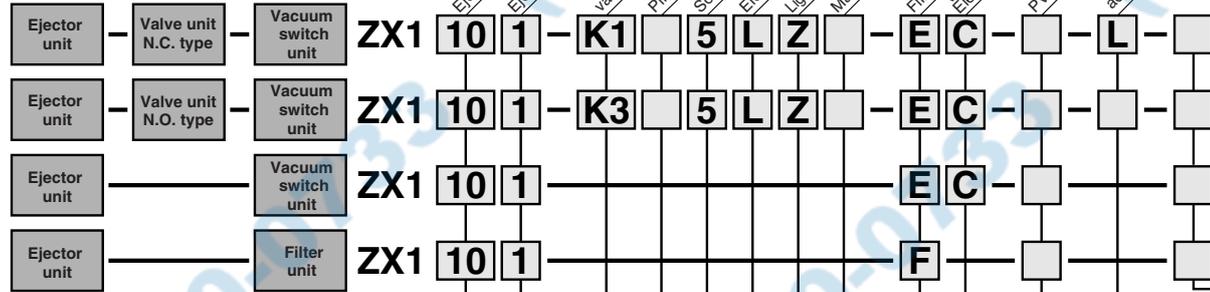


Vacuum Module: Ejector System Series ZX



How to Order

Components



Ejector unit nozzle dia.

05	0.5 mm
07	0.7 mm
10	1.0 mm

Ejector exhaust

1	With silencer
2 (1)	Port exhaust Rc 1/8
3 (2)	Common exhaust (Manifold only)

Note 1) When port exhaust is applied to the manifold, pilot exhaust is done by common exhaust. Thus, the exhaust port on the manifold base should be open while operating.
 Note 2) When the product is used for the manifold specification and common exhaust, the exhaust air of the operating ejector releases may enter the vacuum (V) port of the non-operating ejector and be released if there are an operating and non-operating ejector. Select either the built-in silencer or port exhaust for the ejector exhaust method.

Valve unit/Combination of supply valve and release valve
 Refer to "Table (1)" on page 867.

⚠ Caution

When using the AC type, the DC solenoids are operated via a rectifier. Therefore, when using this type, make sure to combine the connector assembly equipped with a rectifier with the exclusive solenoids. Using other combinations could lead to burned coils or other types of malfunctions.

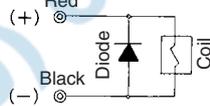
Pilot valve

Nil	DC: 1 W (With indicator light: 1.05 W)
	AC
Y *	DC: 0.45 W (With indicator light: 0.5 W)

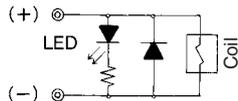
* Only 24 VDC and 12 VDC are applicable to 0.45 W.

⚠ Caution

Surge voltage suppressor



Light/Surge voltage suppressor



Using the DC type:

Match the polarity of the connectors according to the ⊕ and ⊖ marks on the connectors. Do not interchange the polarities to prevent the diodes or the switching elements from becoming burned.
 If lead wires are pre-connected, the red wire is ⊕ and the black wire is ⊖.

Using the AC type:

The AC type is not equipped with a surge voltage suppressor because the rectifier assembly prevents the generation of surge voltage.

Solenoid valve rated voltage

1 * (Note)	100 VAC 50/60 Hz
3 * (Note)	110 VAC 50/60 Hz
5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC
Nil	Air operated (K6, K8, J3, J4, D3, D4)

Note) CE marked products are not available for "1" and "3".

* Applicable to plug connector only. (Connector assembly with rectifier is attached.)

Electrical entry

L	Lead wire length 0.3 m
LN	Without lead wire (Applicable to DC only)
LO	Plug connector type
M	
MN	Lead wire length 0.3 m
MO	Without lead wire (Applicable to DC only)
MO	Without connector
G	Grommet type
H	Lead wire length 0.3 m (Applicable to DC only)
Nil	Lead wire length 0.6 m (Applicable to DC only)
Nil	Air operated

Note) In the case of "K1" or "J1" (combination of supply and release valves), M type plug connector can not be used.

CE compliant

Nil	—
Q	CE marked

PV/V port size

Nil	M5 x 0.8
Y	M6 x 1 (Option)

Release flow rate adjusting needle

Nil	Without lock nut
L	With lock nut

Vacuum switch electrical entry

Nil	Grommet type	Lead wire length 0.6 m
L		Lead wire length 3 m
C	Connector type	Lead wire length 0.6 m
CL		Lead wire length 3 m
CN	Without connector (Without lead wire)	

Refer to "Table (3)" on page 867 for part number of lead wire with connector.

Vacuum switch unit/Filter unit

E	Vacuum switch (For general purpose)(ZSE2)(NPN)	With suction filter
E55	Vacuum switch (For general purpose)(ZSE2)(PNP)	
PS (Note)	Adsorption confirmation switch (ZSP1)	Nozzle dia. (ø0.3 to 0.7)
PB (Note)		Nozzle dia. (ø0.5 to 1.2)
F	Only suction filter	

Note) CE marked products are not available for "PS" and "PB".

Vacuum digital pressure switch unit (ZSE3)

D	21	2 outputs/without analog output
	22	2 outputs/with analog output
	23	1 output (with trouble detection)/without analog output
	24	1 output (with trouble detection)/with analog output

Note) Analog output is available only on grommet type.

Manual operation

Nil	Non-locking push type
B	Locking slotted type

Light/Surge voltage suppressor

Nil	None
Z	With light/surge voltage suppressor
S *	With surge voltage suppressor

* S is not available for AC.
 DC voltage (with surge voltage suppressor)
 If the polarity is incorrect at DC (surge voltage suppressor), diode or switching element may be damaged.

- Refer to "Table (2)" on page 867 for part number of lead wire with connector.
- Refer to page 894 for ordering the manifold.
- Refer to pages 924 and 925 for ordering a unit for replacement.

Made to Order
 (Refer to pages 930 to 934 for details.)

Table (1) Valve Unit/Combination of Supply Valve and Release Valve (Refer to page 868 for detailed specifications.)

Components		Symbol	Supply valve					Release valve					Mass (g)
Supply valve	Release valve		Solenoid valve		Air operated		None	Solenoid valve		Air operated	External release	None	
			N.C. (VJ114)	N.O. (VJ324)	N.C. (ZX1A)	N.O. (VJA324)		N.C. (VJ114)	N.C. (VJ314)	N.C. (VJA314)	ZX1A		
Solenoid (N.C.)	Solenoid (N.C.)	K1	●	—	—	—	—	●	—	—	—	—	82
Solenoid (N.O.)	Solenoid (N.C.)	K3	—	●	—	—	—	—	●	—	—	—	132
Air operated (N.C.)	External release	K6	—	—	●	—	—	—	—	—	●	—	58
Air operated (N.O.)	Air operated (N.C.)	K8	—	—	—	●	—	—	—	●	—	—	132
Solenoid (N.C.)	None	J1	●	—	—	—	—	—	—	—	—	●	77
Solenoid (N.O.)	None	J2	—	●	—	—	—	—	—	—	—	●	100
—		Nil	Without valve module										

- Air operated valve: Controlled by external 3 port valve.
- External release: Directly released by external 2 port valve.

Table (2) Valve Unit/Valve Plug Connector Assembly

Connector assembly part no.

(For DC)

VJ10-20-4A-6

(For 100 VAC)

VJ10-36-1A-6

(For 110 VAC)

VJ10-36-3A-6

Lead wire length

Lead wire length	Lead wire length
Nil	0.3 m (Standard)
6	0.6 m
10	1 m
15	1.5 m
20	2 m
25	2.5 m
30	3 m

How to order

If ordering vacuum module with 600 mm or the longer lead wire, specify both vacuum module and connector assembly part numbers.

Ordering example)

ZX1051-K15LOZ-EC(-Q) ... 1 pc.
*VJ10-20-4A-6 2 pcs.

Table (3) Vacuum Switch/Lead Wire with Connector

For ZSE2

For ZSP1

ZS-10-5A-

For ZSE3

ZS-20-5A-

Note) If ordering a vacuum switch with 3 m lead wire, specify both the vacuum unit switch and the 3 m lead wire with connector part numbers.

Ordering example)

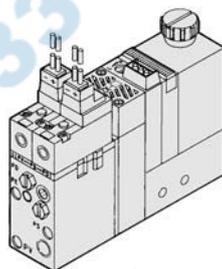
ZX1051-K15LO-ECN(-Q) ... 1 pc.
*VJ10-20-4A-6 2 pcs.
*ZS-10-5A-50 1 pc.

↳ The asterisk (*) denotes the symbol for assembly.

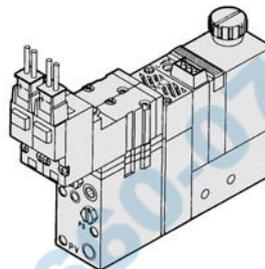
Lead wire length	Lead wire length
Nil	0.6 m
30	3 m
50	5 m

Ejector System/Recommended Model (The models below will have shorter deliveries.)

Nozzle diameter (mm)	Model	Ejector unit exhaust type	Combination		Solenoid valve rated voltage	Lead wire electrical entry	Light/Surge voltage suppressor	Vacuum switch unit	Vacuum switch electrical entry
			Supply valve (Pilot valve)	Release valve (Direct operated)					
0.5	ZX1051-K15LZ-EC	With silencer	N.C. (VJ114)	N.C. (VJ114)	24 VDC	Plug connector type	With light/surge voltage suppressor	General vacuum switch (ZSE2)	Connector type
	ZX1051-K35MZ-EC		N.O. (VJ324M)	N.C. (VJ314)					
0.7	ZX1071-K15LZ-EC		N.C. (VJ114)	N.C. (VJ114)					
	ZX1071-K35MZ-EC		N.O. (VJ324M)	N.C. (VJ314)					
1.0	ZX1101-K15LZ-EC		N.C. (VJ114)	N.C. (VJ114)					
	ZX1101-K35MZ-EC		N.O. (VJ324M)	N.C. (VJ314)					



ZX1051-K15LZ-EC



ZX1051-K35MZ-EC

ZA

ZX

ZR

ZM

ZMA

ZQ

ZH

ZU

ZL

ZY

ZF

ZP

SP

ZCUK

AMJ

AMV

AEP

HEP

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