













Selection guide [Components for process gases]


* Refer to Intro Pages 7 to 8 of High Vacuum Components Selection Guide.


● Valve for process gases

Model No.	Working fluid	Connection	Cv	Page
			0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0	
Air operated valve	<ul style="list-style-type: none"> ● Inert gas ● Process gas 	LGD1¹/₂ · LGD2¹/₂ • Metal diaphragm structure 	1/4" JXR Male fitting or equiv. 0.3 1/4" JXR Female fitting or equiv. 1/4" Double barbed fitting	P.4
		1/2" JXR Male fitting or equiv. 1/2" JXR Female fitting or equiv. 3/8" Double barbed fitting 1/2" Double barbed fitting	0.7 0.7 0.65 0.7	
		AGD0¹/₂R • Metal diaphragm structure • □21 compact 	1/4" JXR Male fitting 0.1 1/4" JXR Female fitting	P.14
		AGD1¹/₂R · AGD2¹/₂R • Metal diaphragm structure • Standard size 	1/4" JXR Male fitting 0.3 1/4" JXR Female fitting 1/4" Double barbed fitting	P.16
		3/8" JXR Male fitting 3/8" JXR Female fitting 3/8" Double barbed fitting	0.65 0.65	
		Other variation-compatible products  * Contact CKD for other fittings.	Refer to the listed page for details. 0.1 0.3 0.65	P.18
		AGD0¹/₂R-HD AGD1¹/₂R-HD • High durability 	1/4" JXR Male fitting 0.1 1/4" JXR Female fitting	P.44
		1/4" JXR Male fitting 1/4" JXR Female fitting 1/4" Double barbed fitting	0.3 0.3	
		AGD1¹/₂R-HDF AGD2¹/₂R-HDF • For high temperature • High durability 	1/4" JXR Male fitting 0.3 1/4" JXR Female fitting 1/4" Double barbed fitting	P.46
		3/8" JXR Male fitting 3/8" JXR Female fitting 3/8" Double barbed fitting	0.65 0.65	
		AGD21R-A • For high temperature • High durability 	3/8" JXR Male fitting 3/8" JXR Female fitting 3/8" Double barbed fitting 0.4*	P.48

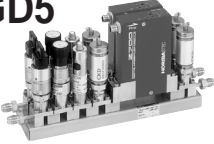
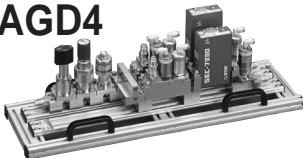
* 200°C, negative pressure

Model No.		Working fluid	Connection	Cv	Page
				0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0	
Manual valve	LGD₂0 • Metal diaphragm structure • Handle open/close (180° rotation) 	● Inert gas ● Process gas	1/4" JXR male fitting or equiv. 1/4" JXR female fitting or equiv. 1/4" Double barbed fitting	0.3	P.8
			1/2" JXR male fitting or equiv. 1/2" JXR female fitting or equiv. 3/8" Double barbed fitting 1/2" Double barbed fitting	0.7	
	OGD₂0R • Metal diaphragm structure • Handle open/close (90° snap action) 		1/4" JXR male fitting 1/4" JXR female fitting 1/4" Double barbed fitting	0.3	P.32
			3/8" JXR male fitting 3/8" JXR female fitting 3/8" Double barbed fitting	0.65	
	MGD₂0R • Metal diaphragm structure • Handle open/close (270° rotation) 		1/4" JXR male fitting 1/4" JXR female fitting 1/4" Double barbed fitting	0.3	P.34
			3/8" JXR male fitting 3/8" JXR female fitting 3/8" Double barbed fitting	0.65	
Other variation-compatible products			Refer to the listed page for details.	0.3 0.65	P.36

Model No.	Working fluid	Connection	Supply fluid pressure (MPa)	Achieved vacuum level (kPa(abs))	Page
VG • Vacuum generator for process gas exhaust 	● Inert gas ● Process gas	IN1/4" JXR male fitting VAC. 1/4" JXR female fitting VENT3/8" JXR male fitting	0.4 to 0.6	13.3 or less	P.52
• Flow rate adjusting valve • Piston check valve					P.54

Model No.	Working fluid	Connection	Max. working pressure (MPa)	Set pressure range (MPa)	Page
PGM 	● Inert gas ● Process gas	1/4" JXR male fitting 1/4" JXR female fitting 1/4" JXR male→female fitting 1/4" JXR female→male fitting Various integrated interfaces supported	1.0	-0.07 to 0.21 MPa (pressure range 30 V) 0 to 0.21 MPa (pressure range 30) 0 to 0.35 MPa (pressure range 50) 0 to 0.42 MPa (pressure range 60) 0 to 0.7 MPa (pressure range 100) * Pressure range in () indicates psi.	P.56


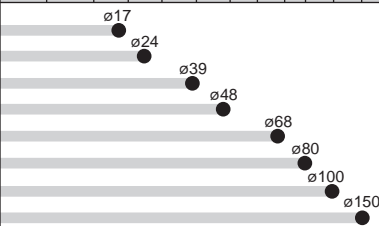

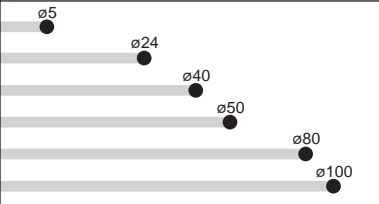

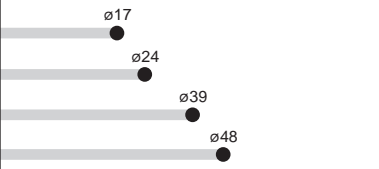

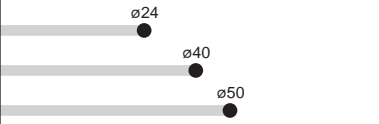


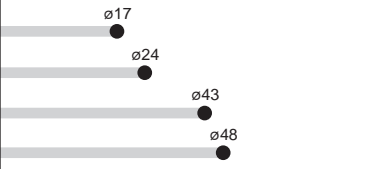
● Integrated gas supply system

Integrated gas supply system				
Model No.	Seal connection	Size	Cv	Page
			00.10.20.30.40.50.60.70.80.91.0	
IAGD5		● W seal	1.125"	0.10.26
IAGD4		● W seal	1.5"	0.10.26



Selection guide [High vacuum Components]

● Valve for high vacuum

	Model No.	Working fluid	Connection size	Orifice: ømm	Voltage	Page
				0 5 10 20 30 40 50 60 70 80 100 150		
Air operated valve	AVB**7 • Molded bellows • Aluminum body 	● Vacuum ● Inert gas	Vacuum clamp fitting NW16 Vacuum clamp fitting NW25 Vacuum clamp fitting NW40 Vacuum clamp fitting NW50 Vacuum clamp fitting NW63 Vacuum clamp fitting NW80 Vacuum clamp fitting NW100 Vacuum clamp fitting NW160		—	P.92
	AVB**3 • Molded bellows • Stainless steel body 	● Vacuum ● Inert gas	1/4" Tube Vacuum clamp fitting NW25 Vacuum clamp fitting NW40 Vacuum clamp fitting NW50 Vacuum clamp fitting NW80 Vacuum clamp fitting NW100		—	P.106
Manual valve	MVB*17 • Molded bellows • Aluminum body 	● Vacuum ● Inert gas	Vacuum clamp fitting NW16 Vacuum clamp fitting NW25 Vacuum clamp fitting NW40 Vacuum clamp fitting NW50		—	P.118
	MVB*0 • Molded bellows • Stainless steel body 	● Vacuum ● Inert gas	Vacuum clamp fitting NW25 Vacuum clamp fitting NW40 Vacuum clamp fitting NW50		—	P.120
	MVP*0 • Double O-ring shaft sealing method • Stainless steel body 				—	P.122
Vacuum pressure control valves	IACV • Vacuum pressure control • Molded bellows • Aluminum body 	● Vacuum ● Inert gas	Vacuum clamp fitting NW16 Vacuum clamp fitting NW25 Vacuum clamp fitting NW40 Vacuum clamp fitting NW50		—	P.128