VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 63 (ID 2½'')
Ordering No. 10836-TE48

Description

Flange	ASA-LP 63
Actuator	pneumatic double acting, with 3-position actuator – with solenoid valve – with position indicator
Feedthrough	Bellows

Technical data

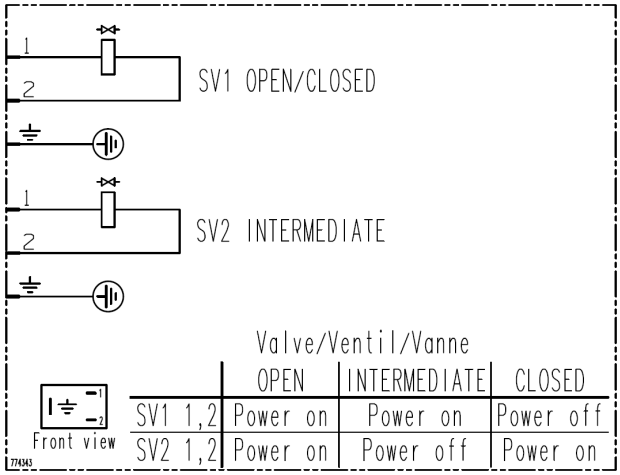
Leak rate	– Valve body	$< 5 \cdot 10^{-10}$ mbar ls^{-1}
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-10}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		600 ls^{-1}
Cycles until first service		50 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h) ≤ 200 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		50 °C h^{-1}
Material (main components)	– Valve body – Mechanism – Bellows	AISI 304 (1.4301) AISI 316L (1.4404), AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal FKM (Viton®), vulcanized FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.08 l / 0.0028 ft^3
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G⅛'' (⅛'' NPT for USA)
Actuation time	– closing – opening	1 s 1 s
Weight		9 kg / 20 lbs

Behavior in case of compressed air pressure drop	– Valve closed	valve remains closed
	– Valve open	undefined
	– Middle position	undefined
Behavior in case of power failure	– Valve closed	valve remains closed
	– Valve open	valve closes
	– Middle position	valve closes

Electrical connections

Solenoid valve

Type	4/2 way
Voltage	Defined by order



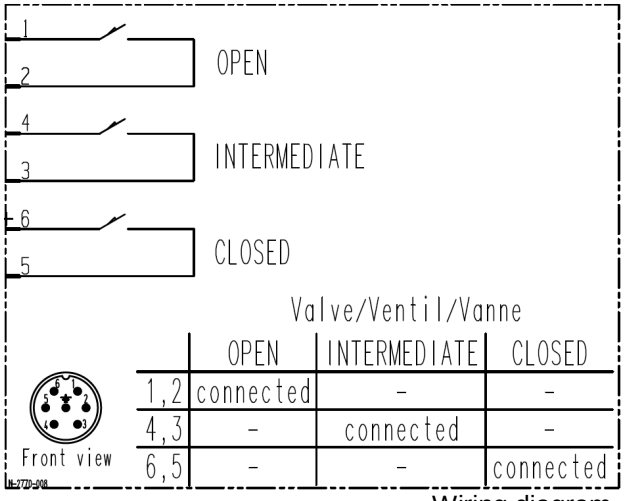
Valve/Ventil/Vanne

	OPEN	INTERMEDIATE	CLOSED
SV1 1,2	Power on	Power on	Power off
SV2 1,2	Power on	Power off	Power on

Wiring diagram

Position indicator

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current max.	≤ 1.2 A



Valve/Ventil/Vanne

	OPEN	INTERMEDIATE	CLOSED
1,2	connected	-	-
4,3	-	connected	-
6,5	-	-	connected

Wiring diagram