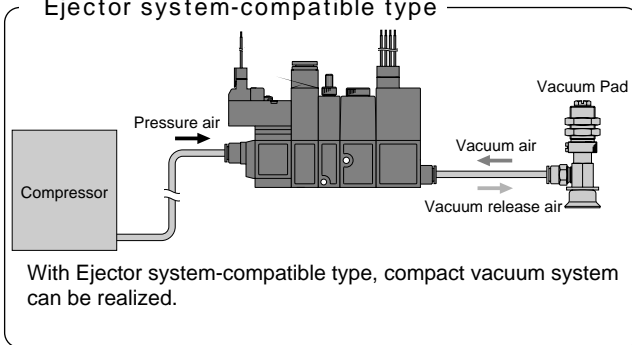


Vacuum Generator VJ Type

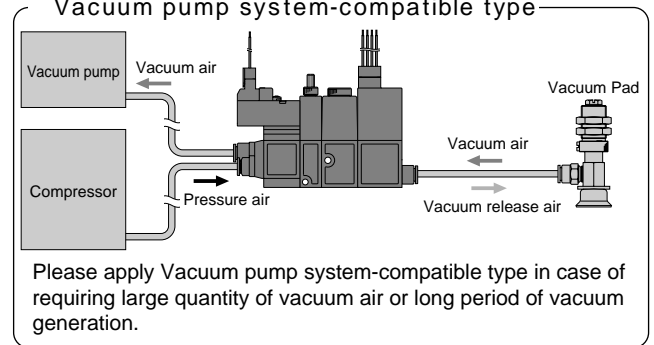
Package: 1 pc. in a bag

- By newly adding pressure adjusting function to flow adjusting function, it enable to prevent works from being blown away.
- A relief mechanism built into the circuit which breaks the vacuum (extra pressure is relieved) realizes shorter vacuum release time.
- A variety of features allows this vacuum unit to respond to diverse needs. (ejector system-compatible vacuum generation unit, vacuum pump system-compatible unit).
- A manifold-type vacuum unit can realize savings vis-a-vis pipe work. Concerning the pipe lead-out direction, two types are available-front lead-out type and rear lead-out type; choice depends on the place of installation.
- Supply valves are available in three different types-double solenoid type (retention type), normal close type (always closed) and normal open type (always open). Of the three, double solenoid type (retention type) is optimal for applications where the vacuum is generated only for a short period of time.
- LED vacuum switches allow for clearer visual recognition. Two types of vacuum switches are available-two-point output and analog output-with selection depending on the desired application. For wiring, a connector method is adopted to enhance the ease of designing the wiring layout.
- Four standard nozzle diameters are available-05, 07, 10 and 12.

Ejector system-compatible type



Vacuum pump system-compatible type



Specifications (Supply pressure)

Type	Ejector system-compatible type	Vacuum pump system-compatible type
Fluid admitted	Air	Air
Service pressure range	43.5~102psi (0.3~0.7MPa)	43.5~102psi (0.3~0.7MPa)
Service temperature range	41~122°F (5~50°C)	41~122°F (5~50°C)
Working vacuum range	—	0~29.8in. Hg (0~101kPa)

Generator characteristics

■ H type (High-vacuum Middle-flow type)

Nozzle dia.		Final vacuum		Suction flow		Consumption	
(in.)	(mm)	(in. Hg)	(kPa)	(SCFM)	(ℓ/min(A, N ₂))	(SCFM)	(ℓ/min(A, N ₂))
0.02	0.5	-26.7	-90.4	0.25	7	0.40	11.5
0.03	0.7	-27.5	-93.1	0.46	13	0.81	23
0.04	1.0	-27.5	-93.1	0.95	27	1.61	46
0.05	1.2	-27.5	-93.1	1.33	38	2.45	70

■ L type (Middle-vacuum Large-flow type)

Nozzle dia.		Final vacuum		Suction flow		Consumption	
(in.)	(mm)	(in. Hg)	(kPa)	(SCFM)	(ℓ/min(A, N ₂))	(SCFM)	(ℓ/min(A, N ₂))
0.02	0.5	-19.6	-66.5	0.39	11	0.40	11.5
0.03	0.7	-19.6	-66.5	0.91	26	0.81	23
0.04	1.0	-19.6	-66.5	1.40	40	1.61	46
0.05	1.2	—	—	—	—	—	—

■ E type (High-vacuum Small-flow type)

Nozzle dia.		Final vacuum		Suction flow		Consumption	
(in.)	(mm)	(in. Hg)	(kPa)	(SCFM)	(ℓ/min(A, N ₂))	(SCFM)	(ℓ/min(A, N ₂))
0.02	0.5	—	—	—	—	—	—
0.03	0.7	-26.7	-90.4	0.37	10.5	0.60	17
0.04	1.0	-26.7	-90.4	0.74	21	1.19	34
0.05	1.2	-26.7	-90.4	0.95	27	1.65	47

Solenoid valve specifications (Vacuum making, vacuum release)

■ Pilot Valve

Item	Vacuum making solenoid valve		Vacuum release solenoid valve	
Operating system	Direct operation			
Valve construction	Elastic seal, poppet valve			
Voltage rating	24VDC	100VAC	24VDC	100VAC
Allowable voltage range	24VDC±10%	100VAC±10%	24VDC±10%	100VAC±10%
Surge limiting circuit	Diode	Bridge diode	Diode	Bridge diode
Power consumption	1.2 W (with LED)	1.5VA (with LED)	1.2 W (with LED)	1.5VA (with LED)
Manual operation	Push-button system of non-lock type			
Operational indication	Red LED lighting up when coil excitation is in operation.			
Wiring method	Connector type (cable length: 300mm/11.81 in.)			
	Red: 24VDC Black: COM	Blue	Red: 24VDC Black: COM	Blue

■ Changing Valve

Item	Vacuum making solenoid valve	Vacuum release solenoid valve
Operating system	Pneumatic operation by pilot valve	
Valve construction	Elastic seal, poppet valve	
Proof pressure	152.3psi (1.05MPa)	
Valve type	Double solenoid (retention type), Normally closed, Normally open	Normally closed
Min. excitation time	50msec (Double solenoid type only)	
Lubrication	Not required	
Effective sectional area	Air supply port diameter φ4.35mm (Cv: 0.19) φ6.5mm (Cv: 0.27)	1mm ² (Cv: 0.05)

Vacuum Generator VJ Type

Vacuum release function

Vacuum release air flow	0~1.75SCFM (0~50 l/min (ANR)) (air supply pressure is 72.5psi/0.5MPa)
Structure of vacuum release air relief valves	Elastic seal, poppet valve
Relief pressure setting range	0.73~7.3psi (0.005~0.05MPa)

Filter specification

Element material	PVF (polyvinyl formal)
Filtering capacity	10 μ m
Filter surface area	1130mm ² (1.75in ²)
Replacement element model designation	For vacuum air: VGFE10 For vacuum release air: VJFF

Vacuum switch with LED

Specification	Equipped with 2-point output switch (W)	Equipped with analog output switch (A)
Set value at shipment	-14.8in. Hg/-50kPa (SW1) -3.0in. Hg/-10kPa (SW2)	-14.8in. Hg/-50kPa
Current consumption	40mA max.	
Pressure detection	Diffused semiconductor pressure switch	
Service pressure range	0~-29.5in. Hg (0~-100kPa)	
Pressure setting range	0~-29.3in. Hg (0~-99kPa)	
Proof pressure	29psi (0.2MPa)	
Storage temperature range	-4~176°F/20~80°C (atmospheric pressure, humidity less than 60%RH)	
Operating temperature range	32~122°F/0~50°C (no freezing)	
Operating humidity range	35~85%RH (no freezing)	
Power requirements	DC12~24V \pm 10% Ripple (P-P) 10% max.	
Protective structure	IEC standard IP40 equiv.	
No. of pressure setting	2	1
Operating accuracy	\pm 3%F.S. max. (at Ta=77°F/25°C)	
Differential response	Fixed (2%F.S. max)	Variable (about 0~15% of set value)
Switch output	NPN open collector output: 30V 80mA max. Residual voltage 0.8V max.	
Analog output	Output voltage: 1~5V Zero-point voltage: 1 \pm 0.1V Span voltage: 4 \pm 0.1V Output current: 1mA max. (load resistance 5k Ω max.) LN/HYS: \pm 0.5%F.S. max.	
Response	1 msec max.	
Indication	0~-29.5in. Hg/0~-99kPa (2-digit red LED display)	
No. of indications	About 4 times/sec	
Indication accuracy	\pm 3%F.S. \pm 2digit	
Resolution	1 digit	
Operational indication	SW1: Red LED lighting up when pressure is above setting. SW2: Green LED lighting up when pressure is above setting.	Red LED lighting up when pressure is above setting.
Function	1. MODE selector switch (ME or S1 or S2) 2. S1 setting trimmer (2/3-turn trimmer) 3. S2 setting trimmer (2/3-turn trimmer)	1. MODE selector switch (ME or SW) 2. SW setting trimmer (2/3-turn trimmer) 3. HYS setting trimmer (about 0~15% of set value)

Detailed Safety Instructions

Before using the PISCO device, be sure to read the "Safety Instructions", "Common Safety Instructions for Products Listed in This Manual" on page 15 to 17 and "Common Safety Instructions for Vacuum" on page 139 to 140.

Warning

- For the operation of the valve, make certain that the leakage current is less than 1mA. Leakage current larger than that may cause malfunction.
- This Vacuum Generator with hold function permits some vacuum leakage, so provide an appropriate safety means where vacuum must be held for long time.
- Long continuous power supply to the pilot valve may raise the temperature of the coil. Heat may cause burns or affect the surrounding equipment adversely. Consult PISCO about such applications.
- A model with retention type air supply valve (refer to as double solenoid type), VJA, must confirm position of change valve by sending signal to or by manually operation of pilot solenoid valve when re-supplying pilot air after shut down once or initial setting because the change valve is placed at neutral position.

Caution

- In order to avoid disconnection and/or damage to the connectors, do not allow the pilot valve and vacuum switch lead wires to be pulled or bent.
- In respect to manifold specifications, performance deterioration or adverse effects may possibly be produced on the vacuum ports of other stations depending on the number of manifold series used and/or combinations of installed units. Discretion is therefore to be used in this respect. Consult us if problems arise.
- Compressed air contains a variety of foreign matter (such as water, oxidized oils, and mineral tar among others). Since foreign matter substantially reduces the performance of this equipment, air quality should be enhanced by dehumidification via after-coolers or dryers.
- Do not use lubricators.
- Since pipe rust cause malfunctions, a filter with a thickness of less than 5 should be used.
- Do not use this equipment near corrosive and/or flammable gases. Do not use this equipment for the handling of fluids.
- Do not activate vacuum breaking solenoid valves when a vacuum has been generated.
- When replacing vacuum port cartridge joints, first remove any foreign matter clinging to them and the surrounding areas, then firmly insert pins into joints.
- When replacing supply port joint blocks, confirm that their packing is in place, then remove foreign matter from surrounding areas and tighten screws according to the prescribed torque.
- As the series number of manifolds increases, trouble, such as the lowering of vacuum performance due to an insufficient supply of air and/or insufficient exhaust port capacity, exhaust air flowing directly into vacuum ports and others such problems may possibly be encountered. Consult us on this matter, since simultaneous activation-allowable series numbers differ according to each unit's vacuum performance.

Model Designation of ejector system-compatible type (Example)

VJ **H** **07** **B** - **06** **06** **08** - **D24** **L** - **W**

①. Vacuum characteristic

- H:** High-vacuum Middle-flow type
- L:** Middle-vacuum Large-flow type
- E:** High-vacuum Small-flow type
- K:** With manifold types, when ejectors are mounted in combination with each vacuum characteristic. (Details should be described in Specification form.)

②. Nozzle diameter

Code	Nozzle diameter (in.) (mm)	H type		L type			E type			
		Final vacuum (in. Hg) (kPa)	Suction flow (SCFM) (l/min(ANR))	Air on suction (SCFM) (l/min(ANR))	Final vacuum (in. Hg) (kPa)	Suction flow (SCFM) (l/min(ANR))	Air on suction (SCFM) (l/min(ANR))	Final vacuum (in. Hg) (kPa)	Suction flow (SCFM) (l/min(ANR))	Air on suction (SCFM) (l/min(ANR))
		05	0.02 0.5	-26.7 -90.4	0.25 7	0.40 11.5	-19.6 -66.5	0.39 11	0.49 11.5	---
07	0.03 0.7	-27.5 -93.1	0.46 13	0.81 23	-19.6 -66.5	0.91 26	0.81 23	-26.7 -90.4	0.37 10.5	0.60 17
10	0.04 1.0	-27.5 -93.1	0.95 27	1.61 46	-19.6 -66.5	1.40 40	1.61 46	-26.7 -90.4	0.74 21	1.19 34
12	0.05 1.2	-27.5 -93.1	1.33 38	2.45 70	---	---	---	-26.7 -90.4	0.95 27	1.65 47
00	With manifold types when ejectors are mounted in combination with each vacuum characteristic. (Details should be described in Specification form.)									

③. Vacuum-generating solenoid valve valve-unit type

- A:** Double solenoid type (retention type)
- B:** Normally closed type
- C:** Normally open type
- K:** With manifold types, when mounted with each valve type (Details should be described in Specification form.)

④. Vacuum port (tube dia.)

Code	04	06	08	00
Dia.	φ4mm	φ6mm	φ8mm	(*1)

- *1. With manifold types, when joint size differs with each station. (Details should be described in Specification form.)

⑤. Air supply port (tube dia.)

Code	04	06	08	10
Dia.	φ4mm (*1)	φ6mm	φ8mm (*2)	φ10mm (*2)

- *1. Stand-alone type only
- *2. Manifold type only

⑥. Exhaust port

Code	Open to air	Concentrated exhaust	
	Silencer	Quick-fitting joint	
Dia.	---	φ8mm	φ10mm (*1)

- *1. Manifold type only

⑦. Solenoid valve type

Code	D24	A100
Working voltage	24VDC	100VAC

⑧. Wire lead-out direction

Code	L	S
Wire lead-out direction	Lead out from above	Lead out sideways

⑨. No. of manifold (Code is entered only in the case of manifold)

Code	02	03	04	05	06	07	08	09	10
No. of manifold	2	3	4	5	6	7	8	9	10

⑩. Lead-out direction of concentrated piping (Code is entered only in the case of manifold)

Code	A	B
Leadout direction	Vacuum port side	Supply port side

⑪. Vacuum switches (NPN Open collector)

- W:** With 2-point output switch
- A:** With analog output switch
- K:** With manifold types, when mounted in combination with each specification. (Details should be described in Specification form.)
- No code:** Without vacuum switch

Model Designation of vacuum pump system-compatible type (Example)

VJP **A** - **06** **06** **06** - **D24** **L** - **W**

①. Vacuum-generating solenoid valve valve-unit type

- A:** Double solenoid type (retention type)
- B:** Normally closed type
- C:** Normally open type
- K:** With manifold types, when joint size differs with each valve type (Details should be described in Specification form.)

②. Vacuum port (tube dia.)

Code	04	06	08	00
Dia.	φ4mm	φ6mm	φ8mm	(*1)

- *1. With manifold types, when joint size differs with each station. (Details should be described in Specification form.)

③. Air supply port (tube dia.)

Code	04	06	08	10
Dia.	φ4mm (*1)	φ6mm	φ8mm (*2)	φ10mm (*2)

- *1. Stand-alone type only
- *2. Manifold type only

④. Exhaust port (tube dia.) (Code is entered only in the case of manifold)

Code	06	08	10
Dia.	φ6mm	φ8mm	φ10mm

⑤. Vacuum supply port (tube dia.)

Code	04	06	08	10
Dia.	φ4mm (*1)	φ6mm	φ8mm (*2)	φ10mm (*2)

- *1. Stand-alone type only
- *2. Manifold type only

⑥. Solenoid valve type

Code	D24	A100
Working voltage	24VDC	100VAC

⑦. Wire lead-out direction

Code	L	S
Wire lead-out direction	Lead out from above	Lead out sideways

⑧. No. of manifold (Code is entered only in the case of manifold)

Code	02	03	04	05	06	07	08	09	10
No. of manifold	2	3	4	5	6	7	8	9	10

⑨. Lead-out direction of concentrated piping (Code is entered only in the case of manifold)

Code	A	B
Leadout direction	Vacuum port side	Supply port side

⑩. Vacuum switches (NPN Open collector)

- W:** With 2-point output switch
- A:** With analog output switch
- K:** With manifold types, when mounted in combination with each specification. (Details should be described in Specification form.)
- No code:** Without vacuum switch

➡ Please refer to P.159 for order example of ejector system-compatible type and P.160 for order example of vacuum pump system-compatible type.

Vacuum Generator VJ Type

Order Example

1. Ejector system-compatible Stand-alone type

VJ H 05 A-04 06 S-D24 L-W
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑩ ⑪

- ①.Vacuum characteristics: H→High-vacuum Middle-flow type
- ②.Nozzle dia.: 05→ ϕ 0.5mm
- ③.Vacuum-generating solenoid valve type: A→Double solenoid type (retention type)
- ④.Vacuum port: 04→ ϕ 4mm tube fitting
- ⑤.Air supply port: 06→ ϕ 6mm tube fitting
- ⑥.Exhaust port: S→Open to air
- ⑦.Solenoid valve type: D24→24VDC
- ⑧.Wire lead-out direction: L→Lead out from above
- ⑩.Vacuum switch specification: W→With 2-point output switch

2. Ejector system-compatible manifold

VJ H 05 A-04 10 10-D24 L-04 A-W
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

- ①.Vacuum characteristics: H→High-vacuum Middle-flow type
- ②.Nozzle dia.: 05→ ϕ 0.5mm
- ③.Vacuum-generating solenoid valve type: A→Double solenoid type (retention type)
- ④.Vacuum port: 04→ ϕ 4mm tube fitting
- ⑤.Air supply port: 10→ ϕ 10mm tube fitting
- ⑥.Exhaust port: 10→ ϕ 10mm tube fitting
- ⑦.Solenoid valve type: D24→24VDC
- ⑧.Wire lead-out direction: L→Lead out from above
- ⑨.No. of manifold: 04→4
- ⑩.Lead-out direction of concentrated piping: A→Vacuum port side
- ⑩.Vacuum switch specification: W→With 2-point output switch

3. Ejector system-compatible manifold (Applicable to model designation for manifold when the specification of each station differs even by one.)

VJ K 00 K-00 10 10-D24 L-05 A-K
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

- ①.Vacuum characteristics: K→St.1, St.2, St.3: H type
St.4: E type
St.5: H type
- ②.Nozzle dia.: 00→St.1, St.2, St.3: 0.7mm
St.4: 1.0mm
St.5: 1.2mm
- ③.Vacuum-generating solenoid valve type: K→St.1, St.2, St.3: Double solenoid type (retention type)
St.4, St.5: Normally closed
- ④.Vacuum port: 00→St.1, St.2, St.3: ϕ 6mm tube fitting
St.4, St.5: ϕ 8mm tube fitting
- ⑤.Air supply port: 10→ ϕ 10mm tube fitting
- ⑥.Exhaust port: 10→ ϕ 10mm tube fitting
- ⑦.Solenoid valve type: D24→24VDC
- ⑧.Wire lead-out direction: L→Lead out from above
- ⑨.No. of manifold: 05→5
- ⑩.Lead-out direction of concentrated piping: A→Vacuum port side
- ⑩.Vacuum switch specification: K→St.1, St.2, St.3: With 2-point output switch
St.4: Without vacuum switch
St.5: With analog output switch

Specification order form example (Specification of above case)

		Vacuum characteristic	Nozzle diameter	Valve type	Vacuum port	Air supply port	Exhaust port	Solenoid valve type	Wire lead-out direction	No. of manifold	Lead out direction of concentrated piping	Vacuum switch specification	
		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	
Manifold model	VJ	K	00	K	- 00	10	10	- D24	L	- 05	A	- K	
Mounting unit model	L	St.1	H	07	A	06	/	/	/	/	/	W	
		St.2	St.1				/	/	/	/	/		
		St.3	St.1				/	/	/	/	/		
		St.4	E	10	B	08	/	/	/	/	/		
		St.5	H	12	B	08	/	/	/	/	/	A	
	R	St.6					/	/	/	/	/	/	
		St.7					/	/	/	/	/	/	
		St.8					/	/	/	/	/	/	
		St.9					/	/	/	/	/	/	
		St.10					/	/	/	/	/	/	

*If the top-mounting units for St.1, St.2 and St.3 are of the same specifications as in the above example of specification order form, fill up the St.1 space (uppermost) only, while entering St.1 in each of the St.2 and St.3 grids on the Config. (port pos.) column ①.

Order Example

1. Vacuum pump system-compatible Stand-alone Type

VJP A-04 04 06-D24 L-W
① ② ③ ⑤ ⑥ ⑦ ⑩

- ①. Vacuum air solenoid valve type:
A→Double solenoid type (retention type)
- ②. Vacuum port
04→φ4mm tube fitting
- ③. Air supply port:
04→φ4mm tube fitting
- ⑤. Vacuum supply port
06→φ6mm tube fitting
- ⑥. Solenoid valve type: D24→24VDC
- ⑦. Wire lead-out direction: L→Lead out from above
- ⑩. Vacuum switch specification:
W→With 2-point output switch

2. Vacuum pump system-compatible manifold

VJP A-04 08 08 10-D24 L-04 A-W
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- ①. Vacuum air solenoid valve type:
A→Double solenoid type (retention type)
- ②. Vacuum port
04→φ4mm tube fitting
- ③. Air supply port:
08→φ8mm tube fitting
- ④. Exhaust port:
08→φ8mm tube fitting
- ⑤. Vacuum supply port
10→φ10mm tube fitting
- ⑥. Solenoid valve type: D24→24VDC
- ⑦. Wire lead-out direction: L→Lead out from above
- ⑧. No. of manifold: 04→4
- ⑨. Lead-out direction of concentrated piping
A→Vacuum port side
- ⑩. Vacuum switch specification:
W→With 2-point output switch

3. Vacuum pump system-compatible manifold

VJP K-00 10 10 10-D24 L-05 A-K
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

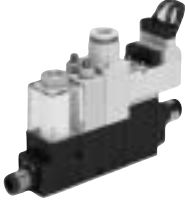


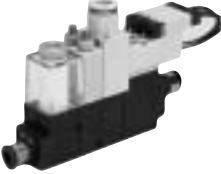
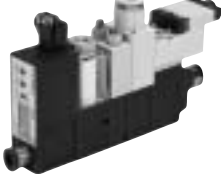
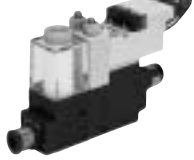
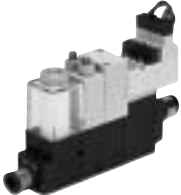
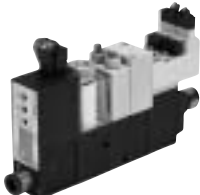

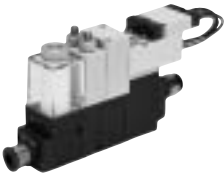
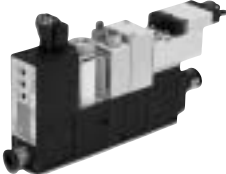
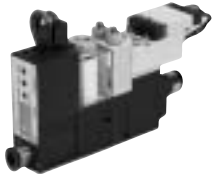
- ①. Vacuum air solenoid valve type:
K→St.1, St.2, St.3: Double solenoid type (retention type)
St.4, St.5: Normally closed
- ②. Vacuum port
00→St.1, St.2, St.3: φ6mm tube fitting
St.4, St.5: φ8mm tube fitting
- ③. Air supply port:
10→φ10mm tube fitting
- ④. Exhaust port:
10→φ10mm tube fitting
- ⑤. Vacuum supply port
10→φ10mm tube fitting
- ⑥. Solenoid valve type: D24→24VDC
- ⑦. Wire lead-out direction: L→Lead out from above
- ⑧. No. of manifold : 05→5
- ⑨. Lead-out direction of concentrated piping
A→Vacuum port side
- ⑩. Vacuum switch specification:
K→St.1, St.2, St.3: With 2-point output switch
St.4: Without vacuum switch
St.5: With analog output switch

Specification order form example (Specification of above case)

Manifold model		VJP	K	-	00	10	10	10	-	D24	L	-	05	A	-	K
Mounting unit model		L	St.1	A	06	/	/	/	/	/	/	/	/	/	/	W
		Station No.	St.2	St.1	/	/	/	/	/	/	/	/	/	/	/	/
			St.3	St.1	/	/	/	/	/	/	/	/	/	/	/	/
			St.4	B	08	/	/	/	/	/	/	/	/	/	/	A
			St.5	B	08	/	/	/	/	/	/	/	/	/	/	/
			St.6	/	/	/	/	/	/	/	/	/	/	/	/	/
			St.7	/	/	/	/	/	/	/	/	/	/	/	/	/
			St.8	/	/	/	/	/	/	/	/	/	/	/	/	/
			St.9	/	/	/	/	/	/	/	/	/	/	/	/	/
		R	St.10	/	/	/	/	/	/	/	/	/	/	/	/	/

*If the top-mounting units for St.1, St.2 and St.3 are of the same specifications as in the above example of specification order form, fill up the St.1 space (uppermost) only, while entering St.1 in each of the St.2 and St.3 grids on the Config. (port pos.) column ①.

Vacuum Actuator Tube Diaphragm Diaphragm

Ejector system-compatible type		Vacuum pump system-compatible type
<p>VJ Concentrated Exhaust, Wire lead-out Direction: from above</p> 	<p>VJ Concentrated Exhaust, with Vacuum Switch Wire lead-out Direction: from above</p> 	<p>VJP Wire lead-out Direction: from above</p> 
Model	Model	Model
VJ□□□-□□08-□L	VJ□□□-□□08-□L-□	VJP□-□□□-□L
<p>VJ Concentrated Exhaust, Wire lead-out Direction: Sideways</p> 	<p>VJ Concentrated Exhaust, with Vacuum Switch Wire lead-out Direction: Sideways</p> 	<p>VJP Wire lead-out Direction: Sideways</p> 
Model	Model	Model
VJ□□□-□□08-□S	VJ□□□-□□08-□S-□	VJP□-□□□-□S
<p>VJ Open to air, Wire lead-out Direction: from above</p> 	<p>VJ Open to air, with Vacuum Switch Wire lead-out Direction: from above</p> 	<p>VJP with Vacuum Switch Wire lead-out Direction: from above</p> 
Model	Model	Model
VJ□□□-□□S-□L	VJ□□□-□□S-□L-□	VJP□-□□□-□L-□
<p>VJ Open to air, Wire lead-out Direction: Sideways</p> 	<p>VJ Open to air, with Vacuum Switch Wire lead-out Direction: Sideways</p> 	<p>VJP with Vacuum Switch Wire lead-out Direction: Sideways</p> 
Model	Model	Model
VJ□□□-□□S-□S	VJ□□□-□□S-□S-□	VJP□-□□□-□S-□

Vacuum Generator VJ Type

Manifold type

No. of manifold

2 units

3 units

4 units

5 units

6 units

7 units

8 units

9 units

10 units

*Price for manifold types are the total sum of the following.

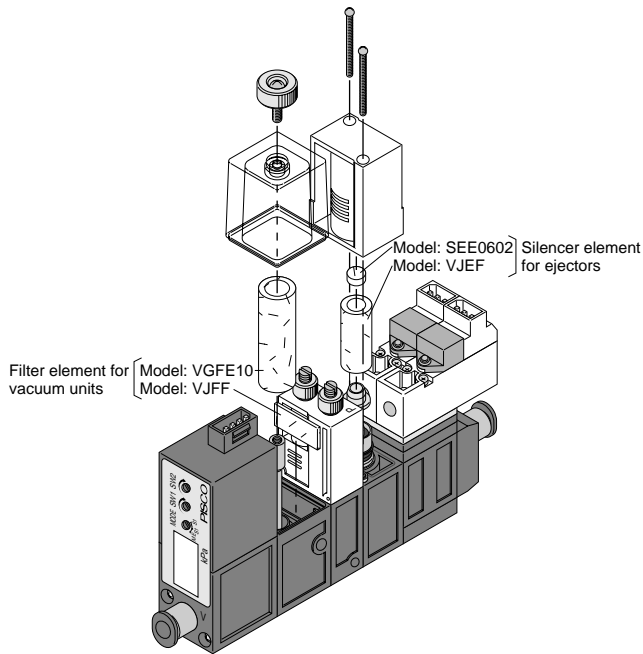
Supply port joint block list

	Model
Ejector system-compatible $\phi 4$ mm joint block	VJV020A940
Ejector system-compatible $\phi 6$ mm joint block	VJV020A960
Vacuum pump system-compatible $\phi 4 - \phi 4$ mm joint block	VJV020A944
Vacuum pump system-compatible $\phi 4 - \phi 6$ mm joint block	VJV020A946
Vacuum pump system-compatible $\phi 6 - \phi 6$ mm joint block	VJV020A966

Cartridge joint for Vacuum port list

	Model
$\phi 4$ mm Quick fitting joint	CJC09-04
$\phi 6$ mm Quick fitting joint	CJC09-06
$\phi 8$ mm Quick fitting joint	CJC09-08

Replace Element list



Element	Model
Silencer element for ejectors	VJEF
	SEE0602
Filter element for vacuum units	VGFE10
	VJFF