



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 100 (4")
Ordering No. 10840-PE24-BUE1

Description

Flange		ISO-F 100
Actuator		pneumatic, double acting – without solenoid valve – 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 data¹

Leak rate (nominal condition)	– Valve body – Valve seat	$< 1 \cdot 10^{-8}$ mbar ls ⁻¹ $< 1 \cdot 10^{-8}$ mbar ls ⁻¹
Leak rate (accidental condition)	– Valve body – Valve seat	$< 1 \cdot 10^{-8}$ mbar ls ⁻¹ n/a
Pressure range		$1 \cdot 10^{-8}$ 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)		1740 ls ⁻¹
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 ⁻¹
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		12.6 kg / 27.8 lbs
Mounting position		any
Radiation resistance		10^6 Gy (10^8 rad)
Maximum magnetic field levels		≤ 150 mT
Volume of pneumatic actuator		0.11 l / 0.0038 ft ³
Compressed air ²		4 – 7 bar / 58 – 102 psi

¹ Values according technical specification D_R8752R v.1.1

Created by: Phil Schneider	Release date: 12.06.2020	1/2
Modified by: Phil Schneider	Release date: 12.02.2021	958032EB



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(min. – max. overpressure)

Compressed air connection		1/8" ISO / NPT
Actuation time	– closing	1.2 s
	– opening	1.2 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

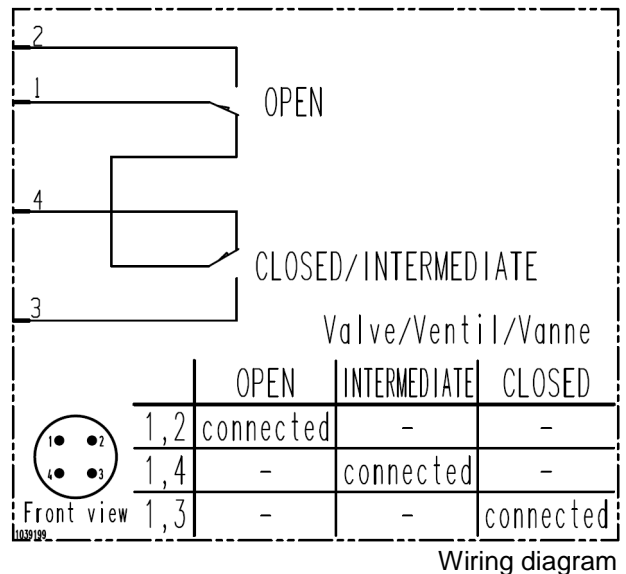
Related documents

Dimensional drawing No. 953846 Rev A
STEP file No. 953845 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)



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

² Deviation to technical specification D_R8752R v.1.1 in agreement with responsible IO department

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