





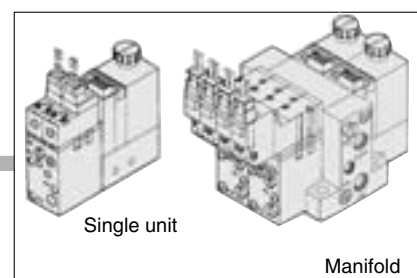
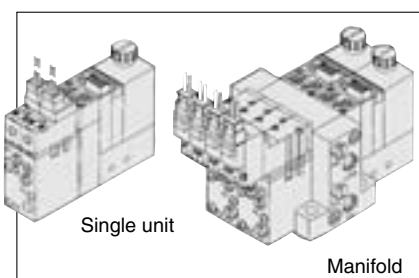
Modular Components Introduction

System		Ejector System			Vacuum Pump System	
Component equipment	Characteristics	P.866 to 901			P.902 to 929	
Ejector unit Series ZX1 	Nozzle diameter (mm)	0.5	0.7	1.0		
	Max. suction flow (l/min(ANR))	5	10	22		
	Air consumption (l/min(ANR))	13	23	46		
	Maximum vacuum pressure	-84 kPa				
	Exhaust release	Built-in silencer/Manifold exhaust Individual exhaust port: (Rc 1/8)				
Valve unit ZX1-V□ 	Component equipment	Supply valve/Release valve				
	Function	N.C., N.O.				
	Operation	Solenoid valve/Air operated valve				
	Power supply voltage	3, 5, 6, 12, 24 VDC, 100, 110 VAC (50/60 Hz)				
Vacuum pressure switch unit Series ZS 	Series	Vacuum switch	Adsorption confirmation switch	Vacuum switch	Adsorption confirmation switch	
	Set pressure range	0 to -101 kPa	-20 kPa to -101 kPa	0 to -101 kPa	-20 kPa to -101 kPa	
	Hysteresis	3% or less		0.5 kPa		
	Applicable pad diameter (mm)	2 to 25	0.3 to 1.2	2 to 25	0.3 to 1.2	
	Supply voltage	24 VDC		24 VDC		
Suction filter unit ZX1-F 	Operating pressure range	Vacuum to 0.5 MPa				
	Filtration	30 μm				
Common specifications	Unit	Air supply port size	M5 (Standard)/M6 (Option)			
		Vacuum pad connection port size	M5 (Standard)/M6 (Option)			
	Manifold	Air supply port size	Rc 1/8			
		Exhaust port size	Rc 1/8			
		External pilot port size	M5			
		Stations	Max. 8 units			

- ZA
- ZX
- ZR
- ZM
- ZMA
- ZQ
- ZH
- ZU
- ZL
- ZY□
- ZF□
- ZP□
- SP
- ZCUK
- AMJ
- AMV
- AEP
- HEP

Related Equipment

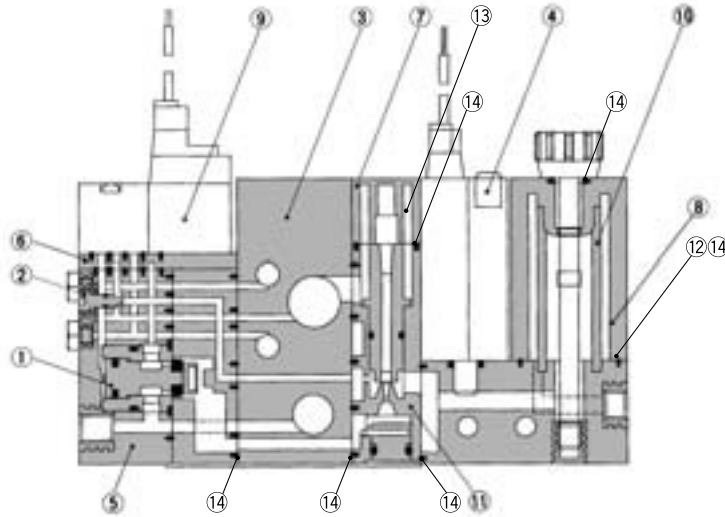
- Refer to pages 870 to 880 for detailed specifications for each unit.
- Refer to pages 866 and 867 for ejector system unit.
- Refer to page 894 for ejector system manifold.
- Refer to pages 902 and 903 for external vacuum supply system unit.



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

- Refer to page 916 for external vacuum supply system manifold.
- Refer to pages 924 to 927 for units for replacement.

Ejector System/Construction



Component Parts

No.	Description	Material	Note
1	Poppet valve assembly	—	ZX1-PV-0
2	Release flow rate adjustment needle	Stainless steel	ZX1-NA
3	Manifold base	Aluminum	
4	Vacuum switch	—	ZSE2, ZSP1, ZSE3
5	Valve unit	—	ZX1-VA□□□□□□-D-□
6	Interface plate	—	(PV↔PS↔PD)
7	Silencer case	—	
8 ^{Note)}	Filter case	Polycarbonate	

Replacement Parts

No.	Description	Material	Part no.
9	Pilot valve Air operated	—	☞ Refer to "Table (1)", "(2)", "(3)".
10	Filter element	PVF	ZX1-FE
11	Ejector assembly	—	☞ Refer to "Table (4)".
12	Gasket	—	ZX1-FG
13	Silencer element	—	ZX1-SAE
14	Seal set	—	ZX1-PK
(7,13)	Silencer assembly	—	ZX1-HS2



Note) Caution when handling filter case

- The case is made of polycarbonate. Therefore, do not use with or expose it to the following chemicals: paint thinner, carbon tetrachloride, chloroform, acetic ester, aniline, cyclohexane, trichloroethylene, sulfuric acid, lactic acid, watersoluble cutting oil (alkalinic), etc.
- Do not expose it to direct sunlight.

Table (1) How to Order Pilot Valves

No.	Components		Model	Combination of supply and release valve
	Supply valve	Release valve		
①	Solenoid valve N.C. (VJ114)	Solenoid valve N.C. (VJ114)	ZX1-VJ114-□□□□	K1, J1
②	Solenoid valve N.O. (VJ324)	Solenoid valve N.C. (VJ314)	ZX1-VJ3 ¹ ₂ 4□-□□□□	K3, J2
③	Air operated N.O. (VJA324)	Air operated N.C. (VJA314)	ZX1-VJA3 ¹ ₂ 4	K8
④	Air operated N.C. (ZX1A)		ZX1A-□	K6

Table (3) How to Order Air Operated Valves

ZX1A - M3

Port size

M3	M3 x 0.5	Pilot port/
M5	M5 x 0.8	External release port

Table (2) How to Order Solenoid Valves

ZX1-VJ114 □ - **5** **L** **Z** □ □

ZX1-VJ3¹₂4 □ □ - **5** **L** **Z** □ □

Type of actuation

1	N.C. (Normally closed)
2	N.O. (Normally open)

Manual override

Nil	Non-locking push type
B	Locking slotted type

Body option

Nil	Pilot valve Individual exhaust
M	Common exhaust for main and pilot valves

Note) In the case of N.C. type, indicate no symbol. (Individual exhaust for Pilot valve)

Note) Compatible with ZX1-VJ324M-□ and ZX1-VJ314-□ only.

Rated voltage

1*	100 VAC
3*	110 VAC
5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

* Applicable to plug connector only.

Electrical entry

L	Connector (0.3 m)
LN	Connector (w/o lead wire)
LO	Without connector
M	Connector (0.3 m)
MN	Connector (w/o lead wire)
MO	Without connector
G	Grommet (0.3 m)
H	Grommet (0.6 m)

Note) In the case of "ZX1-VJ114", M, MN and MO cannot be used.

Pilot valve

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

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

Note) Screw length of VJ100 and VJ300 for series ZX is different from that of the standard model.

<Screw length> VJ100-M1.7 x 15
VJ300-M1.7 x 22

Table (4) How to Order Ejector Assembly

ZX1-W D 05 1

Assembly no. ↓

Ejector unit nozzle dia. ↓

05	0.5 mm
07	0.7 mm
10	1.0 mm

Ejector type (Exhaust type) ↓

1	With silencer
2	Port exhaust
3	Common exhaust

* An adapter should be attached to the assembly to be used as a unit. PV port and V port can be connected.

Ejector assembly □ • Combination/ ZX-WD □
□ • Used as a unit by attaching an adapter/ ZX-W □

Caution

Turning the vacuum release flow volume adjustment needle clockwise reduces the vacuum release flow volume; the needle valve is fully closed when the needle stops turning. Turning the needle 2 full turns counterclockwise from the fully closed position renders the needle valve fully open. The needle will fall out if it is turned more than 4 full turns.

In order to prevent the needle from loosening and falling out, the release flow volume adjustment needle with lock nut is also available.

- ZA
- ZX
- ZR
- ZM
- ZMA
- ZQ
- ZH
- ZU
- ZL
- ZY□
- ZF□
- ZP□
- SP
- ZCUK
- AMJ
- AMV
- AEP
- HEP

Related Equipment