VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet
Mini UHV gate valve, Series 010, DN 40 (ID 1½'')
Ordering No. 01032-KE24-BFS1

Description

Flange		ISO-KF 40
Actuator		pneumatic, double acting – without solenoid valve – with position indicator
Feedthrough		Bellows
Options	BFS =	– Product: valve type ITER 32 – Actuator: seal material EPDM – Gate: seal material EPDM (vulcanized) – Position indicator: double; Glenair 4 pin connector; 125 °C

Technical data[1]

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	$\leq 1 \cdot 10^{-8}$ mbar ls^{-1} n/a
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.5 bar (abs)
Differential pressure on the gate		≤ 1.5 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		160 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	– Valve Body – Gate – Bellows	AISI 304 (1.4301), AISI 316L (1.4435) AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal EPDM EPDM
Weight		2.2 kg / 4.85 lbs
Mounting position		any
Radiation resistance		10^6 Gy (10^8 rad)
Maximum magnetic field levels		≤ 150 mT
Volume of pneumatic actuator		0.06 l / 0.002 ft^3
Compressed air[2]		5 – 7 bar / 73 – 102 psi

[1] Values according technical specification D_R8752R v.1.1

(min. – max. overpressure)		
Compressed air connection		⅛" ISO/NPT
Actuation time	– closing – opening	0.7 s 0.7 s
Behavior in case of compressed air pressure drop	– Valve closed – Valve open – During actuation	valve remains closed undefined undefined
Behavior in case of power failure	– Valve closed – Valve open – During actuation	depending on customer installation
Assembly cleanliness level		ISO Class 8

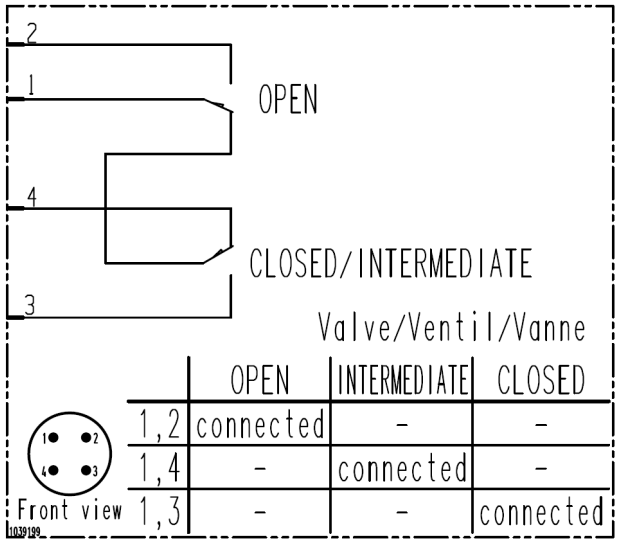
Related documents

Dimensional drawing No.	891255 Rev A
STEP file No.	891257 Rev A

Electrical connections

Position indicator (2x)

Type	Micro switch
Voltage	≤ 50 V AC
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)



	OPEN	INTERMEDIATE	CLOSED
1,2	connected	-	-
1,4	-	connected	-
1,3	-	-	connected

Wiring diagram

*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