



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum angle valve
Series 244, DN 100 (ID 4'')
Ordering No. 24440-QA41-0001

Description

Flange	ISO-K 100
Actuator	Pneumatic, single acting with closing spring – with solenoid valve – with position indicator
Feedthrough	Shaft feedthrough

Technical data

Leak rate (static)	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-7}$ mbar to 2 bar (abs)
Differential pressure on the plate	– In opening direction – In closing direction	≤ 1.2 bar ≤ 2 bar
Differential pressure at opening		≤ 1 bar
Conductance (molecular flow)		440 ls ⁻¹
Actuation time	– Closing – Opening	≤ 1 sec. ≤ 1 sec.
Cycles until first service (Tmax 80°C, under clean conditions)		1 million
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	≤ 150 °C ≤ 120 °C ≤ 50 °C ≤ 80 °C
Material	– Valve body – Actuator – Plate – Shaft feedthrough – Spring – Snap ring for axle	Aluminum (EN AC-42000) Aluminum Aluminum (EN AW 6082) Aluminum (EN AW 6082) AISI 301 (1.4310) AISI 301 (1.4310)
Seal	– Bonnet O-ring – Plate O-ring – Feedthrough O-ring – Actuator O-ring	FKM (Viton®) FKM (Viton®) FKM (Viton®) FKM (Viton®)
Weight		9 kg / 20 lbs
Mounting position		any
Volume of pneumatic actuator		0.3 l / 0.01 ft ³
Compressed air min. – max. overpressure		4.5 – 7 bar / 65 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " female
Behavior in case of compressed air pressure drop	– Valve closed – Valve opened – During actuation	Valve remains closed and leaktight Valve closes leaktight Valve closes leaktight

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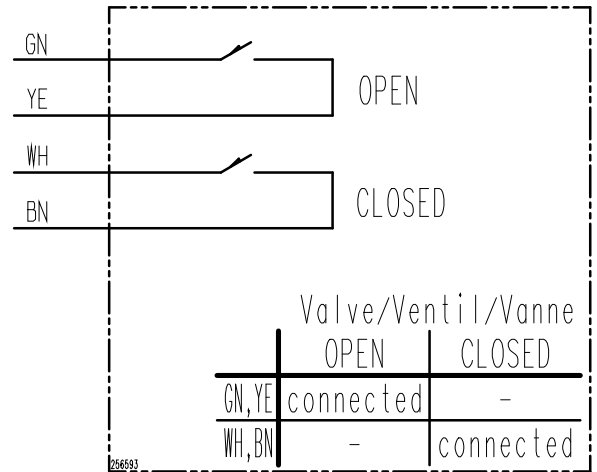
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Behavior in case of power failure – Valve closed Valve remains closed and leaktight
– Valve opened Valve closes leaktight
– During actuation Valve closes leaktight

Electrical connection

Position indicator

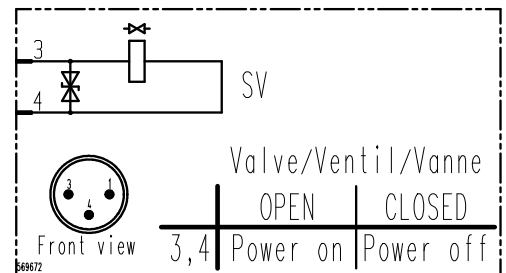
Type Micro switch
Voltage ≤ 50 V AC / DC
Current 5...100 mA
Short circuit protected No
Connection cable, 4 wire
Cable length 500 mm
Wire cross section 0.25 mm²



Wiring diagram

Solenoid valve

Type 3/2 way
Voltage See label on solenoid
Connection type plug, male M8x1
Additional feature LED orange; overvoltage protection; adjustable emergency operation; silencer



Wiring diagram