



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

Large pendulum valve, Series 168, DN 500 (ID 20'')

Ordering No. 16854-PA24

### Description

Flange	ISO-F 500
Actuator	Pneumatic, double acting – with position indicator
Feedthrough	Rotary feedthrough

### Technical data

Leak rate	– Valve body	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
	– Valve seat	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		$1 \cdot 10^{-7} \text{ mbar}$ to 1.2 bar (abs)
Differential pressure on the gate		$\leq 1.2 \text{ bar}$
Differential pressure at opening		$\leq 30 \text{ mbar}$
Conductance (molecular flow)		$90\,000 \text{ ls}^{-1}$
Cycles until first service		100 000
Temperature	– Valve body	$\leq 120 \text{ }^\circ\text{C}$
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	$\leq 80 \text{ }^\circ\text{C}$
	– Position indicator	$\leq 80 \text{ }^\circ\text{C}$
Heating and cooling rate		$\leq 30 \text{ }^\circ\text{C h}^{-1}$
Material	– Valve body	EN AC-42100 (3.2371), EN AW-6082 (3.2315)
	– Mechanics	EN AC-42100 (3.2371)
	– Gate	EN AW-6082 (3.2315)
	– Feedthrough	EN AW-6082 (3.2315), AISI 303 (1.4305)
Seal	– Bonnet	FKM (Viton <sup>®</sup> )
	– Gate	FKM (Viton <sup>®</sup> )
	– Actuator	FKM (Viton <sup>®</sup> ), NBR
	– Feedthrough	FKM (Viton <sup>®</sup> )
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		1/8" ISO / NPT
Actuation time	– closing	14 s
	– opening	14 s

Created by: LBI	Release date: 30.08.2017	1/2
Modified by:	Release date:	<b>762636EB</b>



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

Large pendulum valve, Series 168, DN 500 (ID 20'')

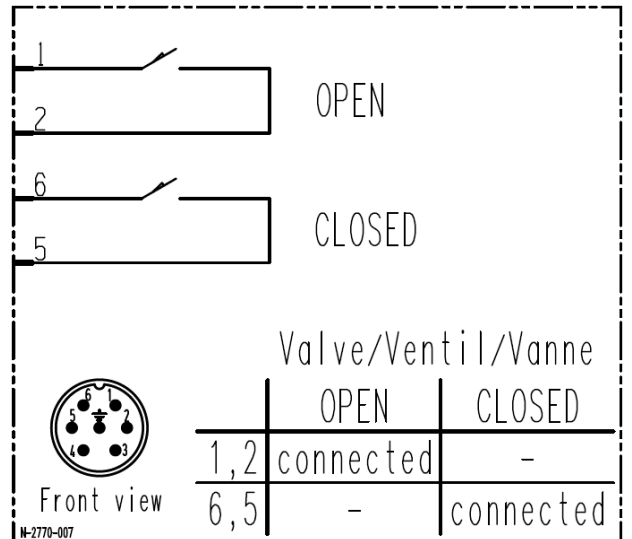
Ordering No. 16854-PA24

Weight		115 kg / 254 lbs
Behavior in case of compressed air pressure drop	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve open</li> <li>- During actuation</li> </ul>	valve remains closed undefined undefined
Behavior in case of power failure	<ul style="list-style-type: none"> <li>- Valve closed</li> <li>- Valve open</li> <li>- During actuation</li> </ul>	valve remains closed valve closes valve closes

## Electrical connections

### Position indicator

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current max.	≤ 3 A



Wiring diagram

Created by: LBI	Release date: 30.08.2017	2/2
Modified by:	Release date:	762636EB