



Air operated valve for process gas

AGD1 1/2 V Series

AGD2 1/2 V Series

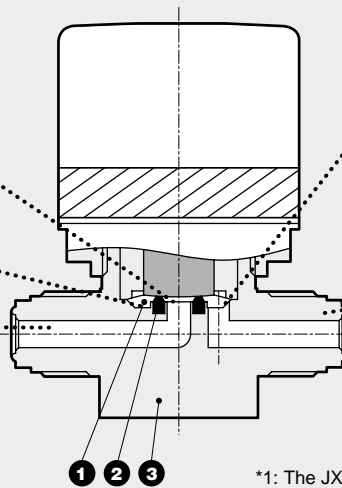
● Metal diaphragm ● Standard



Model No.	Actuation	Cv flow factor	Model No.	Actuation	Cv flow factor
AGD11V	NC	Cv=0.26	AGD21V	NC	Cv=0.6
AGD12V	NO	Cv=0.26	AGD22V	NO	Cv=0.6

Standard diaphragm valve V series created from a pursuit of contamination control

- Continuous use possible up to 80°C
- Zero particle generation realized with optimum seal structure and improved surface roughness
- Valve dead space minimized
- Electropolished finish specifications



- High corrosion resistance and long life Ni-Co alloy diaphragm (4 million cycles achieved²)
- JXR joint connection¹ Standard (male and female) and double barbed joints

Materials for wetted areas

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

*1: The JXR joint can be connected to the VCR joint.
 *2: Life when working fluid is inert gas within specified range, which does not contain solids such as reaction products.

Specifications

Descriptions	AGD1*V	AGD2*V
Working fluid	Inert gas/process gas	
Working pressure range Pa(abs)-MPa	1.3 × 10 ⁻⁶ to 1.0	
Fluid temperature °C	-10 to 80	
Ambient temperature °C	-10 to 80	
Valve seat leakage Pa·m ³ /s(He)	1.3 × 10 ⁻⁹ or less	
External leakage Pa·m ³ /s(He)	2.8 × 10 ⁻¹² or less	
Cv flow factor	0.26	0.6
Connection	1/4" JXR male joint 1/4" JXR female joint 1/4" double barbed joint	3/8" JXR male joint 3/8" JXR female joint 3/8" double barbed joint
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 pressure connection port	Rc1/8	
Weight kg	0.35 ^{*1}	0.88 ^{*1}

*1: Value for AGD11V-4RM (1/4-inch JXR male joint) and AGD21V-6RM (3/8-inch JXR male joint).

⚠ Precautions

Always read page 9 in the introduction and pages 2 to 3 to ensure correct and safe use of this product.

AGD1¹/₂V/AGD2¹/₂V Series

Air operated valve for process gas

How to order

AGD1 1 V-4RM

Model No.

A Actuation

B Connection

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

AGD2 1 V-6R

Model No.

A Actuation

B Connection

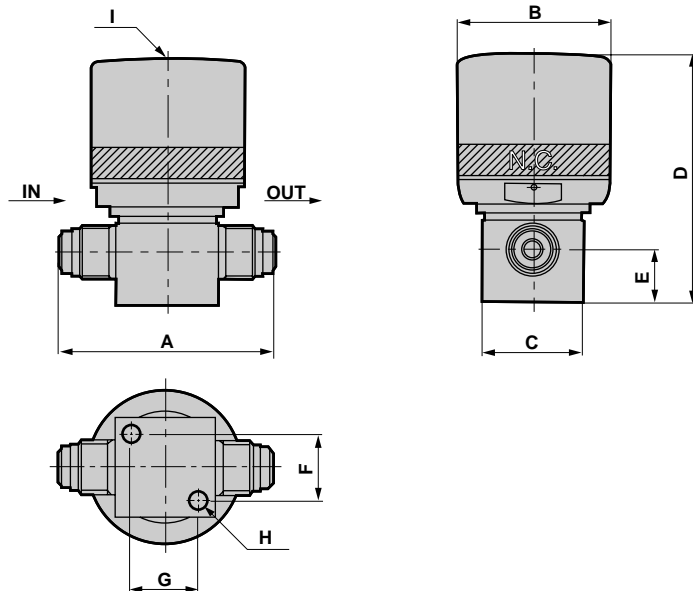
Symbol	Descriptions
A Actuation	
1	NC (normally closed)
2	NO (normally open)
B Connection	
6RM	3/8" JXR male joint
6R	3/8" JXR female joint
6S	3/8" double barbed joint

Dimensions

AGD1*V-4RM

AGD2*V-6RM

● JXR male joint

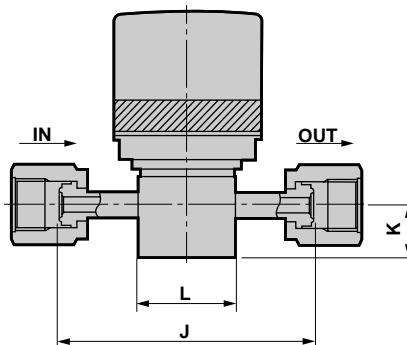


Model No./Symbol	Actuation	A	B	C	D	E	F	G	H	I
AGD11V-4RM	NC	57	ø41	□27	67	14.3	18	18	2-M5 depth 6	Rc 1/8
AGD12V-4RM	NO									
AGD21V-6RM	NC	76	ø55	□35	86	16	20.2	20.2	2-M5 depth 8	Rc 1/8
AGD22V-6RM	NO									

AGD1*V-4R

AGD2*V-6R

● JXR female joint

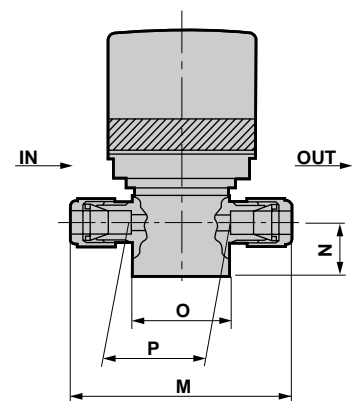


Model No./Symbol	Actuation	J	K	L
AGD11V-4R	NC	70.6	14.3	□27
AGD12V-4R	NO			
AGD21V-6R	NC	83	16	□35
AGD22V-6R	NO			

AGD1*V-4S

AGD2*V-6S

● Double barbed joint



Model No./Symbol	Actuation	M	N	O	P
AGD11V-4S	NC	62	14.3	□27	27.8
AGD12V-4S	NO				
AGD21V-6S	NC	80	16	□35	44.3
AGD22V-6S	NO				