

# Product data sheet Vacuum angle valve Series 244, DN 100 (ID 4'') Ordering No. 24440-QE44-0001

## Description

Flange		ISO-K 100
Actuator		Pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough		Shaft feedthrough
Technical data		
Leak rate (static)	– Valve body – Valve seat	< 1 · 10 <sup>-9</sup> mbar ls <sup>-1</sup> < 1 · 10 <sup>-9</sup> mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-7}$ mbar to 2 bar (abs)
Differential pressure on the plate	<ul> <li>In opening direction</li> <li>In closing direction</li> </ul>	≤ 1.2 bar ≤ 2 bar
Differential pressure at opening		$\leq$ 1 bar [1 bar with reduced number of cycles]
Conductance (molecular flow)		440 ls <sup>-1</sup>
Actuation time	– Closing – Opening	≤ 1 sec. ≤ 1 sec.
Cycles until first service (Tmax 80°C, under clean conditions)		2 million
Temperature (Maximum values: depending on operating conditions and sealing materials)	<ul> <li>Valve body</li> <li>Actuator</li> <li>Solenoid valve</li> <li>Position indicator</li> </ul>	≤ 150 °C ≤ 120 °C ≤ 50 °C ≤ 80 °C
Material	<ul> <li>Valve body</li> <li>Actuator</li> <li>Plate</li> <li>Shaft feedthrough</li> </ul>	AISI 316L (1.4404) Aluminum AISI 316L (1.4404) AISI 304 (1.4301)
Seal	<ul> <li>Bonnet O-ring</li> <li>Plate O-ring</li> <li>Feedthrough O-ring</li> <li>Actuator O-ring</li> </ul>	FKM (Viton®) FKM (Viton®) FKM (Viton®) FKM (Viton®)
Weight		10 kg / 22 lbs
Mounting position		any
Volume of pneumatic actuator		0.3 I / 0.01 ft <sup>3</sup>
Compressed air min. – max. overpressure		4.5 – 7 bar / 65 – 102 psi
Compressed air connection		G <sup>1</sup> / <sub>8</sub> " female
Behavior in case of compressed air pressure drop	<ul> <li>Valve closed</li> <li>Valve opened</li> <li>During actuation</li> </ul>	depending on customer installation depending on customer installation depending on customer installation

Created by: LIN	Release date: 25.02.2013	1/2
Modified by:	Release date:	600822EA



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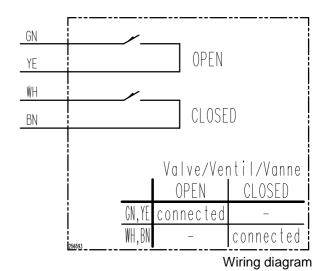
Behavior in case of power failure

- Valve closed
  Valve opened
- Valve opened
   During actuation
- Valve remains closed and leaktight Valve closes leaktight Valve closes leaktight

### **Electrical connection**

#### **Position indicator**

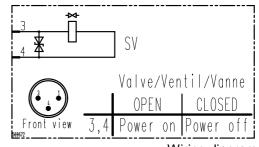
- Type Voltage Current Short circuit protected Connection Cable length Wire cross section
- Micro switch  $\leq 50 \text{ V AC / DC}$ 5...100 mA No cable, 4 wire 500 mm 0.25 mm<sup>2</sup>



#### Solenoid valve

Type Voltage Connection type Additional feature

5/2 way See label on solenoid plug, male M8x1 LED orange; overvoltage protection; adjustable emergency operation; silencer



Wiring diagram

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