



Manual valve for process gas OGD₂10V Series

- Metal diaphragm
- 90° rotation snap action type



Model No.	Cv flow factor	Model No.	Cv flow factor
OGD10V	Cv=0.26	OGD20V	Cv=0.6

Close the valve by turning the handle

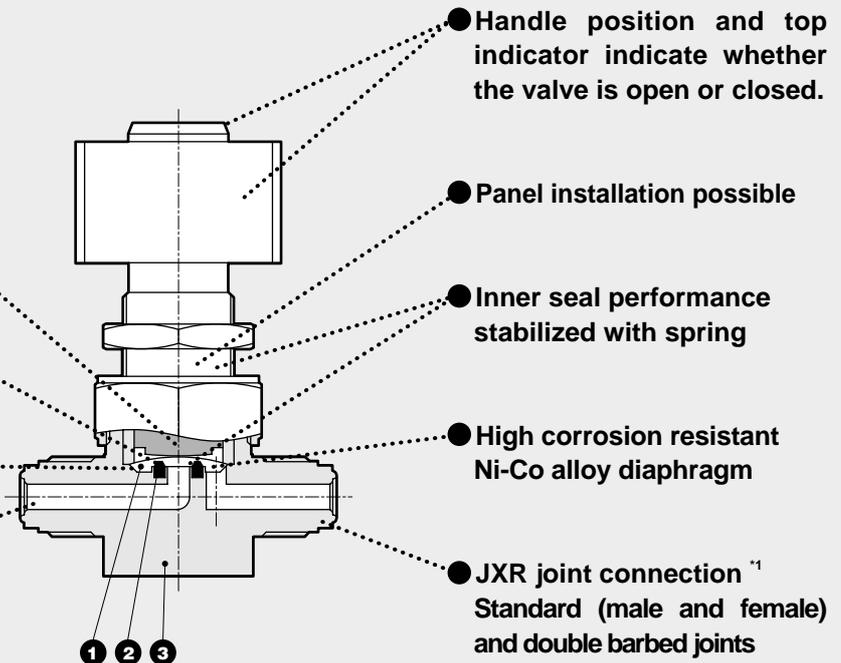
● Continuous use possible up to 80°C

● Stable inner seal performance achieved with nonrotating rod (Patent pending)

● Zero particle generation realized with optimum seal structure and improved surface roughness

● Valve dead space minimized

● Electropolished finish specifications



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.

Specifications

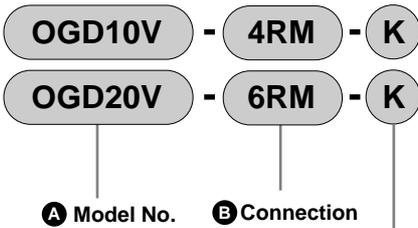
Descriptions	OGD10V	OGD20V
Working fluid	Inert gas/process gas	
Working pressure range Pa(abs)-MPa	1.3 × 10 ⁻⁶ to 1.0	
Fluid temperature °C	-10 to 80	
Ambient temperature °C	-10 to 80	
Valve seat leakage Pa·m ³ /s(He)	1.3 × 10 ⁻⁹ or less	
External leakage Pa·m ³ /s(He)	2.8 × 10 ⁻¹² or less	
Cv flow factor	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
Weight kg	0.34 ^{*1}	0.69 ^{*1}

*1: Value for OGD10V-4RM (1/4-inch JXR male joint) and OGD20V-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.

How to order



Symbol		Descriptions		A Model No.	
				OGD10V	OGD20V
B Connection					
4RM	1/4" JXR male joint	●			
4R	1/4" JXR female joint	●			
4S	1/4" double barbed joint	●			
6RM	3/8" JXR male joint		●		
6R	3/8" JXR female joint		●		
6S	3/8" double barbed joint		●		
C Handle color					
K	Black	●	●		
R	Red	●	●		
B	Blue	●	●		
Y	Yellow	●	●		

Handle color

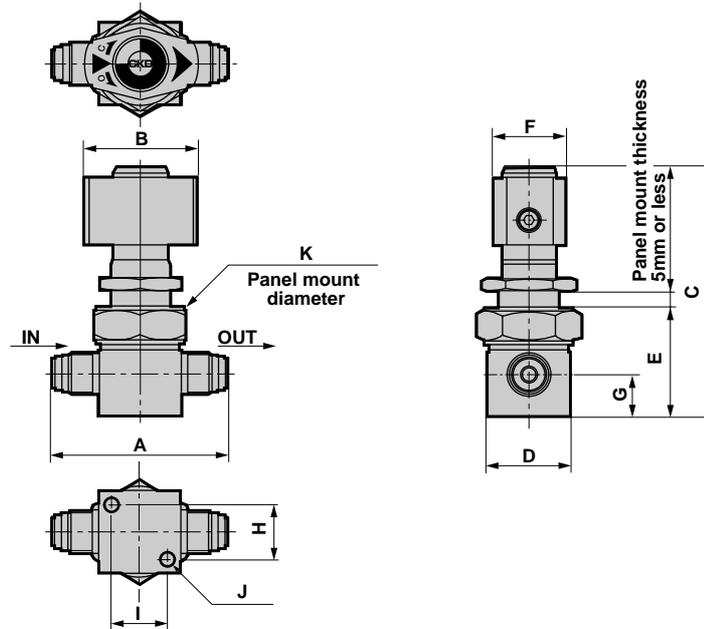


Dimensions

OGD10V-4RM-□

OGD20V-6RM-□

● JXR male joint

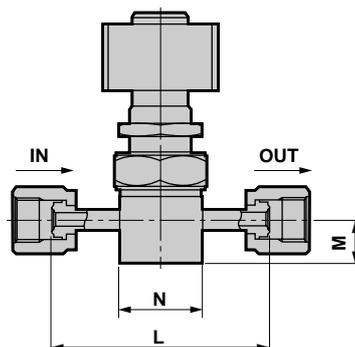


Model No. / Symbol	A	B	C	D	E	F	G	H	I	J	K
OGD10V-4RM-□	57	37	82	□27	36	24	14.3	18	18	2-M5 depth 6	ø20.5
OGD20V-6RM-□	76	47	104	□35	48	27	16	20.2	20.2	2-M5 depth 8	ø26.5

OGD10V-4R-□

OGD20V-6R-□

● JXR female joint

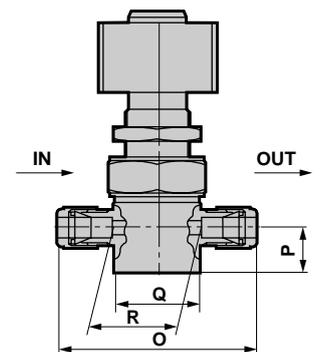


Model No. / Symbol	L	M	N
OGD10V-4R-□	70.6	14.3	□27
OGD20V-6R-□	83	16	□35

OGD10V-4S-□

OGD20V-6S-□

● Double barbed joint



Model No. / Symbol	O	P	Q	R
OGD10V-4S-□	62	14.3	□27	27.8
OGD20V-6S-□	80	16	□35	44.3

OGD10V
MGD10V 2 way valve

Custom order

Dimensions

- OGD10V-4RJ-K (B, Y, R) (1/4" JXR female joint (with bearing) type)
- OGD10V-4W-K (B, Y, R) (1/4" automatic welded joint type)
- MGD10V-4RJ-K (B, Y, R) (1/4" JXR female joint (with bearing) type)
- MGD10V-4R-K (B, Y, R) (1/4" JXR female joint type)
- MGD10V-4RM-K (B, Y, R) (1/4" JXR male joint type)
- MGD10V-4W-K (B, Y, R) (1/4" automatic welded joint type)
- MGD10V-4S-K (B, Y, R) (1/4" double barbed joint type)

Figure shows OGD10V-4RJ-K
Female joint (with bearing)

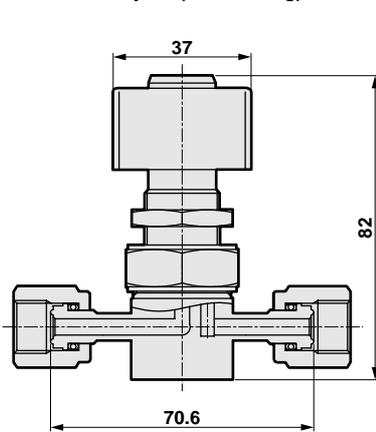
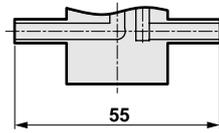
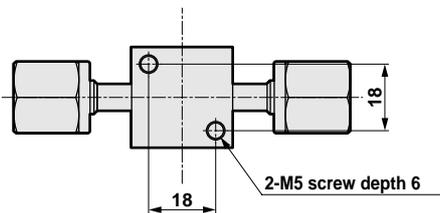
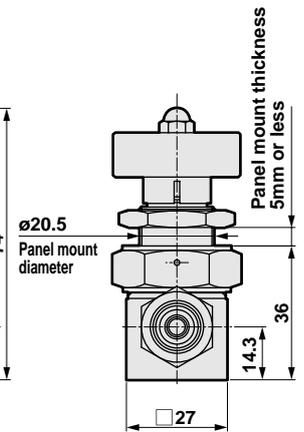
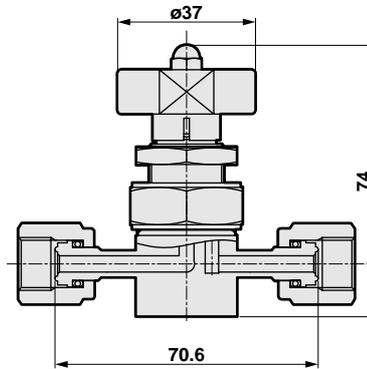
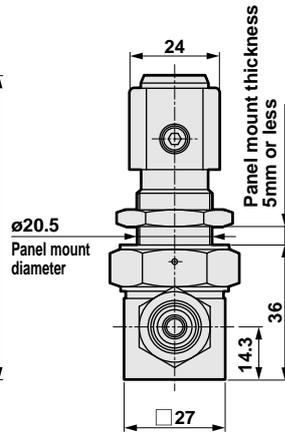
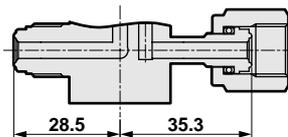


Figure shows MGD10V-4RJ-K
Female joint (with bearing)

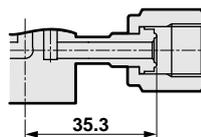


Welded joint: 4W

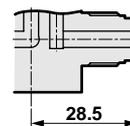
- OGD10V-4RJ-^{FM}_{MF}-K (B, Y, R) (1/4" JXR female (with bearing) - male combination type)
- OGD10V-4R-^{FM}_{MF}-K (B, Y, R) (1/4" JXR female - male combination type)
- MGD10V-4RJ-^{FM}_{MF}-K (B, Y, R) (1/4" JXR female (with bearing) - male combination type)
- MGD10V-4R-^{FM}_{MF}-K (B, Y, R) (1/4" JXR female - male combination type)



Female joint (with bearing)



Female joint: 4R



Male joint: 4RM

OGD10V
MGD10V 3-way separate flow valve

Custom order

Dimensions

- OGD10V-4RJ-□□□-K (B, Y, R) (1/4" JXR female joint (with bearing) combination type)
- OGD10V-4R-□□□-K (B, Y, R) (1/4" JXR female joint combination type)
- OGD10V-4RM-MMM-K (B, Y, R) (1/4" JXR male joint type)
- OGD10V-4W-□□□-K (B, Y, R) (1/4" automatic welded joint combination type)
- MGD10V-4RJ-□□□-K (B, Y, R) (1/4" JXR female joint (with bearing) combination type)
- MGD10V-4R-□□□-K (B, Y, R) (1/4" JXR female joint combination type)
- MGD10V-4RM-MMM-K (B, Y, R) (1/4" JXR male joint type)
- MGD10V-4W-□□□-K (B, Y, R) (1/4" automatic welded joint combination type)

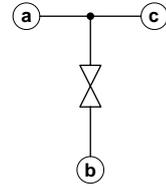


Figure shows OGD10V-4RJ-FFF-K
Female joint (with bearing)

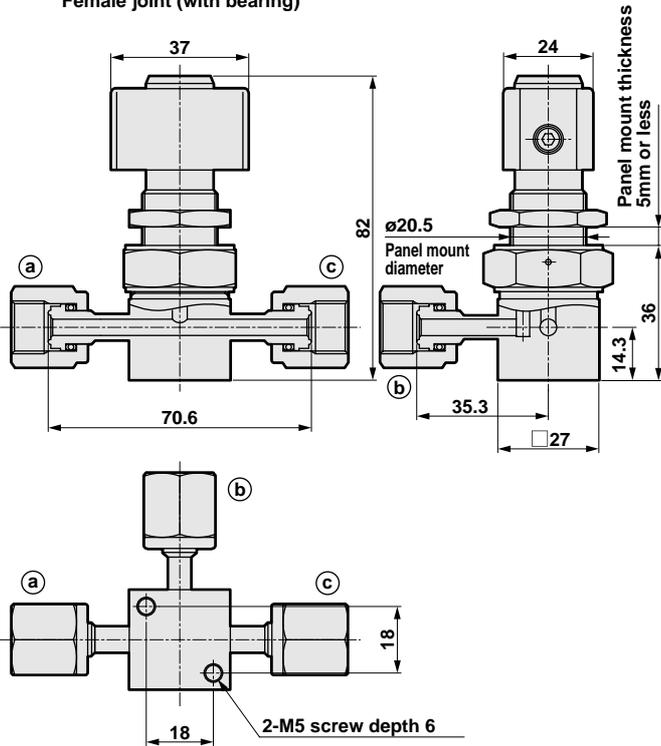
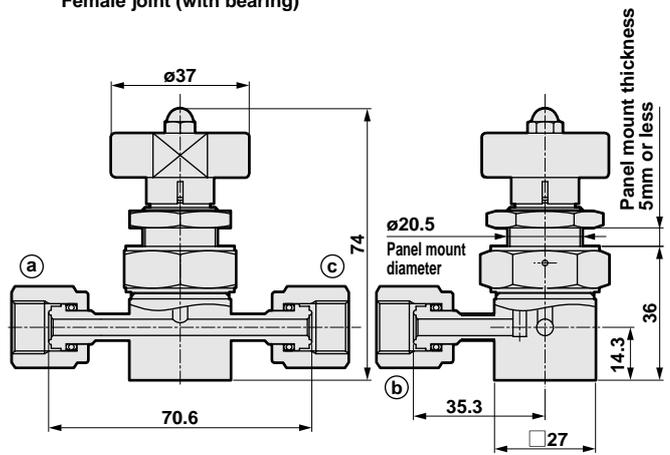
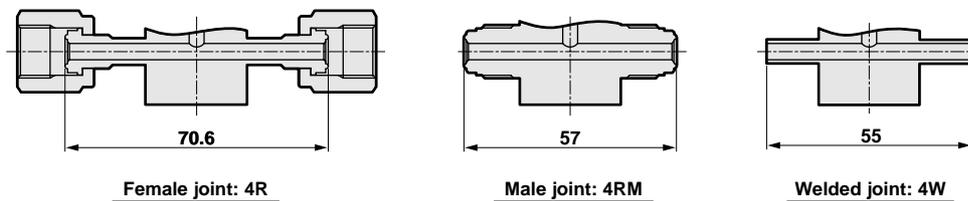


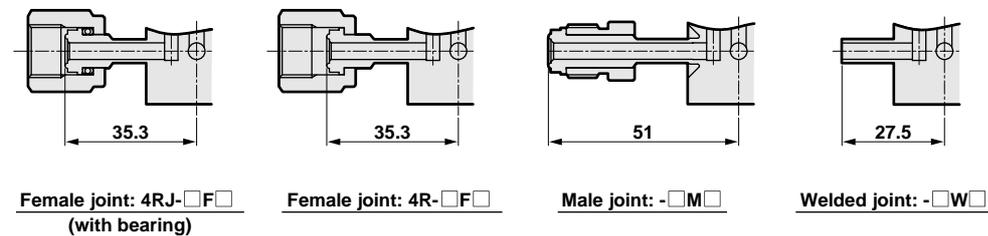
Figure shows MGD10V-4RJ-FFF-K
Female joint (with bearing)



<Main port >



<Branch port >



OGD20V
MGD20V 2 way valve

Custom order

Dimensions

- OGD20V-6RJ-K (B, Y, R) (3/8" JXR female joint (with bearing) type)
- OGD20V-6W-K (B, Y, R) (3/8" automatic welded joint type)
- MGD20V-6RJ-K (B, Y, R) (3/8" JXR female joint (with bearing) type)
- MGD20V-6R-K (B, Y, R) (3/8" JXR female joint type)
- MGD20V-6RM-K (B, Y, R) (3/8" JXR male joint type)
- MGD20V-6W-K (B, Y, R) (3/8" automatic welded joint type)
- MGD20V-6S-K (B, Y, R) (3/8" double barbed joint type)

·The 1/2-inch size is also available. The face-to-face distance is the same as the 3/8-inch size. (This does not apply to the double-barbed joint.)

Figure shows OGD20V-6RJ-K
Female joint (with bearing)

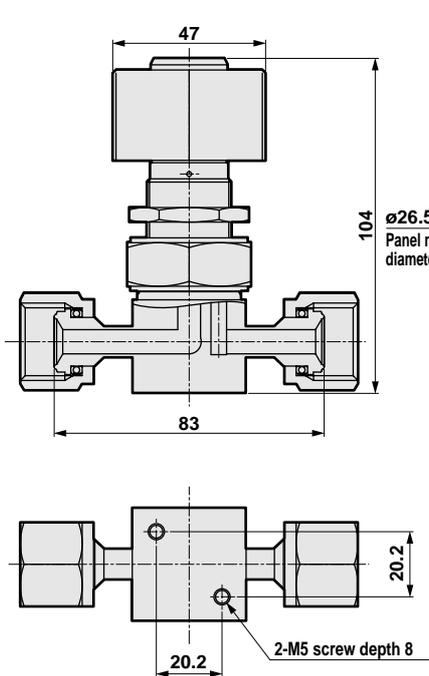
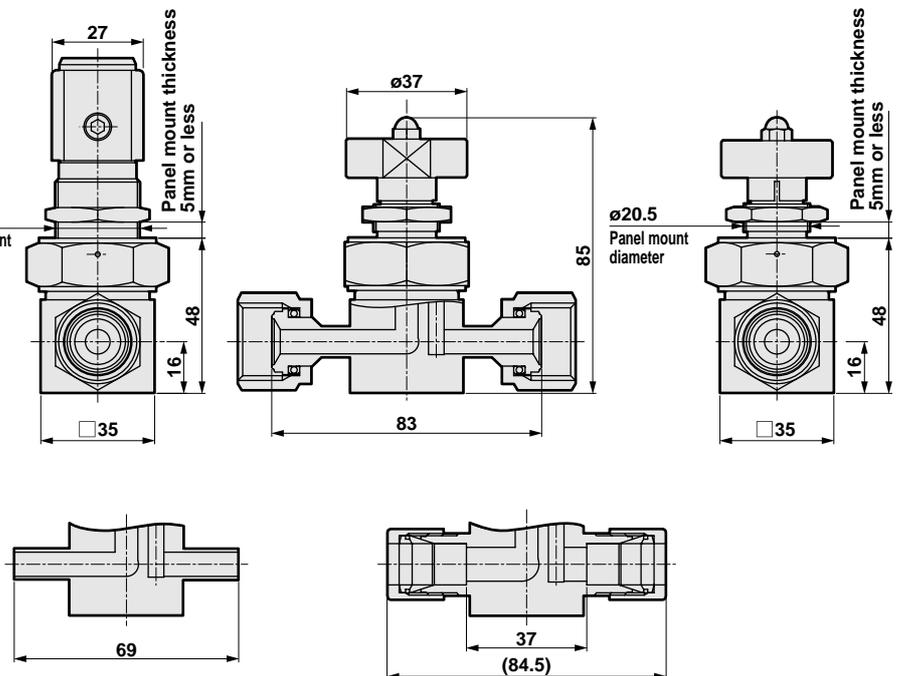


Figure shows MGD20V-6RJ-K
female joint (with bearing)

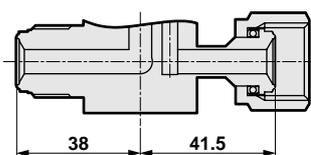


Welded joint: 6W

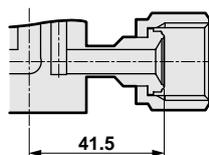
Double barbed joint: 8S

- OGD20V-6RJ-^{FM}_{MF}-K (B, Y, R) (3/8" JXR female (with bearing) - male combination type)
- OGD20V-6R-^{FM}_{MF}-K (B, Y, R) (3/8" JXR female - male combination type)
- MGD20V-6RJ-^{FM}_{MF}-K (B, Y, R) (3/8" JXR female (with bearing) - male combination type)
- MGD20V-6R-^{FM}_{MF}-K (B, Y, R) (3/8" JXR female - male combination type)

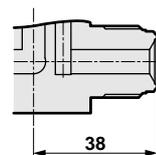
·The 1/2-inch size is also available. The face-to-face distance is the same as the 3/8-inch size.



Female joint: 6RJ (with bearing)



Female joint: 6R



Male joint: 6RM

OGD20V
MGD20V 3-way separate flow valve

Custom order

Dimensions

- OGD20V-6RJ- (3/8" JXR female joint (with bearing) combination type)
- OGD20V-6R- (3/8" JXR female joint combination type)
- OGD20V-6RM- (3/8" JXR male joint type)
- OGD20V-6W- (3/8" automatic welded joint combination type)
- MGD20V-6RJ- (3/8" JXR female joint (with bearing) combination type)
- MGD20V-6R- (3/8" JXR female joint combination type)
- MGD20V-6RM- (3/8" JXR male joint type)
- MGD20V-6W- (3/8" automatic welded joint combination type)

.The 1/2-inch size is also available. The face-to-face distance is the same as the 3/8-inch size.

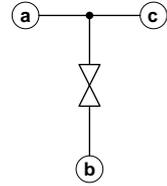
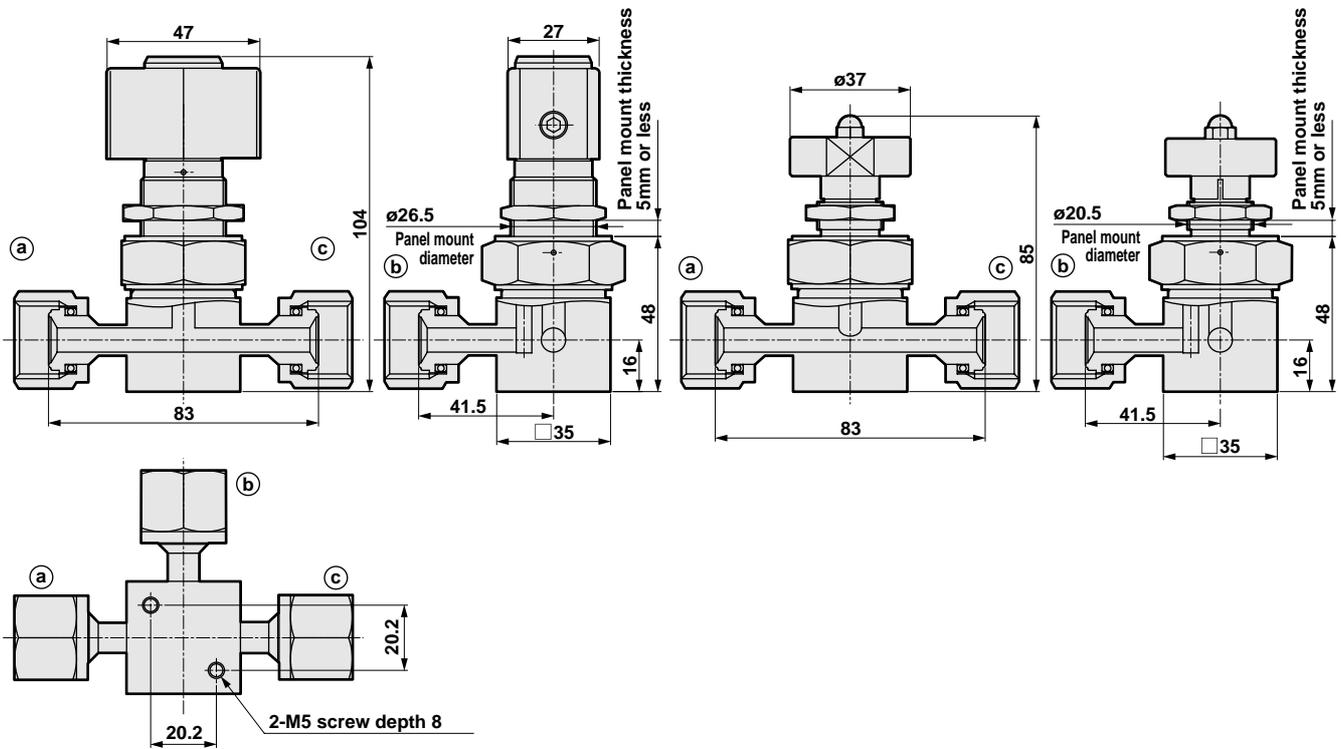
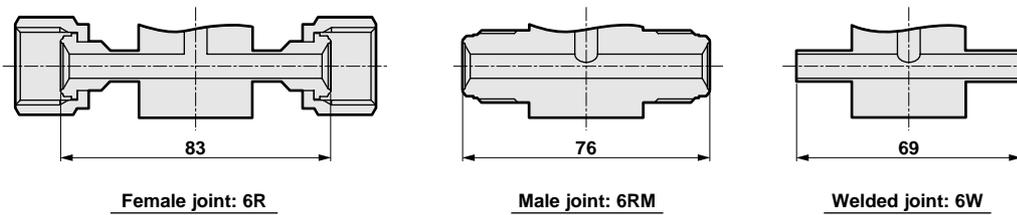


Figure shows OGD20V-6RJ-FFF female joint (with bearing)

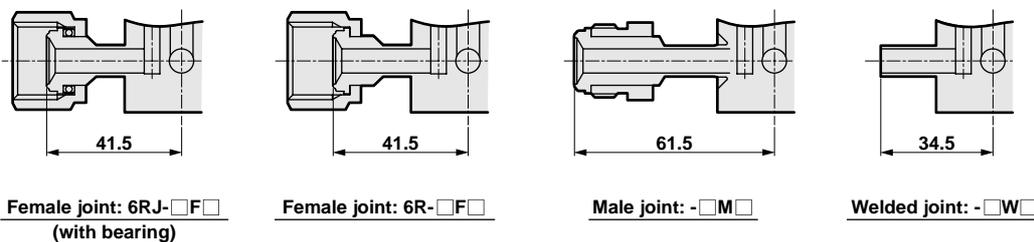
Figure shows MGD20V-6RJ-FFF female joint (with bearing)



<Main port >



<Branch port>



OGD*0V MGD10V Safety specification options **Custom order**

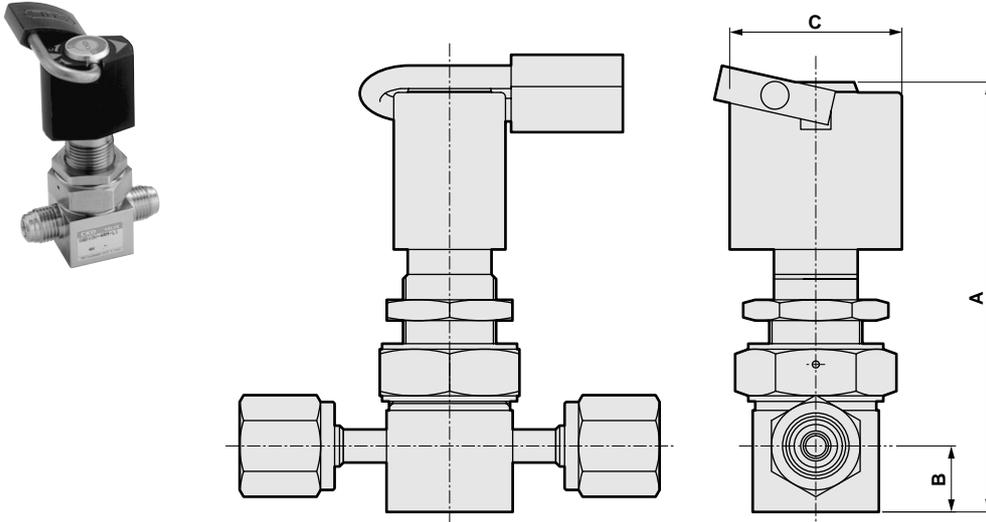
Dimensions

OGD*0V-□ With locking mechanism

Handle can be padlocked not to move.

- (1) Locked when valve open
- (2) Locked when valve closed
- (3) Locked when valve open/closed

The following three are available:



Model No.	A	B	C
OGD10V-□	94	14.3	37
OGD20V-□	118	16	47

* Contact your CKD representative for details on the model No., etc.

Outline drawing

MGD10V With double action mechanism

MGD10V With locking mechanism



Malfunctions are eliminated by pushing and turning the handle (double action).



Contact your CKD representative for details on the model No., etc.

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