

Discontinue

Air operated valve for process gas

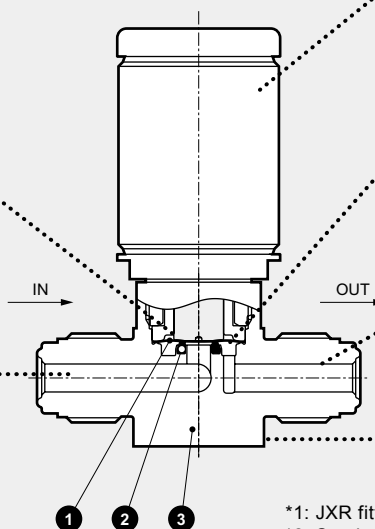
AGD0¹₂R Series

- Metal diaphragm
- Compact



Basic performance is maintained while saving more space.

- It can be used continuously at 80°C
- Zero particle generation is achieved with optimal seal structure and improved surface roughness
- Electrolytic polishing specification



- Slim actuator with an outer diameter of ø26
- Ni-Co alloy diaphragm with high corrosion resistance and long service life (track record of 4 million times ^{*2})
- Connection uses JXR fitting ^{*1} as standard
- □21 mm compact body

Gas contact part materials

No.	Part name	Material
①	Diaphragm	Ni-Co alloy
②	Valve seat	PCTFE
③	Body	SUS316L

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

*2: Service life when the working fluid is inert gas within the specified range and does not contain solids such as reaction products.

Compatibility table by variation

	AGD0*R
Port size	1/4" double barbed fitting, 1/4" JXR fitting
P4	▲

● : Standard ○ : Made to order ▲ : Contact CKD □ : Not applicable

Note: Use after checking the compatibility of the working fluid with the wetted part materials.

AGD0 ① R - ④R - X ○

Ⓐ Actuation

Ⓑ Connection

Code	Content
Ⓐ Actuation	
1	NC (normally closed)
2	NO (normally open)
Ⓑ Connection	
4RM	1/4" JXR male fitting
4R	1/4" JXR female fitting

⚠ Precautions for model No. selection

Made to order. Contact CKD for details.

⚠ Safety precautions

To ensure correct and safe use of this product, read the precautions described in Dry Fine System/high purity gas control system components (Catalog No. CB-035A).

Specifications

Descriptions	AGD01R	AGD02R
Working fluid	Inert gas/process gas	
Working pressure Pa(abs)-MPa(G)	1.3 x 10 ⁻⁶ to 0.99	
Fluid temperature °C	5 to 80	
Operating ambient temperature °C	5 to 80	
Storage ambient temperature °C	-10 to 80	
Valve seat leakage Pa·m ³ /s (He)	1.0 x 10 ⁻¹⁰ or less	
External leakage Pa·m ³ /s (He)	2.8 x 10 ⁻¹² or less	
Cv (23°C, under pressurization)	0.1	
Connection	1/4" JXR male fitting 1/4" JXR female fitting	
Actuation	NC (normally closed)	NO (normally open)
Operating pressure MPa	0.4 to 0.6	0.4 to 0.5
Operating port	M5	
Weight kg	0.15 *1	

*1: Values with AGD01R-4RM (1/4" JXR male fitting).

Discontinue

Air operated valve for process gas

AGD1¹/₂R Series

AGD2¹/₂R Series

● Metal diaphragm

● Standard

RoHS

CAD



Specifications

Descriptions	AGD1*R	AGD2*R
Working fluid	Inert gas/process gas	
Working pressure Pa(abs)-MPa(G)	1.3 x 10 ⁻⁶ to 0.99	
Fluid temperature °C	5 to 80	
Operating ambient temperature °C	5 to 80	
Storage ambient temperature °C	-10 to 80	
Valve seat leakage Pa·m ³ /s (He)	1.0 x 10 ⁻¹⁰ or less	
External leakage Pa·m ³ /s (He)	2.8 x 10 ⁻¹² or less	
Cv (23°C, under pressurization)	0.3	0.65
Connection	1/4" JXR male fitting 1/4" JXR female fitting 1/4" double barbed fitting	3/8" JXR male fitting 3/8" JXR female fitting 3/8" double barbed fitting
Actuation	NC (normally closed) NO (normally open)	NC (normally closed) NO (normally open)
Operating pressure MPa	NC:0.4 to 0.6 NO:0.4 to 0.5	NC:0.4 to 0.6 NO:0.4 to 0.5
Operating port	M5	
Weight kg	0.26 *1	0.59 *1

*1: Values with AGD11R-4RM (1/4" JXR male fitting), AGD21R-6RM (3/8" JXR male fitting).

! Safety precautions

To ensure correct and safe use of this product, read the precautions described in Dry Fine System/high purity gas control system components (Catalog No. CB-035A).

Compatibility table by variation

	AGD1*R	AGD2*R
Port size	1/4" double barbed fitting, 1/4" JXR fitting	3/8" double barbed fitting, 3/8" JXR fitting
P4	▲	▲

● : Standard ○ : Made to order
▲ : Contact CKD ■ : Not applicable

Note: Use after checking the compatibility of the working fluid with the wetted part materials.

How to order

AGD1 **1** R- **4R** -X **○**

Model No.

A Actuation

B Connection

Code	Content
A Actuation	
1	NC (normally closed)
2	NO (normally open)
B Connection	
4RM	1/4" JXR male fitting
4R	1/4" JXR female fitting
4S	1/4" double barbed fitting

AGD2 **1** R- **6R** -X **○**

Model No.

A Actuation

B Connection

Code	Content
A Actuation	
1	NC (normally closed)
2	NO (normally open)
B Connection	
6RM	3/8" JXR male fitting
6R	3/8" JXR female fitting
6S	3/8" double barbed fitting

Dry
Fine system

! Precautions for model No. selection

Made to order. Contact CKD for details.