



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

All-metal gate valve, Series 481, DN 40 (ID 1½")

Ordering No. 48132-CE44-0002

Description

Flange		DN 40 CF-F
Actuator		Pneumatic double acting - with solenoid valve - with position indicator
Feed through		Bellows
Option	=	Standard

Technical data

Leak rate	- Valve body - Valve seat	$< 1 \cdot 10^{-10}$ mbar ls ⁻¹ $< 1 \cdot 10^{-10}$ mbar ls ⁻¹
Pressure range		XUHV to 2 bar (abs)
Test pressure		1 bar
Differential pressure on the gate		≤ 2 bar
Differential pressure at opening		≤ 1bar
Conductance (molecular flow)		100 ls ⁻¹
Cycles until first service		20 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve body - Actuator - Position indicator - Solenoid	≤ 300 °C ≤ 200 °C(for max. 100h) ≤ 80 °C ≤ 80 °C
Heating and cooling rate		≤ 50 °C h ⁻¹
Material	- Valve body - Flange - Gate - Mechanism - Bellows	1.4435, AISI 316 L 1.4435 ESU, AISI 316 L ESR 1.4435, AISI 316 L 1.4435, AISI 316 L 1.4435, AISI 316 L
Seal	- Bonnet - Gate - Actuator	metal, silver plated metal, silver plated FKM (Viton®)
Mounting position		any
Radiation resistance	- Valve body - Actuator - Position indicator - Solenoid	10 ⁸ Gy (10 ¹⁰ rad) 10 ⁵ Gy (10 ⁷ rad) 10 ⁵ Gy (10 ⁷ rad) 10 ⁴ Gy (10 ⁶ rad)
Volume of pneumatic actuator		0.27 l / 0.01 ft ³
Compressed air min. – max. overpressure		4 - 8 bar / 58 - 116 psig
Compressed air connections		R ½" (USA: ½" NPT)

Created by: Kurt Sonderegger	Release date: 02.06.04	1 of 2
Modified by: Martin Greuter	Release date: 04. February 2014	250847EC



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Actuation time (valid for RT, Ø6mm tubing at 4 bar with flow rate of 400 l/min)

- Closing ≤ 1.5 sec
- Opening ≤ 1.5 sec

Weight 7.2 kg / 16 lbs

Behavior in case of compressed air pressure drop

- Valve closed Valve remains in closed position
- Valve open Undefined

Behavior in case of power failure

- Valve closed Valve remains in closed position
- Valve open Valve closes

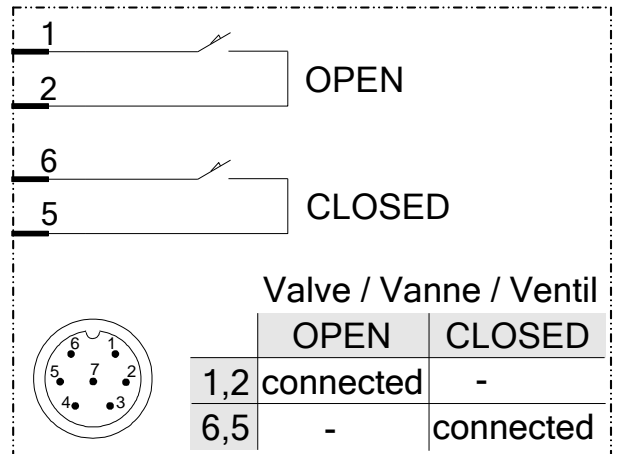
Related documents

Dimensional drawing No. 79043C

Electrical connections

Position indicator

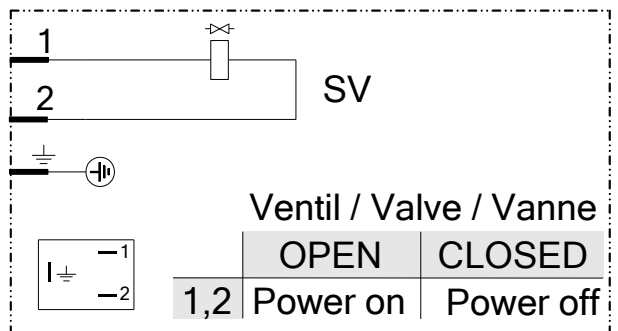
Type micro switch
Voltage ≤ 50 V AC / DC
Current max. ≤ 1.2 A



Wiring diagram

Solenoid

Voltage according to PO
Power consumption ≤ 2.5 W



Wiring diagram