



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Large vacuum gate valve, Series 191, DN 500 (ID 20")
Ordering No. 19154-PE44

Description

Flange	ISO-F 500
Actuator	pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Bellow

Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 1 bar (abs)
Differential pressure on the plate	– in opening direction – in closing direction	≤ 1 bar ≤ 1 bar
Differential pressure at opening		≤ 20 mbar
Conductance (molecular flow)	ISO-F	90000 ls ⁻¹
Cycles until first service		20 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Solenoid valve – Position indicator	≤ 150 °C ≤ 80 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
Material	– Valve Body – Mechanism – Bellows	AISI 304 (1.4301) EN AW-6082 (3.2315), AISI 304 (1.4301) AISI 316L (1.4435) or AISI 304L (1.4306)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®) FKM (Viton®) NBR
Mounting position		any
Volume of pneumatic actuator		2.7 l / 0.095 ft ³
Compressed air min. – max. overpressure		5 – 9 bar / 73 – 131 psi
Compressed air connection		G $\frac{1}{8}$ " ISO / NPT
Actuation time	– closing – opening	10 s 10 s
Weight		235 kg / 518 lbs

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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

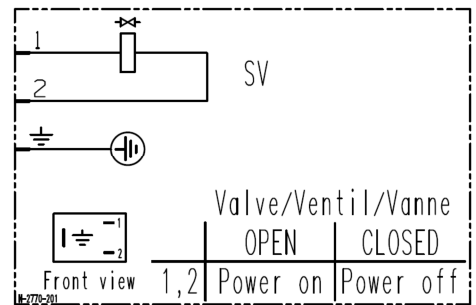
Solenoid valve

Type

5/2 way

Voltage

Defined by order



Wiring diagram

Position indicator

Type

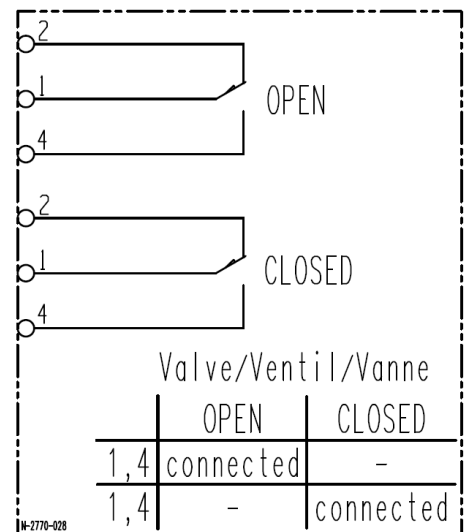
Micro switch

Voltage

≤ 250 V AC ≤ 50 V DC

Current max.

≤ 3 A ≤ 1.2 A



Wiring diagram