



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 100 (4")
Ordering No. 10840-CE24-BUE1

Description

| | | |
|-------------|-------|--|
| Flange | | CF-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 | | 11.3 kg / 24.9 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 | 958034EB |



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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 |

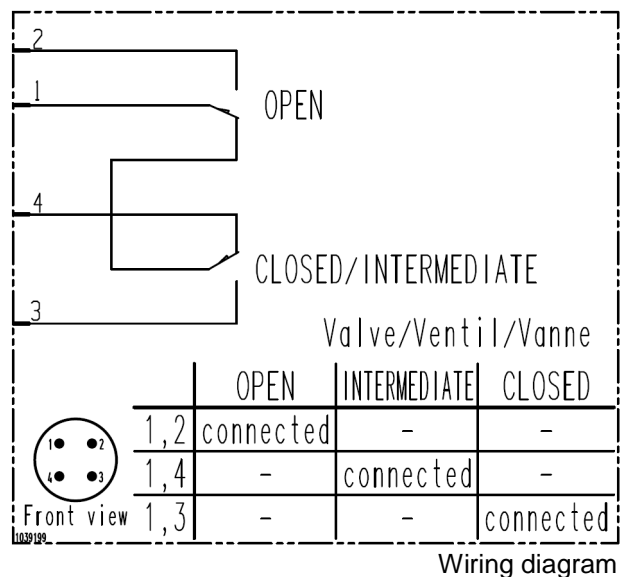
Related documents

Dimensional drawing No. 857770 Rev A
STEP file No. 857769 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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