

### Specifications



Descriptions		MAGD3-0	MAGD3-1
Working fluid		Inert gas/process gas	
Working pressure Pa(abs)-MPa(G)		1.3 × 10 <sup>-6</sup> to 0.7	
Fluid temperature °C		-10 to 80	
Ambient temperature °C		-10 to 80	
Valve seat leakage Pa·m <sup>3</sup> /s (He)		1.3 × 10 <sup>-9</sup>	
External leakage Pa·m <sup>3</sup> /s (He)		2.8 × 10 <sup>-12</sup>	
Cv		0.1	0.26
Connection		CS seal (nominal 6.35)	
Operating pressure MPa	NC	0.4 to 0.6	
	NO	0.4 to 0.5	
Operating port		M5	
Material	Body	SUS316L	
	Diaphragm	Ni-Co alloy	
	Seat	PCTFE	

### How to order

**MAGD3 - 04A - 1 1 2 C - A**

**A** Series

**B** Valve shape

**C** Actuation (V1)

**D** Actuation (V2)

**E** Actuation (V3)

**F** Check valve

**G** Pressurization direction

Code	Content	
<b>A Series</b>		
<b>MAGD3</b>	Air operated valve for IAGD3	
<b>B Valve shape</b>		
		<b>Cv</b>
<b>02A</b>	2-station block A valve (3-port)	0.1
<b>03A</b>	3-station block A valve (3-port)	
<b>04A</b>	4-station block A valve (4-port)	
<b>11C</b>	1-station block C valve (2-port)	0.26
<b>11D</b>	1-station block D valve (2-port)	
<b>11F</b>	1-station block F valve (3-port)	
<b>C Actuation (V1)</b>		
<b>1</b>	NC	
<b>2</b>	NO	
<b>3</b>	NC (with proximity sensor (normally closed valve))	
<b>4</b>	NO (with proximity sensor (normally open valve))	
<b>D Actuation (V2)</b>		
<b>1</b>	NC	
<b>2</b>	NO	
<b>3</b>	NC (with proximity sensor (normally closed valve))	
<b>4</b>	NO (with proximity sensor (normally open valve))	
<b>E Actuation (V3)</b>		
<b>1</b>	NC	
<b>2</b>	NO	
<b>Blank</b>	Without V3	
<b>F Check valve</b>		
<b>C</b>	Check valve	
<b>G Pressurization direction</b>		
<b>A</b>	ⒶPort pressurization (for MFC primary side)	
<b>B</b>	ⒷPort pressurization (for MFC secondary side)	

Note1: Select **C** Pressurization direction only for **B** Valve shape 03A/04A.

Note2: Mounting bolt, gasket and air fitting for actuator drive are not attached with the product and must be purchased separately.

Note3: Contact CKD for products with air fitting for actuator drive.

[Example of model No.]

**MAGD3-03A-12C-A**

**A** Series : Air operated valve for IAGD3

**B** Valve shape : 1/8" size 3-station block A valve (3-port)

**C** Actuation (V1) : NC

**D** Actuation (V2) : NO

**E** Actuation (V3) : Without V3

**F** With check valve

**G** Pressurization direction : ⒶPort pressurization (for MFC primary side)

## Dimensions

1-station block	2-station block	3-station block	4-station block
<p>● MAGD3-11C</p>	<p>● MAGD3-02A-1*</p> <p>MAGD3-02A-1* circuit diagram: (a) V1 V2 (b) (c) (d)</p>	<p>● MAGD3-03A-11C</p> <p>MAGD3-03A-11C-A circuit diagram: (a) V1 V2 (b) (c) (d)</p> <p>MAGD3-03A-11C-B circuit diagram: (a) V1 V2 (b) (c) (d)</p>	<p>● MAGD3-04A-11*C</p> <p>MAGD3-04A-111C-A circuit diagram: (a) V1 V2 V3 (b) (c) (d)</p> <p>MAGD3-04A-112C-B circuit diagram: (a) V1 V2 V3 (b) (c) (d)</p>
<p>● MAGD3-11D</p>	<p>● MAGD3-02A-3*</p> <p>MAGD3-02A-3* circuit diagram: (a) V1 V2 (b) (c) (d)</p>	<p>● MAGD3-03A-3*C-A</p> <p>MAGD3-03A-3*C-A circuit diagram: (a) V1 V2 (b) (c) (d)</p> <p>Check valve direction is reversed for MAGD3-03A-3*C-B.</p>	<p>● MAGD3-04A-31*C-A</p> <p>MAGD3-04A-31*C-A circuit diagram: (a) V1 V2 V3 (b) (c) (d)</p>
<p>● MAGD3-11F</p> <p>MAGD3-11F circuit diagram: (a) V1 V2 (b) (c) (d)</p>	<p>● MAGD3-04A-132C-A</p> <p>MAGD3-04A-132C-A circuit diagram: (a) V1 V2 V3 (b) (c) (d)</p>		

### Specifications



Descriptions		MOGD3-11
Working fluid		Inert gas/process gas
Working pressure Pa(abs)-MPa(G)		$1.3 \times 10^{-6}$ to 0.7
Fluid temperature °C		-10 to 80
Ambient temperature °C		-10 to 80
Valve seat leakage Pa·m <sup>3</sup> /s (He)		$1.3 \times 10^{-9}$
External leakage Pa·m <sup>3</sup> /s (He)		$2.8 \times 10^{-12}$
Cv		0.26
Connection		CS seal (nominal 6.35)
Material	Body	SUS316L
	Diaphragm	Ni-Co alloy
	Seat	PCTFE

### How to order

**MOGD3 - 11C - K A - S1**

**A** Series

**B** Valve shape

**C** Handle color

**D** Pressurization direction

**E** Others

Code	Content
<b>A Series</b>	
<b>MOGD3</b>	Manual valve for IAGD3
<b>B Valve shape</b>	
<b>11C</b>	1-station block C valve (2-port)
<b>11D</b>	1-station block D valve (2-port)
<b>C Handle color</b>	
<b>K</b>	Handle color: Black
<b>R</b>	Handle color: Red
<b>B</b>	Handle color: Blue
<b>Y</b>	Handle color: Yellow
<b>G</b>	Handle color: Green
<b>D Pressurization direction</b>	
<b>A</b>	Ⓐ Port pressurization
<b>B</b>	Ⓑ Port pressurization
<b>E Others</b>	
<b>S1</b>	With handle lock (only when valve is closed)
<b>Blank</b>	Without key

Note1: Mounting bolt and gasket are not attached with the product and must be purchased separately.

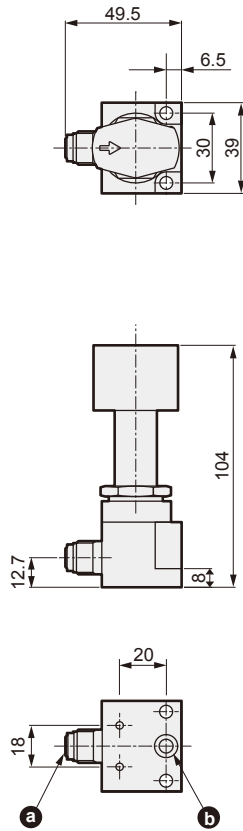
[Example of model No.]

**MOGD3-11C-KA-S1**

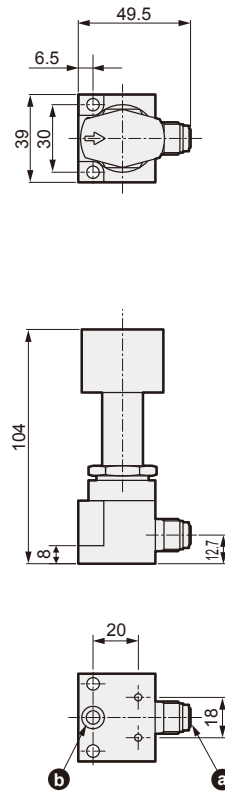
- A** Series : Manual valve for IAGD3
- B** Valve shape : 1-station block C valve (2-port)
- C** Handle color : Black
- D** Pressurization direction : Ⓐ Port pressurization
- E** Others : With handle lock (only when valve is closed)

## Dimensions

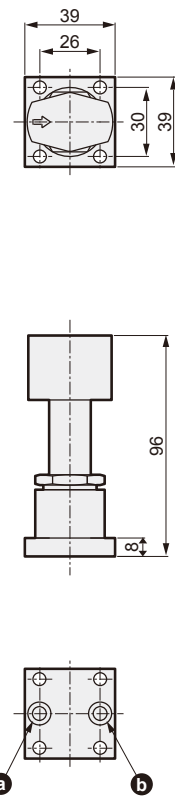
● MOGD3-11C-\*A



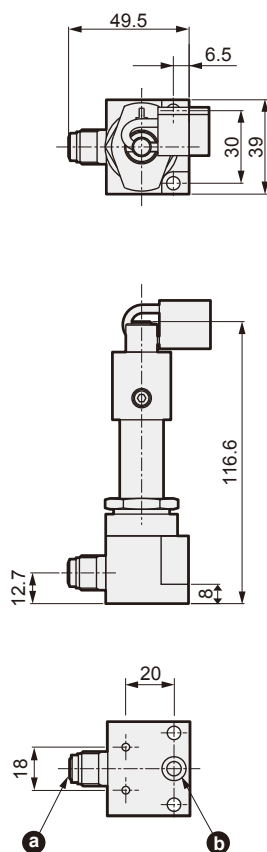
● MOGD3-11C-\*B



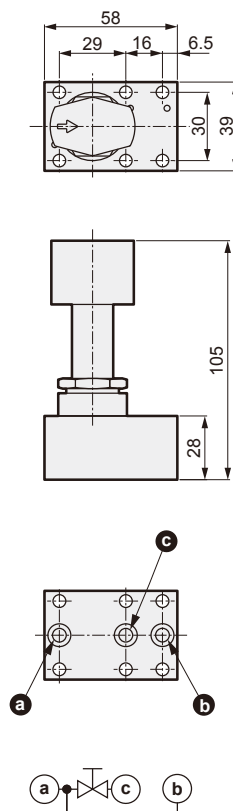
● MOGD3-11D-\*A



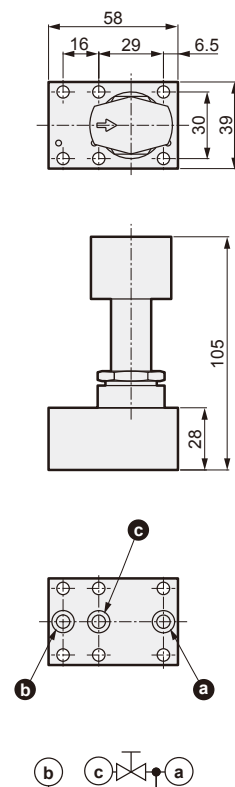
● MOGD3-11C-KA-S1



● MOGD3-11F-\*A



● MOGD3-11F-\*B



## Components for integrated gas supply system

### Flow rate adjusting valve for IAGD3

Custom order product

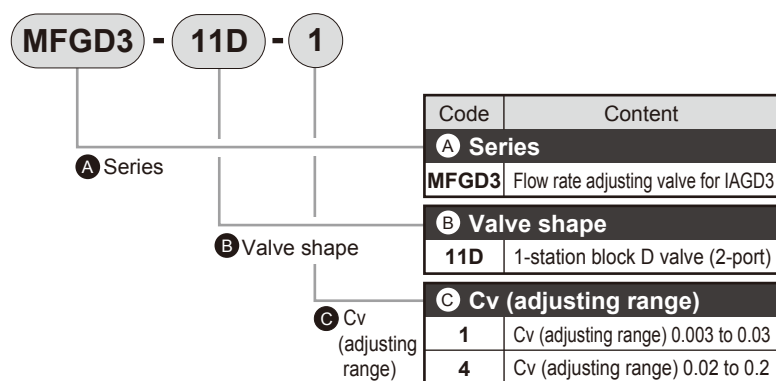


#### Specifications

Descriptions	MFGD3-11D-1	MFGD3-11D-4
Working fluid	Inert gas/process gas	
Working pressure Pa(abs)-MPa(G)	1.3 × 10 <sup>-6</sup> to 0.7	
Fluid temperature °C	-10 to 80	
Ambient temperature °C	-10 to 80	
Valve seat leakage	1/100 or less of max. Cv	
External leakage Pa·m <sup>3</sup> /s (He)	2.8 × 10 <sup>-12</sup>	
Cv (adjusting range)	0.003 to 0.03	0.02 to 0.2
Connection	CS seal (nominal 6.35)	
Material	Body	
	SUS316L	
Diaphragm		Ni-Co alloy

\* Cover is included with the product.

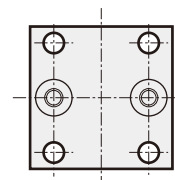
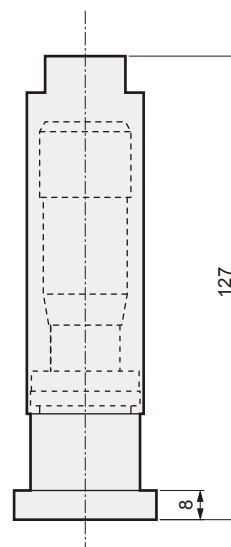
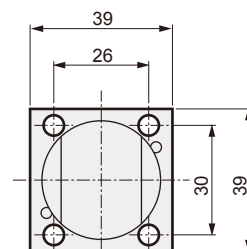
#### How to order



Note: Mounting bolt and gasket are not attached with the product and must be purchased separately.

#### Dimensions

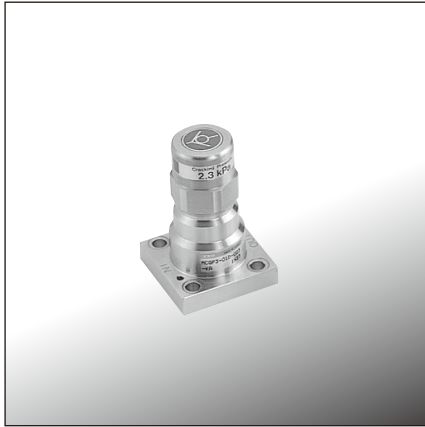
● MFGD3-11D



[Example of model No.]

**MFGD3-11D-1**

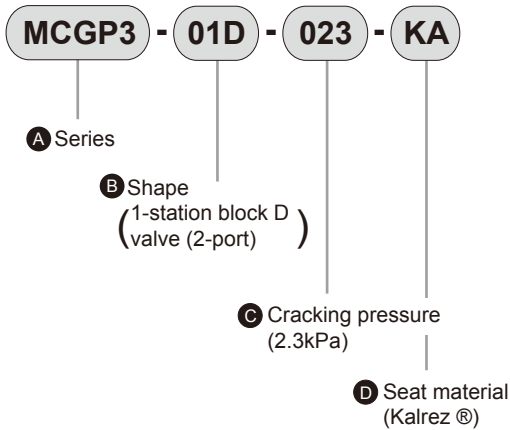
- A** Series : Flow rate adjusting valve for IAGD3
- B** Valve shape : 1-station block D valve (2-port)
- C** Cv (adjusting range) : 0.003 to 0.03



### Specifications

Descriptions		MCGP3-01D
Working fluid		Inert gas/process gas
Working pressure Pa(abs)-MPa(G)		$1.3 \times 10^{-6}$ to 0.7
Fluid temperature °C		-10 to 80
Ambient temperature °C		-10 to 80
Valve seat leakage Pa·m <sup>3</sup> /s (He)		$4.7 \times 10^{-8}$
External leakage Pa·m <sup>3</sup> /s (He)		$2.8 \times 10^{-12}$
Cv (max.)		0.25
Connection		CS seal (nominal 6.35)
Material	Body	SUS316L
	Seat	Kalrez®
	Spring	SUS316
	Gasket	PTFE

### How to order



Note: Mounting bolt and gasket are not attached with the product and must be purchased separately.

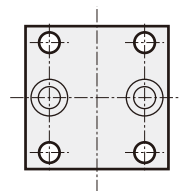
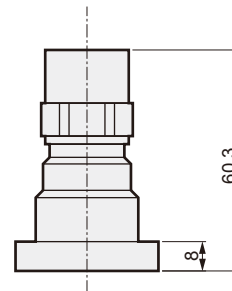
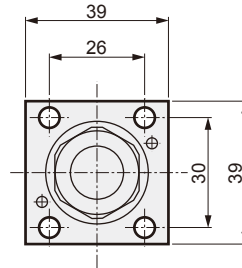
[Example of model No.]

#### MCGP3-01D-023-KA

- A** Series : Check valve for IAGD3
- B** Shape : 1-station block D valve (2-port)
- C** Cracking pressure : 2.3 kPa
- D** Seat material : Kalrez®

### Dimensions

● MCGP3-01D-023-KA



# Components for integrated gas supply system

## Other components for IAGD3

### Gasket set (2 hexagon socket head cap screws, 1 C ring, 1 gasket retainer)

Material C ring : SUS316L, SUS304-WPB (non-gas contact parts)  
 Gasket retainer : SUS304  
 Hexagon socket head cap screw : SCM 435 (special treatment)



Name	Model No.	Applicable parts
Gasket set (bolt length 16 mm)	IAGD3-SEAL	MAGD3-11C MAGD3-11D MOGD3-11C MOGD3-11D MFGD3-11D MCGP3
Gasket set (bolt length 20 mm)	IAGD3-SEAL-L20	
Gasket set (bolt length 30 mm)	IAGD3-SEAL-L30	
Gasket set (bolt length 35 mm)	IAGD3-SEAL-L35	MAGD3-11F MAGD3-02A MOGD3-03A MOGD3-04A Bypass block (for interface pitch 26 mm) Bypass piping block (for MFC interface pitch 79.8 mm) Sealing flange SEC-7330*-*-792B (MFC manufactured by STEC) SEC-7340*-*-792B (MFC manufactured by STEC) SEC-F730*-*-792B (MFC manufactured by STEC) SEC-F740*-*-792B (MFC manufactured by STEC) SEC-4400-792B (MFC manufactured by STEC) FC-785X*B (MFC manufactured by Hitachi Metals) FC-795*T-B (MFC manufactured by Hitachi Metals) FC-D985*T-B1 (MFC manufactured by Hitachi Metals) FC-D985*Y-B1 (MFC manufactured by Hitachi Metals) FC-985*T-B1 (MFC manufactured by Hitachi Metals) FC-985*Y-B1 (MFC manufactured by Hitachi Metals)
Gasket set (bolt length 40 mm)	IAGD3-SEAL-L40	FC-2979 (MFC manufactured by CELERITY) SEC-7350*-*-792B (MFC manufactured by STEC) SEC-7355*-*-792B (MFC manufactured by STEC) SEC-F750*-*-792B (MFC manufactured by STEC)
Gasket set (bolt length 45 mm)	IAGD3-SEAL-L45	FC-785*T-B (MFC manufactured by Hitachi Metals) FC-785*Y-B (MFC manufactured by Hitachi Metals) FC-786*T-B (MFC manufactured by Hitachi Metals) FC-786*Y-B (MFC manufactured by Hitachi Metals) FC-796*T-B1 (MFC manufactured by Hitachi Metals) FC-D986*Y-B1 (MFC manufactured by Hitachi Metals) FC-986*T-B1 (MFC manufactured by Hitachi Metals) FC-986*Y-B1 (MFC manufactured by Hitachi Metals)

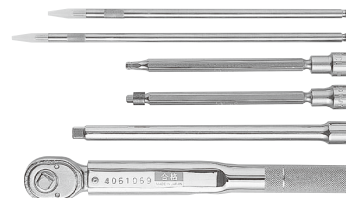
Note1: The number of gasket sets required is determined by the number of CS seal parts.

Note2: Contact CKD for details of applicable parts.

### Maintenance tools ( Installer set, torque wrench, Allen wrench bit (with magnet) ) Allen wrench ball bit, extension bar 1 each )

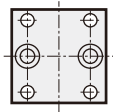
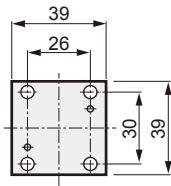
Name	Model No.
Maintenance tool set	IAGD3-MAINTENANCE

Refer to the instruction manual for details of use.

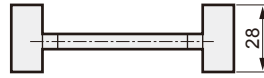
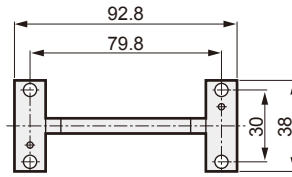


## Top mount block

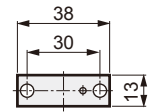
- Bypass block  
(for 26 mm pitch between )



- Bypass piping block  
(for 79.8 mm pitch between MFC)

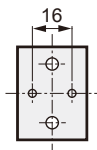
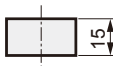
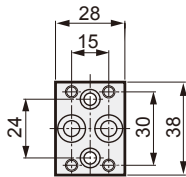


- Sealing flange

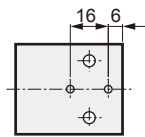
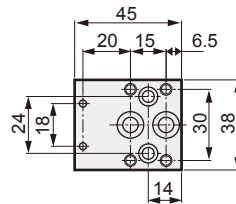


## Base block

- Mount base B-1



- Mount base E-5



- Mount base F-1

