



Components for process gases

Safety Precautions

Be sure to read this section before use. Refer to Intro Page 9 for general precautions.

Design/selection

1. Checking the specifications

WARNING

■Incorrect component selection and handling can cause problems not only in this product, but also to your system. Check the specifications of this product and the compliancy with your system before use.

■Check the compatibility between the gas contact part materials and working fluid before use.

■Use within the specified fluid temperature and pressure range.

Mounting, installation and adjustment

1. Ambient environment

CAUTION

■Do not use in atmospheres containing corrosive gases or in locations where substances that may affect the product such as chemicals, salt water, water or steam could make contact. Use within the specified ambient temperature range.

2. Mounting

WARNING

■Incorrect mounting and piping will result in product trouble, may cause trouble in the user's system, and may result in death or serious injury. The user is responsible for making sure that the operator has read the instruction manual and fully comprehends the system. After mounting, carry out an appropriate function test to confirm that the product is correctly mounted.

CAUTION

■This product is assembled in class 10 and class 100 cleanrooms after precision cleaning treatment. Open the clean pack inside the packing box in a clean environment just before mounting.

■When mounting the product, touching the gas contact parts (body interior, fitting seal surface) may result in adherence of foreign matter and contamination of high purity gas. Do not touch the gas contact parts of this product during mounting.

3. Securing of space

CAUTION

■Secure sufficient space for installation, removal, piping and wiring work.

■Secure sufficient space for maintenance and inspection.

4. Piping

CAUTION

■foreign materials and burrs in the piping and piping work could damage the valve seat or diaphragm seal, and lead to leaks. Remove dirt and burrs before mounting the valve, and then install the primary side filter.

■Make sure not to use the wrong connecting port when connecting the pipes to the product.

■When piping, do not apply tension, compression, bending or other forces to the valve body from the piping.

■If the tube for piping is bent, it will cause malfunctions; pipe with suitable tube lengths.

■Use the driving solenoid valve connected to the drive unit according to the specifications or applications.

■As for operating air, use air or inert gas passed through a filter with a filtration rating of 5 µm or more.



Components for process gases

Safety Precautions

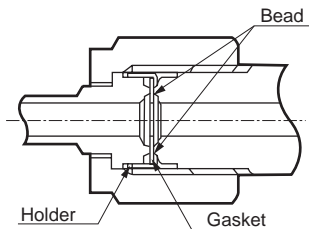
Be sure to read this section before use.
Refer to Intro Page 9 for general precautions.

Mounting, installation and adjustment

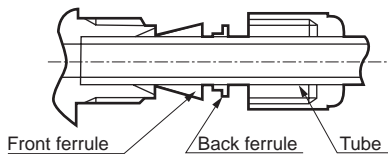
- Make sure that there is no foreign materials, scratches or burrs on the seal section before tightening the fitting with the following procedures.

(1) Fitting tightening method

- JXR fitting (when the gasket material is nickel/SUS316)
Tighten the nut by hand until the gasket contacts the bead surface, and then tighten another 1/8 turn with a tool. (Consult with CKD for all other materials.)



- Double barbed fitting
Confirm that the front ferrule, back ferrule and nuts are properly attached, and then insert the tube until it contacts the back of the body. Tighten the nuts as far as possible by hand, and then tighten 1 1/4 turn with a tool.



- (2) After tightening the fitting, always carry out a leak test, and confirm that there are no leaks.

5. Baking

⚠ CAUTION

- Baking temperature should be within the specified temperature range of the product. Keep the valve fully open when baking.

6. Purge

⚠ CAUTION

- When removing valves using toxic, combustible or corrosive gases, purge with an inert gas such as nitrogen gas before removal.

Use/maintenance

1. Before use

⚠ WARNING

- Use this product within the specifications range.
- Do not touch heater-equipped products with hands or body. There is a risk of burns.

⚠ CAUTION

- Do not use valves as footing or place any heavy objects on top of the valves.

2. Maintenance and inspection

⚠ WARNING

- Operate in accordance with the instruction manual.
- Always turn the power OFF and release any fluids or pressure before starting work.
- Fully replace the residual gas with inert gas, etc., before starting work so that it does not affect people or surrounding components.
- After work, always carry out a leak test, and confirm that there are no leaks.
- Do not disassemble the valve.
Unauthorized disassembly followed by repair or reuse will invalidate the product warranty.

LGD Series	AGD/OGD/ MGD-R Series	High durability for process gas	Other valves for process gas	Regulator	Integrated gas supply system	Safety precautions	Air operated valve	Manual valve	Vacuum pressure control valves	Safety precautions	Related products
Components for process gases											
High vacuum components											