



Vacuum generator for process gas exhaust

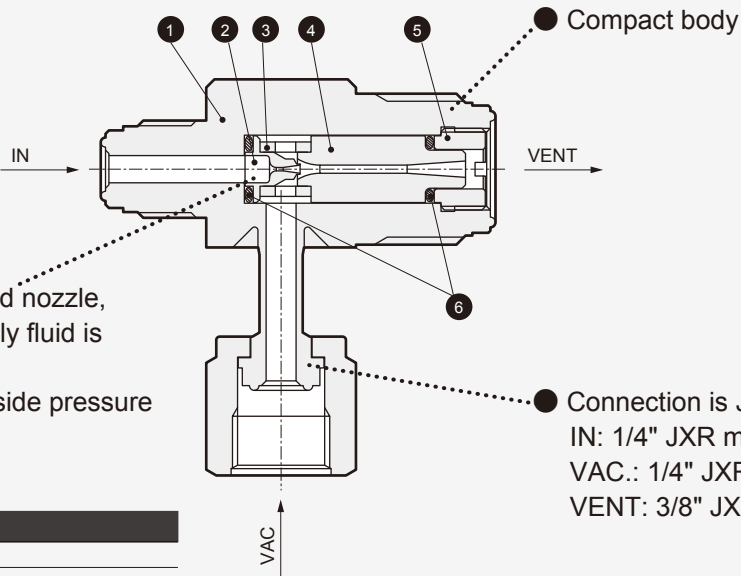
# VG Series

- Nozzle diameter:  $\varnothing 0.5$



Model No.	O-ring material
VG-05F	FKM
VG-05P	Kalrez®

## Energy saving vacuum exhaust equipment



- Using a newly developed nozzle,
  1. Consumption of supply fluid is reduced significantly
  2. Resistant to primary side pressure fluctuation (patented)

### Gas contact part materials

No.	Part name	Material
1	Body	SUS316L
2	Nozzle	SUS316L
3	Spacer	SUS316L
4	Diffuser	SUS316L
5	Diffuser retainer	SUS316L
6	O-ring	FKM or Kalrez®

\*1: JXR fitting can be connected to VCR fitting.

### Specifications

Descriptions	VG
Working fluid	Inert gas/process gas
Fluid temperature °C	0 to 80
Supply fluid	Nitrogen, dry air
Supply fluid pressure MPa	0.4 to 0.6 (operating)
Supply fluid consumption ℓ/min (ANR)	16 or less *1
Achieved vacuum level kPa (abs)	13.3 or less
Discharge rate ℓ/min (ANR)	6 *1 *2
External leakage Pa·m <sup>3</sup> /s (He)	2.8 x 10 <sup>-12</sup> or less
Proof pressure MPa	3
Ambient temperature °C	0 to 80
Connection	IN: 1/4" JXR male fitting (can be connected to VCR fitting) VAC.: 1/4" JXR female fitting (can be connected to VCR fitting) VENT: 3/8" JXR male fitting (can be connected to VCR fitting)
Weight kg	0.2

\*1: When pressurized at 0.5 MPa (operating)

\*2: When the working fluid is air



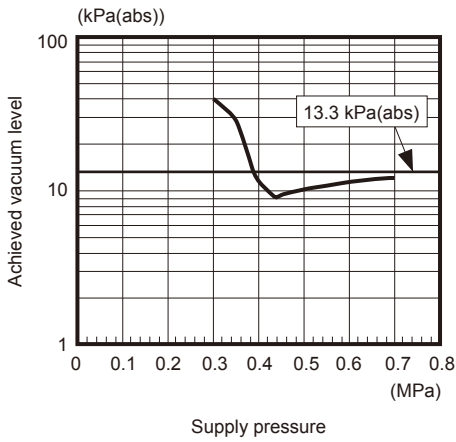
### Safety precautions

Read the Safety Precautions on Intro Page 9 and pages 55 to 56 to ensure correct and safe use of the product.

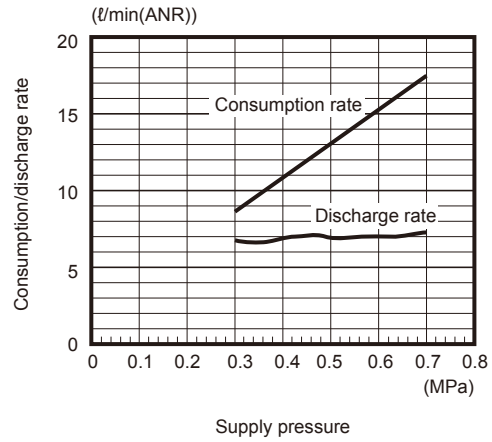
Kalrez® is a registered trademark of DuPont Corporation.

### Characteristic curve

● Achieved vacuum level



● Supply fluid consumption/discharge rate



Note: Achieved vacuum level with the characteristics described above produces abnormal noise (soft clicking sound) at supply pressure (around 0.4 MPa) just before reaching the peak value. When this abnormal noise occurs, the characteristics become unstable and operation becomes louder. Increase the supply pressure within the specification range, as it may affect the sensor, etc., and cause trouble.

### How to order

VG - **05** **F**

Model No.

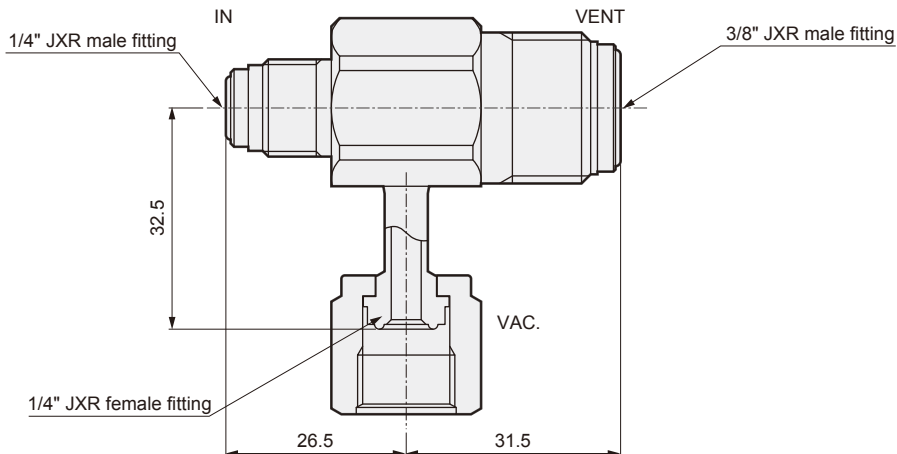
**A** Nozzle diameter [mm]

**B** O-ring material

Code	Content
<b>A Nozzle diameter [mm]</b>	
<b>05</b>	ø0.5
<b>B O-ring material</b>	
<b>F</b>	FKM
<b>P</b>	Kalrez®

### Dimensions

● VG-05\*



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# Flow rate adjusting valve

## Piston check valve

RoHS

Made to Order

### ● Flow rate adjusting valve



- Gas contact part is all metal  
Body (SUS316L)  
Diaphragm (Ni-Co alloy)
- Max. Cv 2 types: 0.03, 0.2
- Changes up to max. Cv with about 10 turns of the handle.
- Connection  
JXR male fitting, JXR female fitting, and double barbed fitting are available.

### ● Piston check valve



- Valve seat material uses Kalrez ®
- Other gas contact parts use SUS316L
- Cracking pressure is 2.3 kPa.
- Connection  
JXR male fitting and double barbed fitting are available.

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