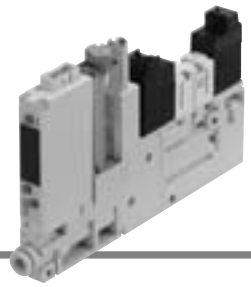
Space Saving Vacuum Ejector
Series ZQ

CE

[Option]
Note) CE compliant:
For DC only.



How to Order

Ejector Unit

For "Made to Order", refer to page 13.

ZQ1 [05] [1U] – [K1] [ ] [5] [L] [ ] – [EA] [ ] [G] [ ] – [ ] [ ] – [ ]
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

① Nozzle nominal size

05	ø0.5
07	ø0.7
10	ø1.0

② Exhaust type

1U	With silencer for single unit
3M	With silencer for manifold

③ Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve
K1	Normally closed	Normally closed
K2 Note 1)	Normally open	Normally closed
J1	Normally closed	None
J2 Note 1)	Normally open	None
Q1	Latching positive common	Normally closed
Q2	Latching positive common	None
N1	Latching negative common	Normally closed
N2	Latching negative common	None

Note 1) In cases when K2 or J2 (supply valve normally open) is selected for the solenoid valve combination, when vacuum is stopped for long periods of time (10 minutes or more), do not continue to energize the supply valve, and shut off the air supply.

④ Pilot valve (Refer to Table (1).)

Nil	Standard (DC: 1 W) Note 2)
Y	DC low wattage type (0.5 W) Note 2)

Note 2) Avoid energizing the solenoid valve for long periods of time. (Refer to Design and Selection on Specific Product Precautions.)

⑤ Solenoid valve rated voltage (Refer to Table (1).)

		CE compliant
1 Note 3)	100 VAC (50/60 Hz)	—
2 Note 3)	200 VAC (50/60 Hz)	—
3 Note 3)	110 VAC (50/60 Hz)	—
4 Note 3)	220 VAC (50/60 Hz)	—
5	24 VDC	●
6	12 VDC	●

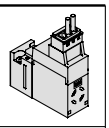
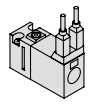
Note 3) CE compliant products are not available for "1", "2", "3" and "4".

Table (1) Combination of Solenoid Valve, Pilot Valve and Power Supply Voltage

Combination no.	Solenoid valve combination symbol	Pilot valve symbol	Applicable power supply voltage (V)					
			100 AC	200 AC	110 AC	220 AC	24 DC	12 DC
①	**K1**	**Nil**	—	—	—	—	●	●
②	**K1**	**Y**	—	—	—	—	●	●
③	**K2**	**Nil**	—	—	—	—	●	●
④	**J1**	**Nil**	●	●	●	●	●	●
⑤	**J1**	**Y**	—	—	—	—	●	●
⑥	**J2**	**Nil**	—	—	—	—	●	●
⑦	**Q1**	**Nil**	—	—	—	—	●	●
⑧	**Q2**	**Nil**	●	●	●	●	●	●
⑨	**N1**	**Nil**	—	—	—	—	●	●
⑩	**N2**	**Nil**	—	—	—	—	●	●

∗ Combinations ① to ⑩ in the above table are the only possible options.

⑥ Electrical entry

L	L-type plug connector, with 0.3 m lead wire, with light/surge voltage suppressor	
LO	L-type plug connector, without connector, with light/surge voltage suppressor	
G	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	

⑦ Manual override Note 4)

Nil	Non-locking push type Latching type: Push-locking type
B	Locking type (Q1/Q2/N1/N2: Not applicable)

Note 4) Latching type supply valve: Available in "Nil" only.
In this case, the supply valve and release valve come with a push-locking type.

⑧ Vacuum pressure switch suction filter Note 5)

EA	0 to –101 kPa/NPN open collector 2 outputs, with suction filter
EB	0 to –101 kPa/PNP open collector 2 outputs, with suction filter
EC	0 to –101 kPa/NPN open collector 1 output + analog voltage, with suction filter
EE	0 to –101 kPa/PNP open collector 1 output + analog voltage, with suction filter
FA	100 to –100 kPa/NPN open collector 2 outputs, with suction filter
FB	100 to –100 kPa/PNP open collector 2 outputs, with suction filter
FC	100 to –100 kPa/NPN open collector 1 output + analog voltage, with suction filter
FE	100 to –100 kPa/PNP open collector 1 output + analog voltage, with suction filter
F	Suction filter only

Note 5) The filter included in this product is of an simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please make additional use of an air suction filter of the ZFA, ZFB or ZFC series.

⚠Warning

The filter case of this suction filter is made of nylon. Contact with alcohol or similar chemicals may cause it to be damaged. Also, do not use the filter when these chemicals are present in the atmosphere.

⑨ Vacuum pressure switch unit specifications

Nil	With unit switching function Note 6)
M	Fixed SI unit Note 7)
P	With unit switching function Note 6) (Initial value psi)

Note 6) Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
Note 7) Fixed unit: kPa

⑩ Vacuum pressure switch lead wire specifications

Nil	Without connector
G	Lead wire with connector (Lead wire length 2 m) With connector cover

⑪Check valve Note 8)

Nil	None
K	With check valve

Note 8) The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used. However, depending on usage conditions, it does not always suppress air overflow to the desired extent. During usage, please inspect thoroughly with actual machine.
Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

⚠Warning

① Cannot be used for vacuum retention.
② Use a release valve. (Without a release valve, a workpiece may not be released.)

⑫ Fitting (V port) Note 9)

Symbol	Applicable tubing O.D.	Part no.	
		Vacuum pressure switch	Filter only
0	Without fitting (M5 x 0.8)	VVQ1000-50A-M5	—
1	ø3.2 (Straight)	VVQ1000-50A-C3	KJS23-M5
2	ø4 (Straight)	VVQ1000-50A-C4	KJS04-M5
3	ø6 (Straight)	VVQ1000-50A-C6	KJS06-M5
4	ø3.2 (Elbow)	VVQ1000-F1-LC3	KJL23-M5
5	ø4 (Elbow)	VVQ1000-F1-LC4	KJL04-M5

⑬ Fitting (P port) Note 9)

Symbol	Applicable tubing O.D.	Part no.	Object spec.
Nil	Without port	—	Manifold
0	Without fitting (M5 x 0.8)	—	Single unit
2	ø4 (Straight)	KJS04-M5	
3	ø6 (Straight)	KJS06-M5	
5	ø4 (Elbow)	KJL04-M5	

⑭ CE compliant

Nil	—
Q	CE marked

Note) CE compliant: For DC only.

Note 9) For filter only (Without vacuum pressure switch)
When neither V port fitting nor P port fitting are needed, enter nothing or –00 in the dotted line above "How to Order".