



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

All-metal gate valve, Series 482, DN 160 (6")
Ordering No. 48244-XE05-ATU1

Description

Flange		ITER style DN 150
Actuator		Manual actuator – with position indicator 200°C
Feed through		Bellows
Option	ATU =	Product: valve type ITER 1; Flange A+B: type ITER; 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 – Valve seat	< 1 · 10 ⁻⁹ mbar ls ⁻¹ < 1 · 10 ⁻⁹ 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		≤ 500 mbar, 1 bar with reduced cycle life
Conductance (molecular flow)		2 500 ls ⁻¹
Cycles until first service (Maximum values: depending on operating conditions and valve contamination)	– Normal conditions ¹ – Extreme conditions ²	20 000 1 000
Bake-out temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Position indicator	≤ 240 °C ≤ 200 °C ≤ 200 °C
Heating and cooling rate		≤ 10 °C h ⁻¹
Material	– Valve body – Flange – Gate – Mechanism – Bellows	AISI 316 L AISI 316 L ESR AISI 316 L AISI 316 L AISI 316 L
Seal	– Bonnet – Gate	metal, silver plated metal, silver plated
Mounting position		any
Radiation resistance	– Valve body	10 ⁸ Gy (10 ¹⁰ rad)

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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	- Actuator	10 ⁶ Gy (10 ⁸ rad)
	- Position indicators	10 ⁶ Gy (10 ⁸ rad)
Maximum magnetic field levels		≤ 150 mT
Turns per stroke		62
Weight	- Valve complete	76 kg / 167.6 lbs
	- Actuator	4.0 kg / 8.8 lbs

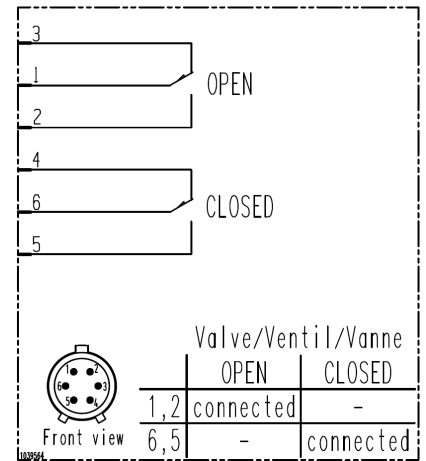
Related documents

Dimensional drawing No.	940181	Rev A
STEP file No.	940180	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)



Wiring diagram

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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