



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Large pendulum valve, Series 168, DN 500 (ID 20'')**  
**Ordering No. 16854-JA44**

### Description

Flange	JIS 500
Actuator	Pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Rotary feedthrough

### Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-7}$ mbar to 1.2 bar (abs)
Differential pressure on the gate		$\leq 1.2$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		90 000 ls <sup>-1</sup>
Cycles until first service		100 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	$\leq 120$ °C $\leq 80$ °C $\leq 50$ °C $\leq 80$ °C
Heating and cooling rate		$\leq 30$ °C h <sup>-1</sup>
Material	– Valve body – Mechanics – Gate – Feedthrough	EN AC-42100 (3.2371), EN AW-6082 (3.2315) EN AC-42100 (3.2371) EN AW-6082 (3.2315) EN AW-6082 (3.2315), AISI 303 (1.4305)
Seal	– Bonnet – Gate – Actuator – Feedthrough	FKM (Viton®) FKM (Viton®) FKM (Viton®), NBR FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		3.3 l / 0.116 ft <sup>3</sup>
Compressed air min. – max. overpressure		5 – 7 bar / 73 – 102 psi
Compressed air connection		G1/8" (ISO / NPT for USA)
Actuation time	– closing – opening	14 s 14 s

Created by: MAEM	Release date: 2014-10-30	1 of 2
Modified by:	Release date:	<b>259970EA</b>



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Large pendulum valve, Series 168, DN 500 (ID 20'')**  
**Ordering No. 16854-JA44**

Weight

115 kg / 254 lbs

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

valve remains closed  
valve closes  
valve closes

## Electrical connections

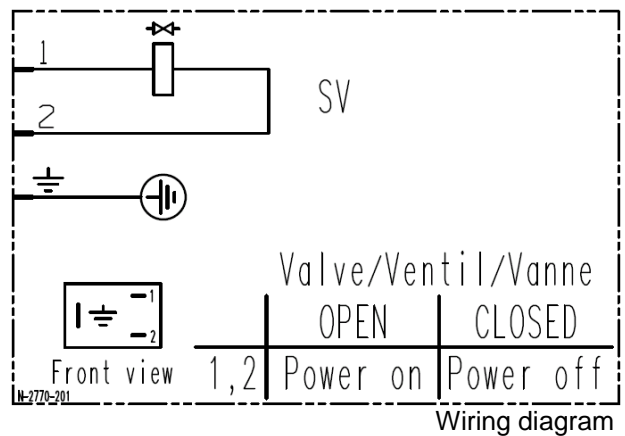
### Solenoid valve

Type

4/2 way

Voltage

Defined by order



### Position indicator

Type

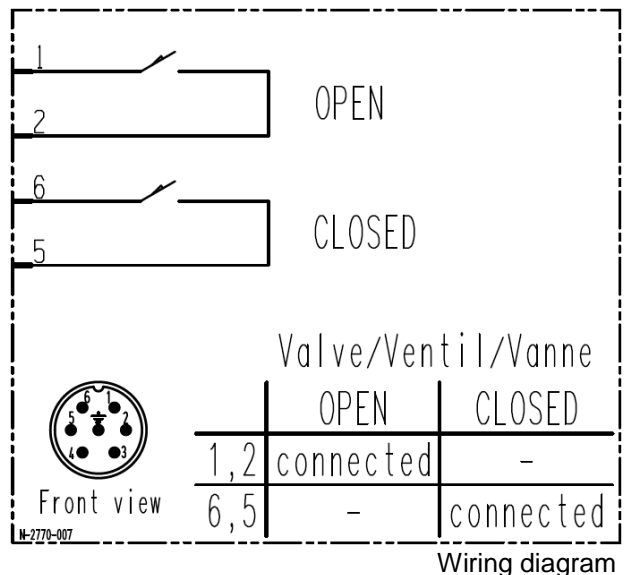
Micro switch

Voltage

≤ 50 V AC / DC

Current max.

≤ 3 A



Created by: MAEM

Release date: 2014-10-30

2 of 2

Modified by:

Release date:

**259970EA**