



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

All-metal gate valve, Series 482, DN 100 (4")
Ordering No. 48240-XE05-ATU1

Description

Flange		ITER style DN 100
Actuator		Manual actuator – with position indicator 200°C
Feedthrough		Bellows
Options	ATU=	Product: valve type ITER 1 Flange A+B: type ITER Position indicator: double; 200°C Body: double wall body; Actuator: radiation resistant 10 ⁶ Gy; Position indicator: double; 200 °C; Glenair 6 pin connector; 125 °C; radiation resistant 10 ⁶ Gy; Bonnet flange: vacuum feedthrough double bellows; kind of seal double; VATSEAL; intermediate pumping between two bellows, double wall body and double bonnet seal; VCR ¼"

Technical data

Leak rate (Test method acc. VAT Standard N-2100; He/air mix, ΔP = 1 bar)	– Valve body	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
	– Valve seat	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		XUHV to 2 bar (abs)
Test Pressure		1 bar
Differential pressure on the gate	– In opening direction	$\leq 2 \text{ bar}$
	– In closing direction	$\leq 2 \text{ bar}$
Differential pressure at opening		$\leq 500 \text{ mbar}$, 1 bar with reduced number of cycles
Conductance (molecular flow)		1060 ls ⁻¹
Cycles until first service (Maximum values: depending on operating conditions and valve contamination)	– Normal conditions ¹	20 000
	– Extreme conditions ²	1 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body	$\leq 240 \text{ °C}$
	– Actuator	$\leq 200 \text{ °C}$
	– Position indicator	$\leq 200 \text{ °C}$
Heating and cooling rate		$\leq 10 \text{ °C h}^{-1}$
Material	– Valve body	AISI 316L
	– Flange	AISI 316L ESR
	– Gate	AISI 316L
	– Mechanism	AISI 316L
	– Bellows	AISI 316L
Seal	– Bonnet	metal, silver plated
	– Gate	metal, silver plated

¹ Normal conditions: External pressure 0.1 MPa, pressure inside valve 0 MPa, bellows interspace pressure 0.05 MPa temperatures ambient.

² Extreme conditions: External pressure 0.2 MPa, pressure inside valve 0 MPa, bellows interspace pressure 0 MPa, temperature 100 °C

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Mounting position	any	
Radiation resistance	– Valve body	10 ⁸ Gy (10 ¹⁰ rad)
	– Actuator	10 ⁶ Gy (10 ⁸ rad)
	– Position indicators	10 ⁶ Gy (10 ⁸ rad)
Maximum magnetic field levels	≤ 150 mT	
Turns per stroke	46	
Weight	49.4 kg / 108.9 lbs	

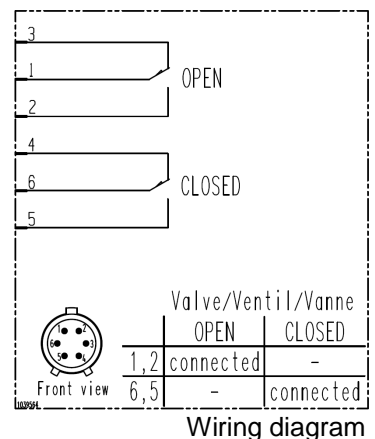
Related documents

Dimensional drawing No.	999295	Rev A
STEP file No	998328	Rev A

Electrical connections

Position indicator (2x)

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current max.	≤ 1.0 A
Connector on the valve:	8070-2530-02Z16-6PA
Mating connector:*	8070-3039-01Z16-6KA (pins compatible with AWG 20 wire)



References

The product data is based on either VAT internally/externally performed lab tests or supplier product information. Relevant references listed on document 838738.

*The mating connector is not part of the valve and needs to be ordered separately at Glenair.

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