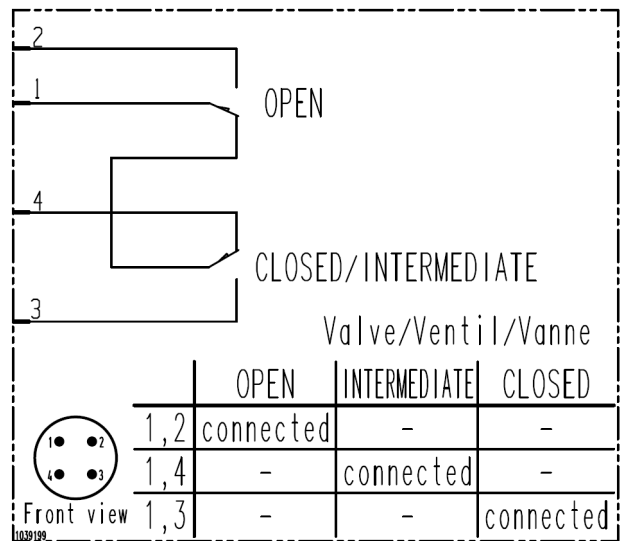
### Related documents

Dimensional drawing No. 953308 Rev A  
STEP file No. 953306 Rev A

### Electrical connections

#### Position indicator (2x)

Type Micro switch  
Voltage ≤ 50 V AC / DC  
Current max. ≤ 1.2 A  
Connector on the valve: 8070-2530-02Z16-4GA  
Mating connector:\* 8070-3039-01Z16-4KA  
(pins compatible with AWG 20 wire)



Wiring diagram

\*The mating connector is not part of the valve and needs to be ordered separately at Glenair.

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

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