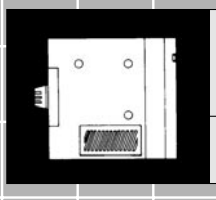
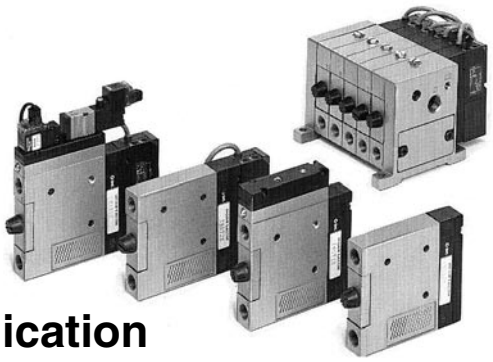


Vacuum Ejector

Series ZM

All in One!

- Built-in suction filter and silencer
- Air supply valve for generating a vacuum
- Vacuum release valve (equipped with a flow volume adjustment valve)
- Vacuum pressure switch (solid state or diaphragm style)



Adaptable for manifold application

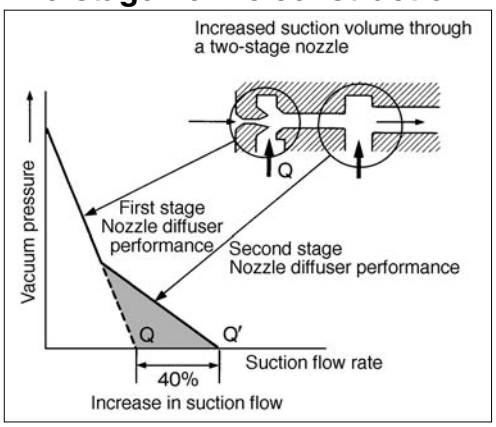
All tubing, wiring, indicators, and adjustment functions have been eliminated from the side surfaces, thus enabling assembly and maintenance while linked to a manifold.

- EXH system—common
- SUP system—common, individual

Maximum air suction volume increased by 40% Maximum vacuum pressure – 84kPa

The suction volume has been increased by 40% through the adoption of a two-stage nozzle construction.

Two-stage nozzle construction



Compact and lightweight

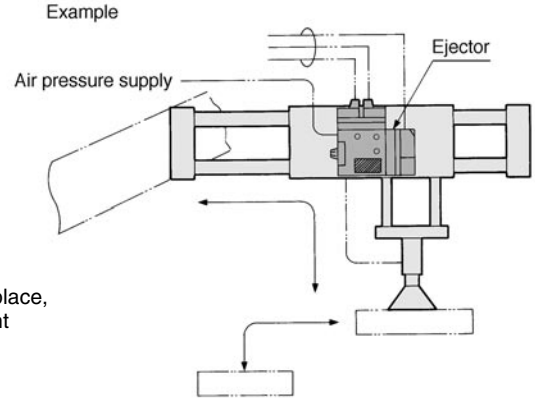
15.5mm width, 400g (full system)

Air operated style

Series ZM Applications

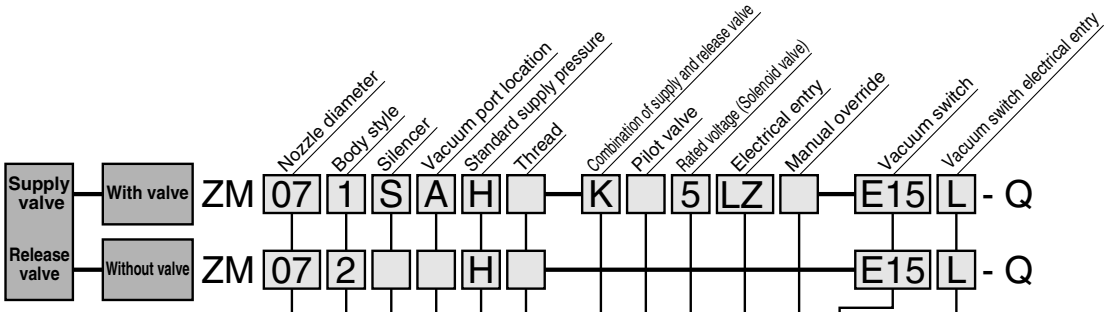
Fields of application	Semi-conductor and electrical, automobile assembly, food and medical equipment, and various types of manufacturing and assembly equipment
Machine types	Robotics for material handling, automatic assembly equipment, automatic transport equipment, pick-and-place, and printing equipment
Functions	Vacuum picking and transport, vacuum picking and securing, and vacuum air flow

Example



Vacuum Ejector
With Valve and Switch
Series ZM

How to Order



Nozzle diameter

05	0.5mm
07	0.7mm
10	1.0mm
13	1.3mm

Body style

Valve	Symbol	Single/manifold
With valve	**1**	For single
	3	For manifold, Common SUP
	5	For manifold, Individual SUP
Without valve	**2**	For single
	4	For manifold, Common SUP
	6	For manifold, Individual SUP

Silencer*

—	Standard
S	High noise reduction

*Silencer is applicable to single unit style.

Vacuum port location

—	Side/Bottom entry
A	Side entry

Standard supply pressure

H	0.5MPa
M	0.35MPa (Except nozzle diameter "05" type)

Thread

—	Rc(PT)
T	NPTF
F	G(PF)

Supply and release valve

J	Supply valve
K	Supply valve and release valve
A	Supply valve (N.O.)
B	Supply valve (N.O.) and release valve

Pilot valve

—	DC: 1W (With light: 1.5 W)
Y*	DC: 0.45W (With light: 0.5W)

*24V DC and 12V DC are applicable to 0.45W type.

Voltage

5	24V DC
6	12V DC
V	6V DC
S	5V DC
R	3V DC

Electrical entry

G	Grommet/With 0.3m lead wire (Applicable to DC)
L	L plug connector/With 0.3m lead wire
LZ	L plug connector/With 0.3m lead wire/With indicator light and surge voltage suppressor
LN	L plug connector/Without lead wire (Applicable to DC)
LO	L plug connector/Without connector

Manual override

—	Non-locking push style
B	Locking slotted style

Vacuum switch model

—	**Without switch**	
E14	1 point setting/without analog output/3 rotation setting	Solid state (12 to 24V DC)
E15	1 point setting/without analog output/200 degrees setting	
E16	2 point setting/without analog output/3 rotation setting	
E17	2 point setting/without analog output /200 degrees setting	
E18	1 point setting/analog output/3 rotation setting	
E19	1 point setting/analog output/200 degrees setting	
M15	1 point setting/without analog output/Diaphragm (18 rotation setting)/Solid state(10 to 26VDC)	
E55	PNP swich	

Vacuum switch electrical entry

—	Grommet/with 0.6m lead wire	Solid state : ZSE1
L	Grommet/with 3m lead wire	
C	Connector/with 0.6m lead wire	
CL	Connector/with 3m lead wire	
CN	Connector/without connector	
—	Grommet/with 0.5m lead wire	Diaphragm : ZSM1
L	Grommet/with 3m lead wire	

Refer to p.3.3-4 for air operated style.

Table ① How to Order Connector for Solid State Switch

• Without lead wire (A connector and 4 sockets) ····· ZS − 20 − A

• With lead wire ····· ZS − 20 − 5A − □

Note) If ordering a switch with 5m lead wire, indicate the switch without connector and lead wire with connector.
Ex.) ZM□□□-E15CN·····1 pc.
ZS-20-5A-50 ····· 1 pc.

Lead wire length

—	0.6m
30	3m
50	5m

Table ② How to Order Connector for Supply Valve and Vacuum Release Valve

VJ10 — 20 — 4A — □ (DC)

Lead wire length

—	300mm
6	600mm
10	1000mm
15	1500mm
20	2000mm
25	2500mm
30	3000mm

Note) If ordering a valve with 600mm or longer lead wire, indicate the valve without connector and connector ass'y.
〈Ex.〉 Lead wire length: 1000mm
ZM□□□-K1LO·····1 pc.
∗VJ10-20-4A-10·····2 pcs.

How to Order

ZM — **Nozzle diameter** — **Body style** — **Standard supply pressure**

Nozzle diameter
05 — 0.5mm ø
07 — 0.7mm ø
10 — 1.0mm ø
13 — 1.3mm ø

Body style
〈Without valve〉
2 — For single
4 — For manifold, Common SUP
6 — For manifold, Individual SUP
〈With valve〉
1 — For single
3 — For manifold, Common SUP
5 — For manifold, Individual SUP

Standard supply pressure
H — 0.5MPa
M — 0.35MPa
(Except nozzle diameter "05" type)

Quick Delivery/Model

〈Without valve/Single unit〉
- ZM052H
- ZM072H
- ZM102H
- ZM132H

〈With valve/Single unit〉
- ZM051H-K5LZ
- ZM051H-K5LZ-E15
- ZM071H-K5LZ
- ZM071H-K5LZ-E15
- ZM101H-K5LZ
- ZM101H-K5LZ-E15
- ZM131H-K5LZ
- ZM131H-K5LZ-E15
- ZM131M-K5LZ
- ZM131M-K5LZ-E15

All in One!

- Built-in suction filter and silencer
- Air supply valve for generating a vacuum
- Vacuum release valve (equipped with a flow volume adjustment valve)
- Vacuum pressure switch (solid state, diaphragm)

Adaptable for a manifold application

All tubing, wiring, indicators, and adjustment functions have been eliminated from the side surface, thus enabling assembly and maintenance while linked in a manifold.

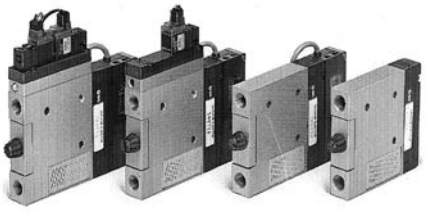
- EXH system — common
- SUP system — common, individual

Maximum air suction volume increased by 40% Maximum vacuum pressure – 84kPa

The suction volume has been increased by 40% through the adoption of a two-stage nozzle construction.

Compact and lightweight

15.5mm width, 400g (full system)



Symbol

Model

Nozzle dia. (mm)	Model	Standard supply pressure		Max. suction flow (ℓ/min)	Air consumption (ℓ/min)
		H	M		
0.5	**ZM05□H**	0.5MPa	—	15	17
0.7	**ZM07□H**			24	23
1.0	**ZM10□H**			36	46
1.3	**ZM13□H**			40	95
0.7	**ZM07□M**	—	0.35MPa	20	16
1.0	**ZM10□M**			26	32
1.3	**ZM13□M**			36	70

Vacuum Ejector Specifications

Fluid		Air
Max. operating pressure		0.7MPa
Max. vacuum pressure		–84kPa
Supply pressure range	Without valve	0.2 to 0.55MPa
	With valve	0.25 to 0.55MPa
Operating temperature range	Without valve	5 to 60°C
	With valve	5 to 50°C
Air supply valve Vacuum release valve		Main valve ———— Poppet Pilot valve —— VJ114, VJ324M
Vacuum pressure switch		Solid state: ———— ZSE1-00-□□ Diaphragm: —— ZSM1-0□□
Suction filter		30μm·PE (Polyethylene)

Valve Specifications

Operation	Pilot operated
Main valve	NBR poppet
Effective area	3 mm²
Flow Qn (Nℓ/mim)	163.3
Operating pressure	0.25 to 0.7MPa
Electrical entry	Plug connector, Grommet (available on DC)
Max. operating frequency	5Hz
Voltage	24/12/6/5/3V DC
Power consumption	DC: 1W(with light: 1.2W), AC100V: 1.4W(1.45W), AC110V: 1.45W(1.5W)

Air Operated Valve Specifications

Refer to p.3.3-11 for dimensions.

Specifications

Applicable nozzle size (mm)		ø0.5, ø0.7, ø1.0, ø1.3
Components	P	Supply valve
	Q	Supply valve and release valve
Port size		M3 X 0.5 M5 X 0.8
Main valve		N.C.

ZM 05 (1/3/5) H Q □

Nozzle diameter

05	0.5mm
07	0.7mm
10	1.0mm
13	1.3mm

Supply pressure

H	0.5MPa
M*	0.35MPa

*Except nozzle diameter "05" type

Air-operated valve

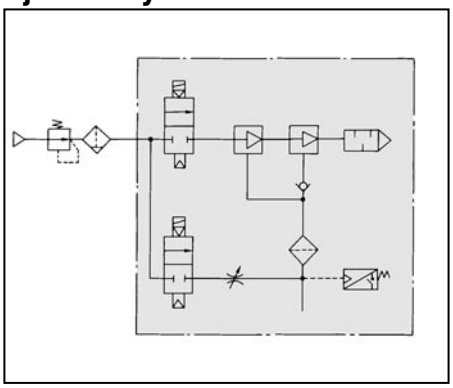
P	Supply valve
Q	Supply valve, release valve

Port size

3	M3 X 0.5
5	M5 X 0.8

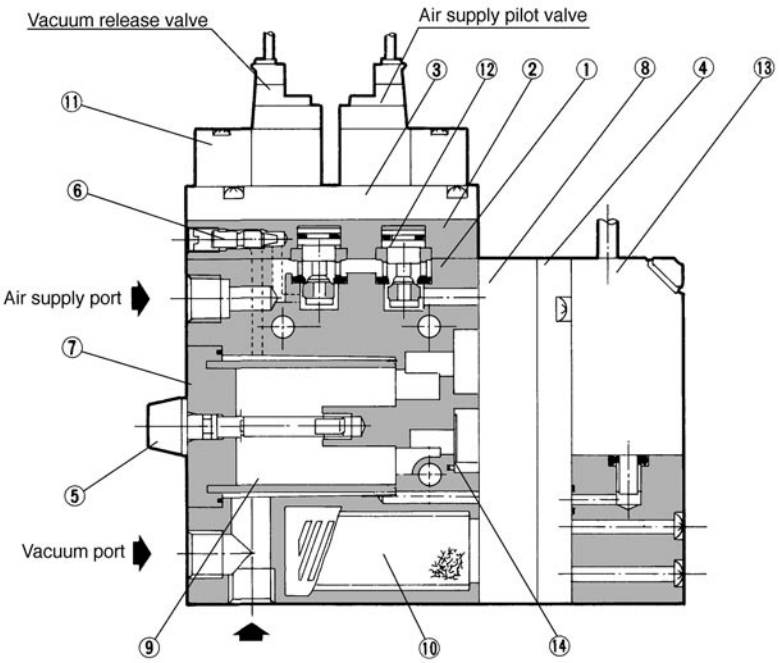
Note) Switch mounted style is also available.

Ejector System Circuit



Order Made P. 3.3-17 to 3.3-19

Construction/ZM□1□-K□L-E



Component Parts

No.	Description	Material	Notes
①	Body	Aluminum die cast	
②	Valve cover	Zinc die cast	
③	Adapter plate	Zinc die cast	
④	Cover	Zinc die cast	Without switch: ZM-HCA, With switch: ZM-HCB
⑤	Tension bolt	Stainless steel/Polyacetal	
⑥	Release flow adjusting needle	Brass	Electroless nickel plated

Replacement Parts

No.	Description	Material	Part No.
⑦	Filter cover ass'y	—	ZM-FCB-0
⑧	Diffuser ass'y	—	ZM□□0□-0
⑨	Suction filter	Polyethylene	ZM-SF
⑩	Silencer ass'y	—	ZM-SA
⑪	Pilot valve	—	VJ114-□□□□
⑫	Poppet valve ass'y	—	ZM-PV-0
⑬	Vacuum switch	—	ZSE1-00-□□ ZSM1-015 ZSM1-021
⑭	Check valve	NBR	ZM-CV

⚠ Precautions

Be sure to read before handling. Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the products mentioned in this catalogue, and refer to p.3.0-2 for precautions on every series.

⚠ Caution

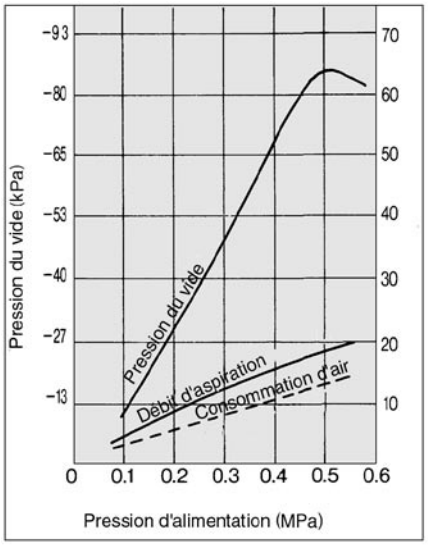
Operation of an ejector equipped with a valve:
When the air supply pilot valve is turned ON, air flows to the diffuser assembly, and a vacuum is created.
When the pilot valve for releasing the vacuum is turned ON, air flows to the vacuum port side, immediately causing a release in the vacuum. The release speed can be adjusted by regulating the flow volume adjustment screw.
When the supply valve is turned OFF, the atmospheric pressure causes the air to flow back from the silencer, thus releasing the vacuum. However, in order to properly release a vacuum, a vacuum release valve must be used.
Operating environment:
Because the filter cover is made of polycarbonate, do not use it with or expose it to following chemicals: paint thinner, carbon tetrachloride, chlorofrom, acetic ester, aniline, cyclohexane, trichloroethylene, sulfuric acid, lactic acid, water-soluble cutting oil (alkalinic), etc. Also, do not expose it to direct sunlight.
Matching of the ejector to the vacuum circuit:
For precautions associated with matching of the ejector to the vacuum circuit, refer to the technical data in “Best Pneumatics 3”.

Exhaust Characteristics/Flow Characteristics

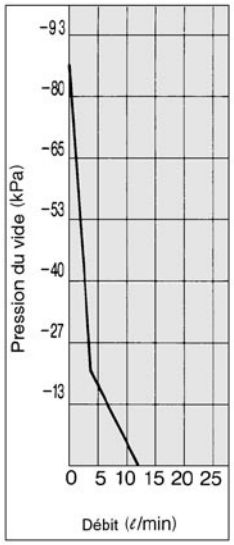
Standard supply pressure: H···0.5MPa

ZM05□H

Exhaust characteristics

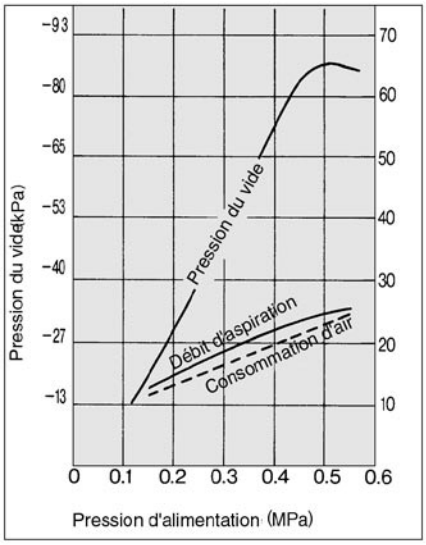


Flow characteristics

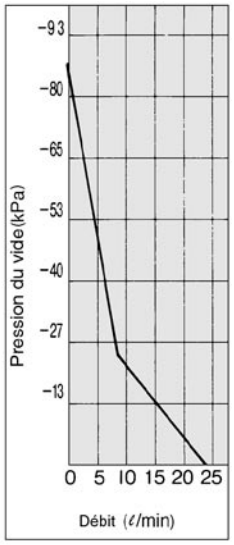


ZM07□H

Exhaust characteristics

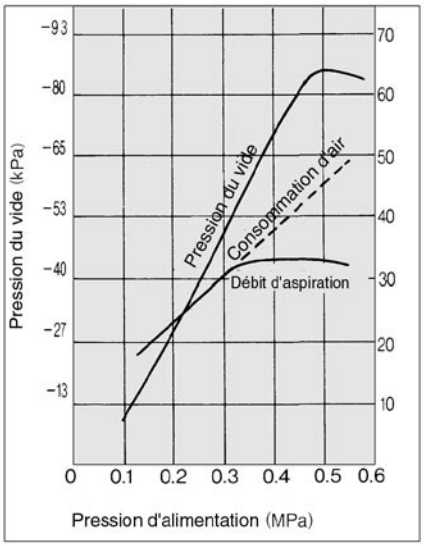


Flow characteristics

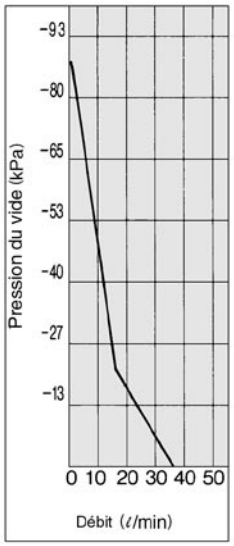


ZM10□H

Exhaust characteristics

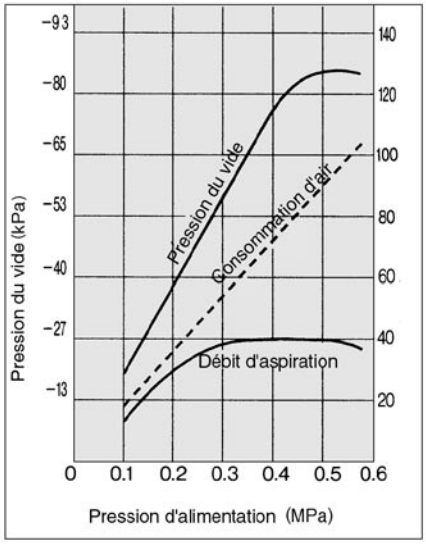


Flow characteristics

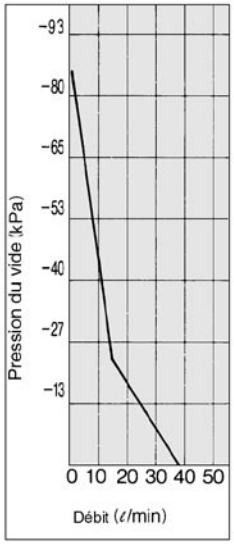


ZM13□H

Exhaust characteristics



Flow characteristics

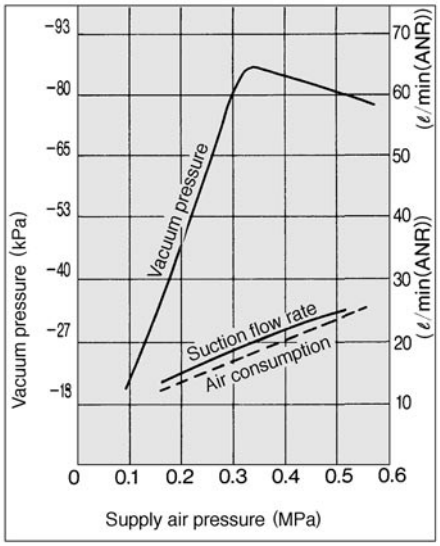


Exhaust Characteristics/Flow Characteristics

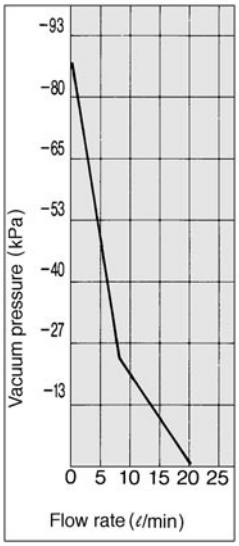
Standard supply pressure: M···0.35MPa

ZM07□M

Exhaust characteristics

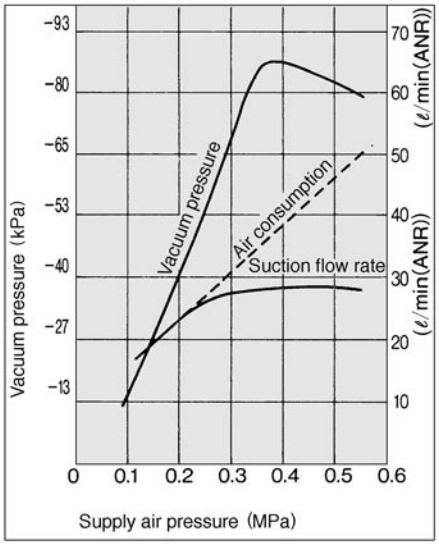


Flow characteristics

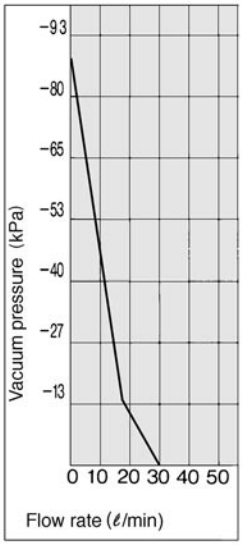


ZM10□M

Exhaust characteristics

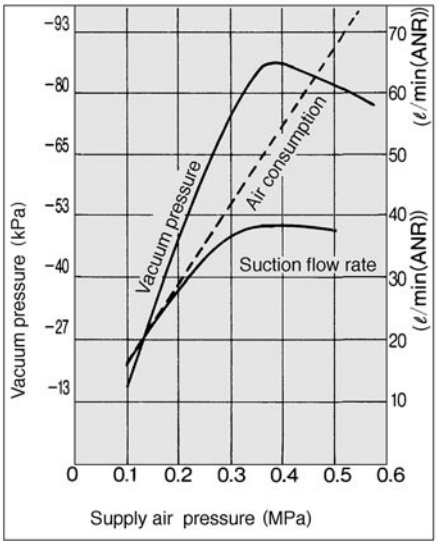


Flow characteristics

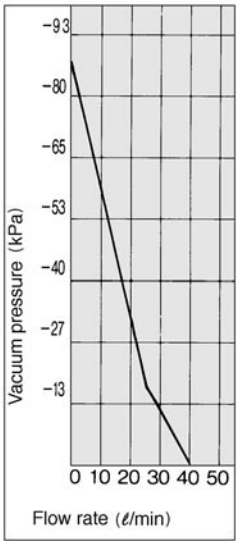


ZM13□M

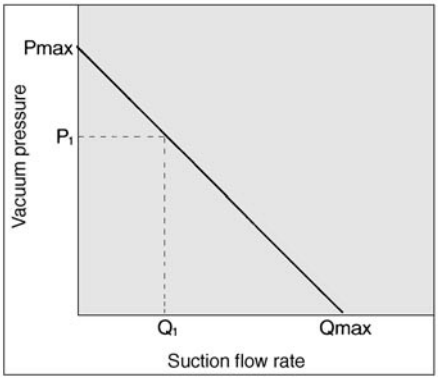
Exhaust characteristics



Flow characteristics



How to Read the Graph



Flow characteristics are expressed in ejector vacuum pressure and suction flow. Fluctuations in the suction flow rate will change the vacuum pressure. Normally this relationship is expressed in ejector standard use. In graph, Pmax is according to catalogue use. Changes in vacuum pressure are expressed in the order below.

1) When ejector suction port is covered and made airtight, suction flow is 0 and vacuum pressure is at maximum value (Pmax).

2) When suction port is opened gradually, air can flow through, (air leakage), suction flow increases, but vacuum pressure decreases. (condition P_1 and Q_1)

3) When suction port is opened further, suction flow moves to maximum value (Q max), but vacuum pressure is near 0. (atmospheric pressure).

When vacuum port (vacuum piping) has no leakage, vacuum pressure becomes maximum, and vacuum pressure decreases as leakage increases. When leakage value is the same as max. suction flow, vacuum pressure is near 0.

In the case when ventirative or leaky work should be adsorbed, please note that vacuum pressure will not be high.

Vacuum Pressure Switch/Solid State Switch (ZSE), Diaphragm Switch (ZSM)

Vacuum Switch Specifications

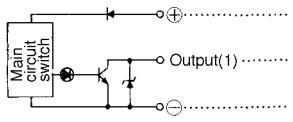
Model	ZSE1-00-14	ZSE1-00-15	ZSE1-00-16	ZSE1-00-17	ZSE1-00-18	ZSE1-00-19	ZSM1-015	ZSM1-021
Sensor	Solid state						Diaphragm	
Switch	Electronic circuit						Solid state	Reed
Setting pressure range	0 to −101kPa						−26.6 to −79.8kPa	
Hysteresis	1 to 10% of the set pressure (Changeable)		3% full span or less (Fixed)		1 to 10% of the set pressure (Changeable)		17% full span	23% full span
Repeatability	±1% full span or less							
Temperature characteristics	±3% full span or less						±5% full span	
Voltage	12 to 24V DC (Ripple ±10% or less)						10 to 26V DC	100V AC
ON-OFF output	Open collector 30V Max. 80mA						Open collector 30V, Max. 100mA	——
Setting point	1 point		2 points		1 point		1 point	
Indicator light	Lights ON		Lights ON (Output1: Red, Output2: Green)		Lights ON		Lights ON	
Setting trimmer	3 rotations	200 degrees	3 rotations	200 degrees	3 rotations	200 degrees	18 rotations	
Current consumption	17mA or less (24V DC, at ON state)		25mA or less (24V DC, at ON state)		17mA or less (24V DC, at ON state)		16mA	——
Max. current	——						——	5 to 20mA
Max. operating pressure	0.2MPa						0.5MPa	

∗When using ejector system, instantaneous pressure up to 0.5MPa will not damage the switch.

Solid State Switch (ZSE)

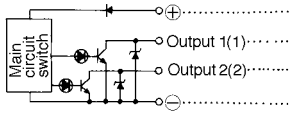
Circuit/Connection

ZSE1-00-14 -15



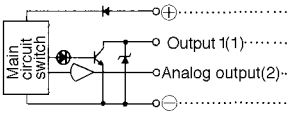
Brown lead wire: connect to power supply terminal (+) to operate the switch main circuit
Black lead wire: connect to load (PLC input or relay)
Blue lead wire: connect to power supply GND terminal.
In case of connector type, do not connect the green lead wire.

ZSE1-00-16 -17



Brown lead wire: connect to power supply terminal (+) to operate the switch main circuit.
Black lead wire: connect to the load (PLC input or relay)
Gray lead wire: connect to the load (PLC input or relay)
Blue lead wire: connect to power supply GND terminal.

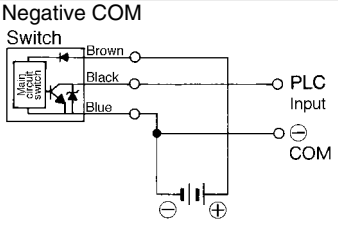
ZSE1-00-18 -19



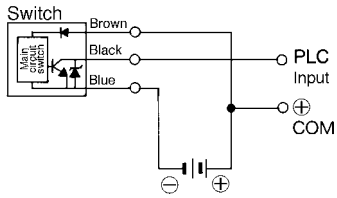
Brown lead wire: connect to power supply terminal (+) to operate the switch main circuit.
Black lead wire: connect to load (PLC input or relay)
Gray lead wire: connect to analog load.
Blue lead wire: connect to power supply GND terminal.

Connection with PLC

Negative COM

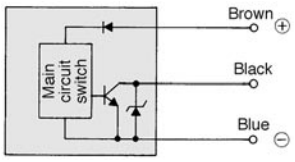


Positive COM



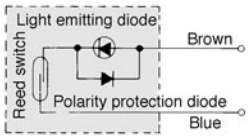
Diaphragm Switch (ZSM)

⟨Solid state switch: ZSM1-015⟩



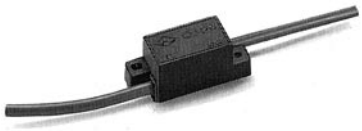
Red lead wire: Connect the ⊕ power supply to operate the main switch circuit (to the ⊕ terminal of the power source).
White lead wire: Connect the load (to the input or output relay of the PLC).
Black lead wire: Connect the ⊖ power supply (to the GND terminal of the power supply).

⟨Reed switch: ZSM1-021⟩

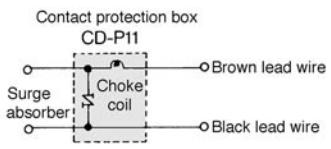


Contact protection box

The switch does not have a built-in contact protection circuit. Use this box if an induction load is applied or if the lead wire is longer than 5 meters.

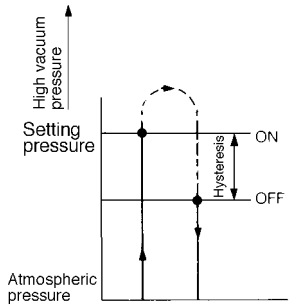


Internal circuit of contact protection box

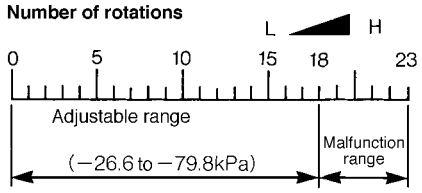


Hysteresis

Hysteresis is the difference in pressure when the output signal is ON and OFF. The pressure to be set is the ON pressure.



Number of Rotations/Pressure Adjustment Screw

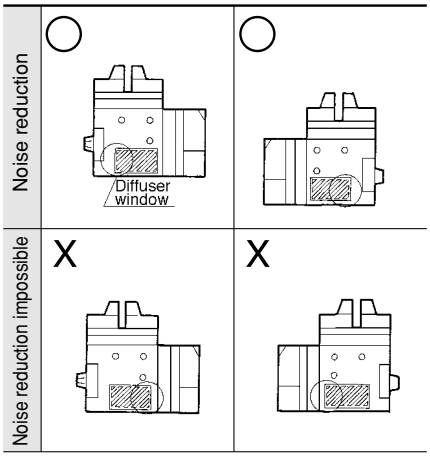


Set the pressure adjustment screw to be within 18 turns from its minimum setting.

Silencer

A hole is provided in one side of the window of the silencer's exhaust port. Therefore, if the silencer is to be attached against a wall or a board, make sure that the window of the exhaust port is not covered by the wall or the board.
To reverse the position, apply your finger to the side without a hole to forcefully push and remove the silencer. Then, turn the silencer around and push it into place. At this time, make sure that the window of the silencer is located away from the diffuser.

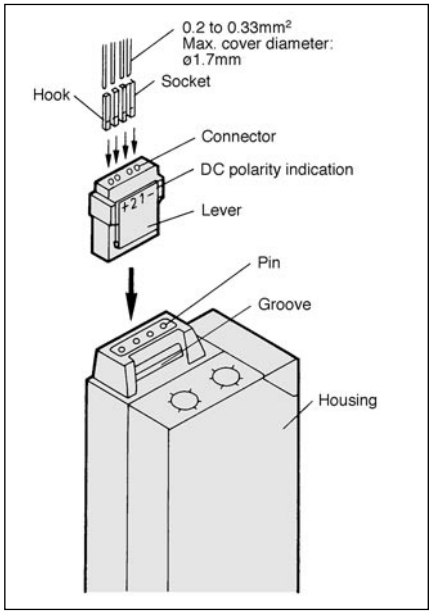
Mounting Direction of Silencer



How to Use Plug Connector

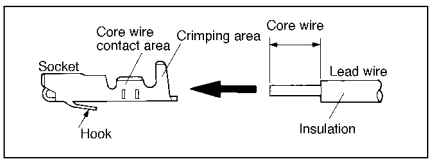
① Insertion/Removal of Connector

- Insertion: Push the connector straight on to the pins of the solenoid, making sure the lip of the lever securely "locks" into the groove of the solenoid cover.
- Removal: Press the lever against the connector housing and pull it outward from the solenoid.



② Crimping connection of lead wire and socket

Strip 3.2 to 3.7mm of the lead wire ends, insert each stripped wire into a socket and crimp contact it using special crimping tool. Be careful that the outer insulation of the lead wires does not interfere wth the socket contact part.
(Crimping Tool: DXT170-75-1)



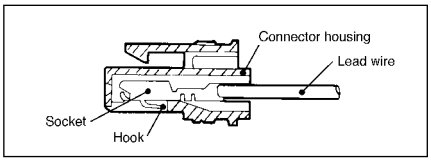
③ Connection/Disconnection of socket with lead wire

- **Connection**

Insert lead wire and crimped socket into square holes (indicated as A, B, COM) of connector. Press the socket in fully until the hook of the socket locks into the groove of the connector housing. Confirm the locked position by lightly pulling on the lead wire.

- **Disconnection**

To remove the socket from the connector, pull out lead wire while depressing the hook of the socket with a fine screw driver (or similar), if the socket is to be re-used, reposition the hook again.



⚠ Precautions

Be sure to read before handling. Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the products mentioned in this catalogue, and refer to p.3.0-2 for precautions on every series.

Mounting

⚠ Warning

① Do not drop or strike the switch.
When handling the switch, do not apply an excessive impact (1000 m/s²) by dropping or striking the switch. Even if the switch case itself does not become damaged, it could damage the internal switch and cause it to malfunction.

② To handle the product, hold it by its body.
The tensile strength of the power supply cord is 49N (5kgf). If the cord is pulled with a greater force, it could lead to a malfunction. When handling the product, make sure to hold it by its body.

③ Never move the switch assembly or loosen the switch assembly mounting screws.

Wiring

⚠ Warning

① Do not repeatedly bend or pull the lead wires.
If the lead wires are routed in such a way that repetitive bending stress or tensile strength is applied, it could cause broken wires. If the lead wires become damaged, the product must be replaced (the lead wires cannot be replaced due to the grommet type wiring.).

Power Supply

⚠ Warning

① Vacuum pressure switch:
The performance is not affected even if an momentary pressure of approximately 0.5MPa is applied (during a vacuum break). However, make sure that a constant pressure that is higher than 0.2MPa is not applied.

Operating Environment

⚠ Warning

① It cannot be used in a magnetic region.

In case of ZSM1-021

⚠ Warning

- Operate the product within the specified operating amperage range. If the product is used below the specified operating amperage, the indicator light will not turn ON. If the product is used above the specified operating amperage, the indicator light will become damaged.
- A parallel connection of the switches does not cause any problem. However, be carefull with a series connection because the voltage drop will incerase due to the internal resistance of the light-emitting diodes (approximately 2V per switch).

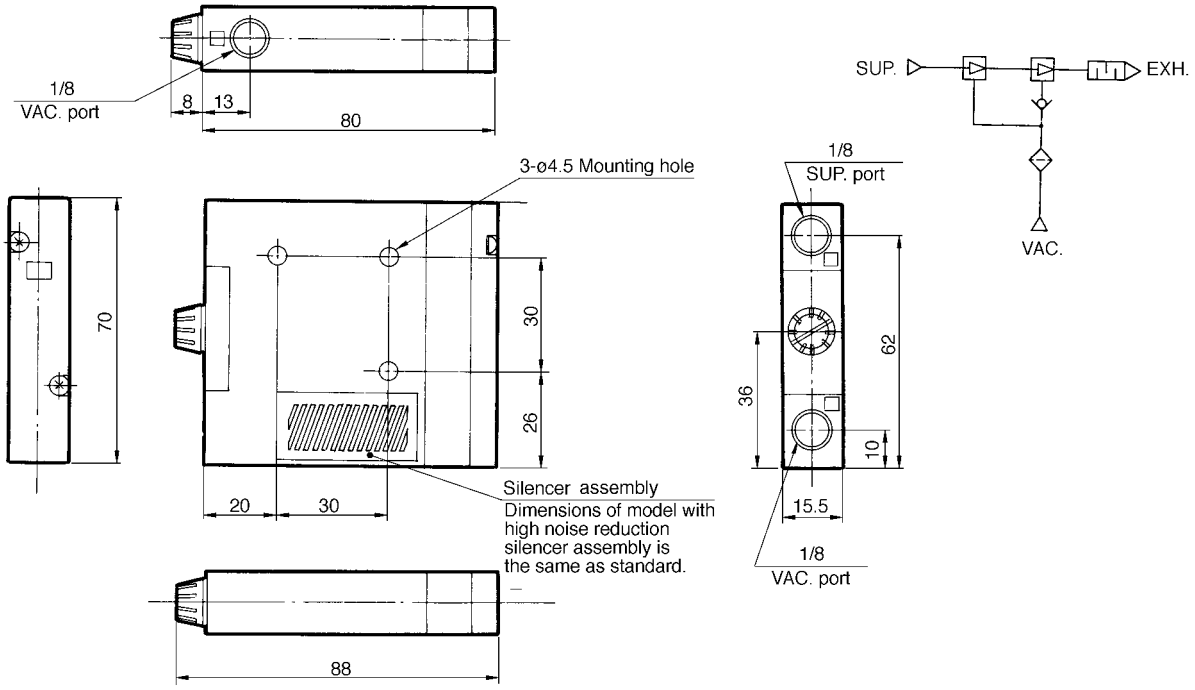
In case of ZSM1-015

⚠ Warning

- Make sure to conect the 3 lead wires correctly. If they are interchanged, they could lead to a malfunction or damage.
- Although an output signal is instantly emitted immediately after the power is turned ON, this is not a malfunction.

Single/Without Valve Basic Style

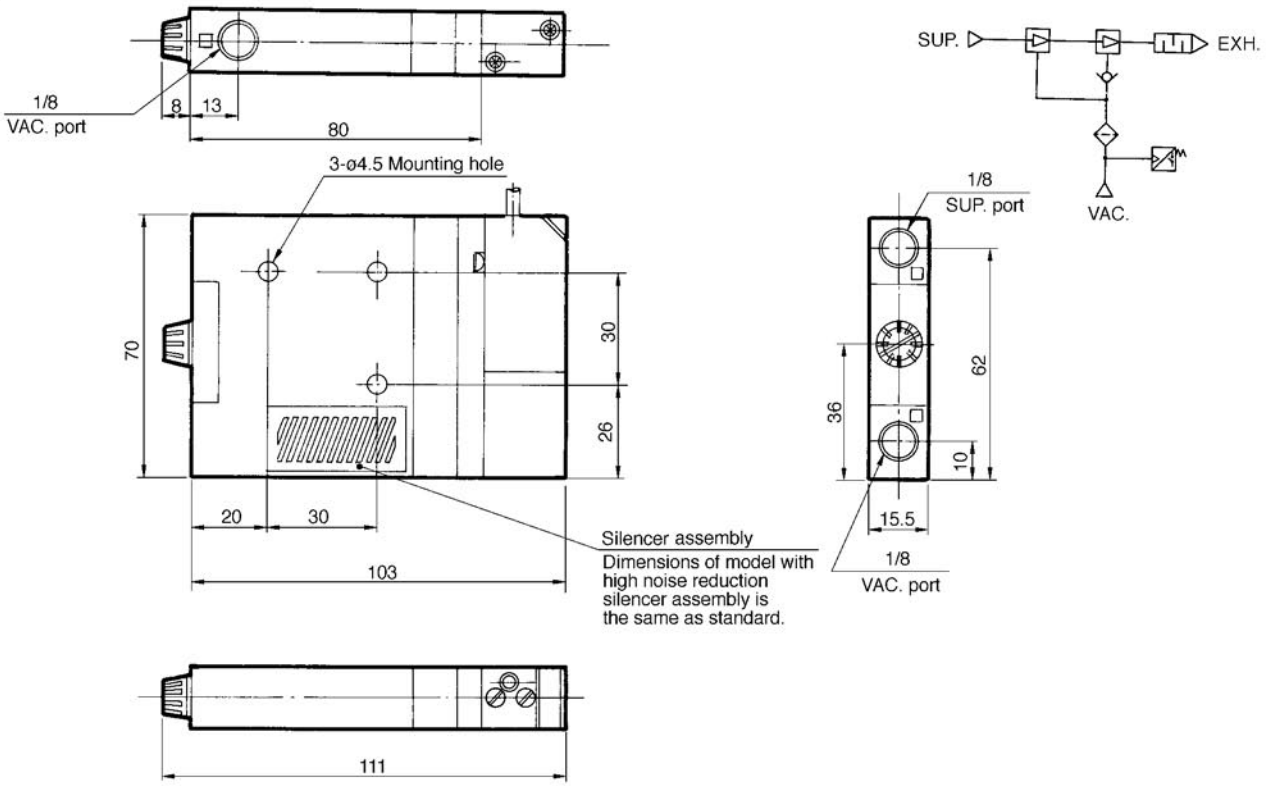
ZM□2$^{H}_{M}$



(Side entry style is equipped with plugs.)

Single/Without Valve With Vacuum Switch

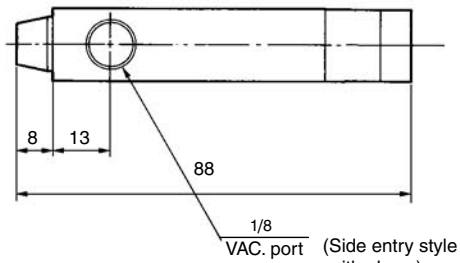
ZM□2$^{H}_{M}$-□□



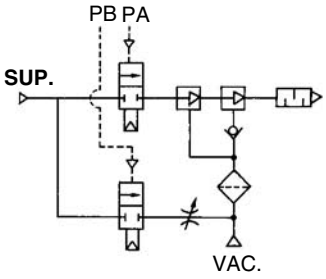
(Side entry style is equipped with plugs.)

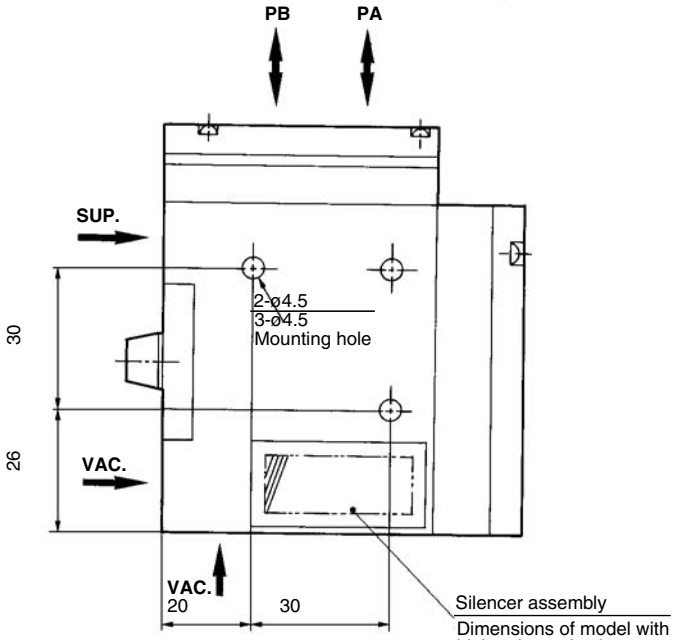
Air operated Style

ZM□1$^{H}_{M}$-$^{Q}_{P}$□

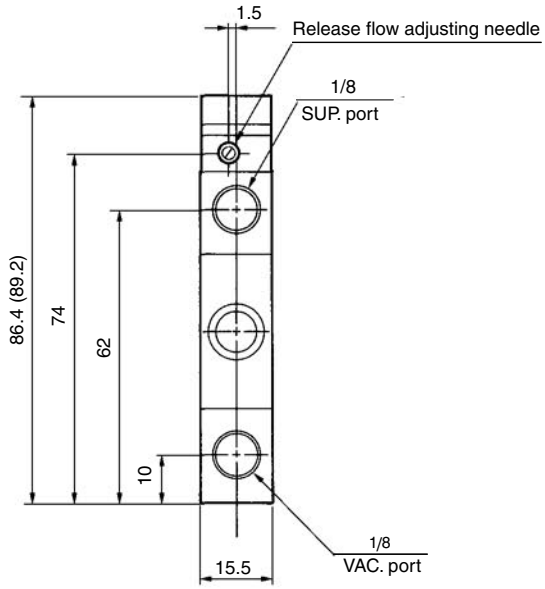


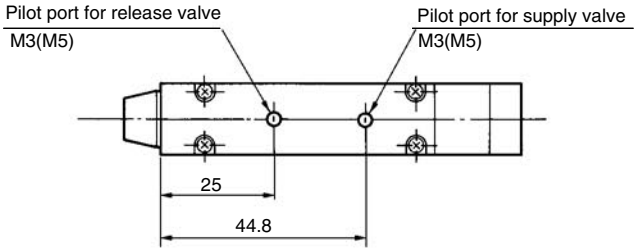
(Side entry style is equipped with plugs.)



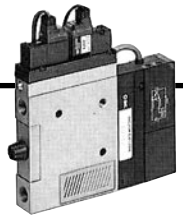


Dimensions of model with high noise reduction silencer assembly is the same as standard.





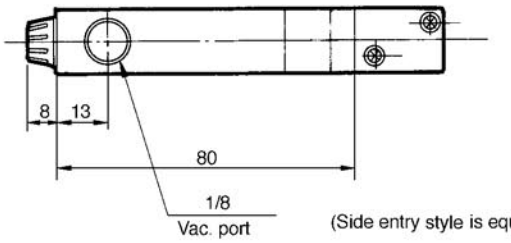
This dimension shows Q3 (M3 X 0.5). Dimension in parentheses shows Q5 (M5 X 0.8).



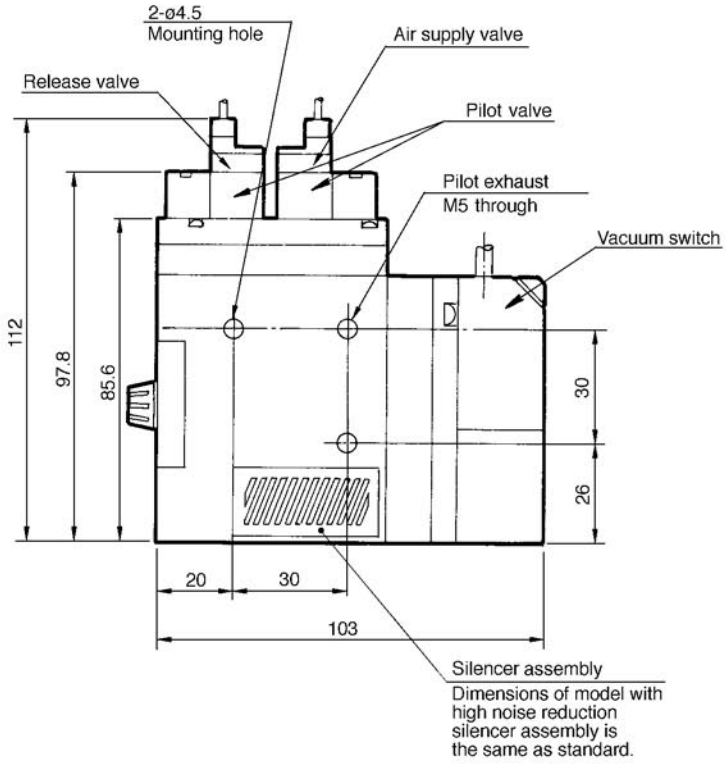
Single/With Valve

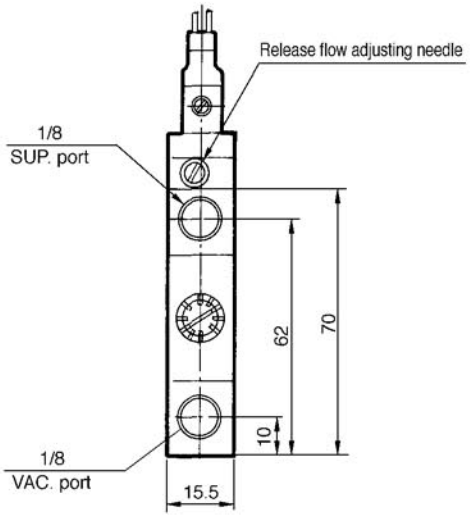
With Switch and Valve

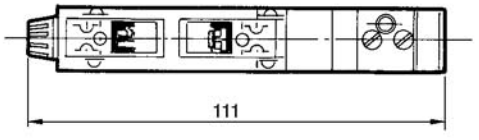
ZM□1$^{H}_{M}$-K□□□-E□

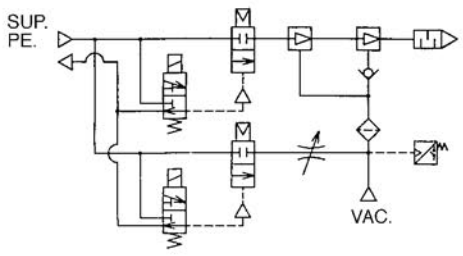


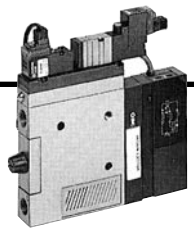
(Side entry style is equipped with plugs.)





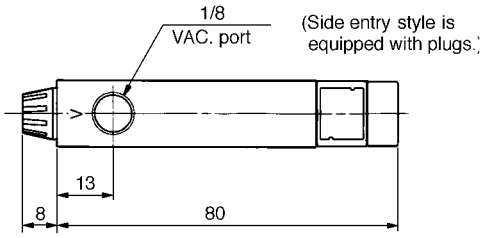


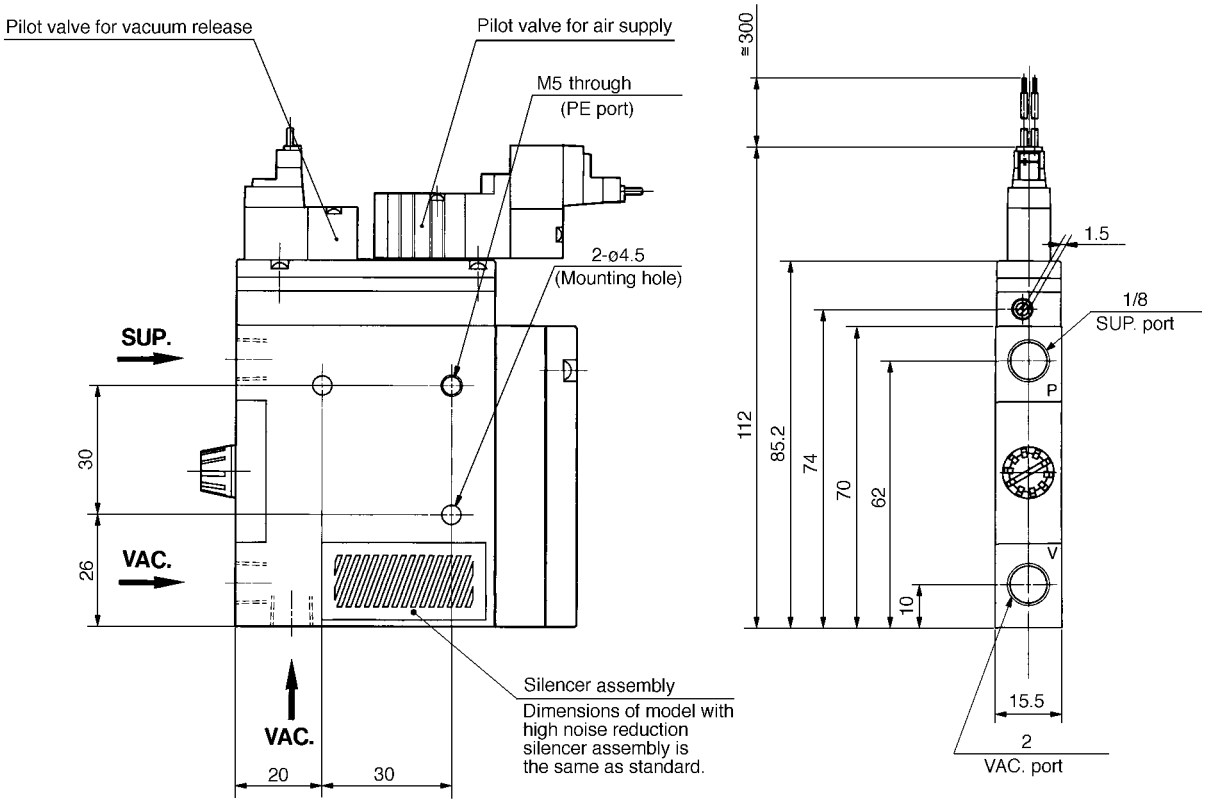


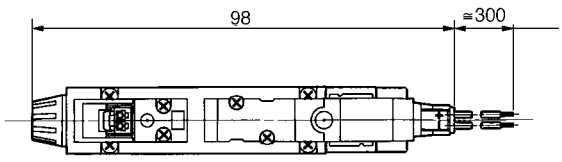


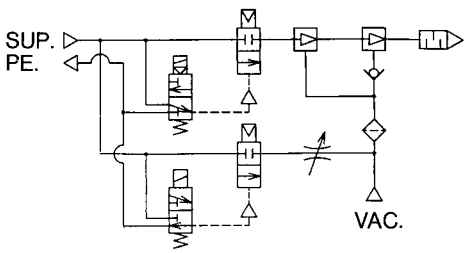
Single/With air supply valve(N.O.) and vacuum release valve

ZM□1$^{H}_{M}$-B□□

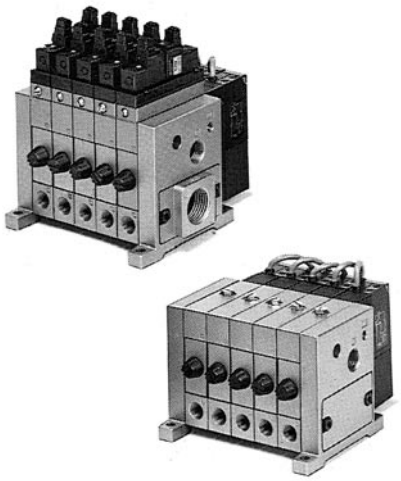








Manifold Specifications: Series ZZM



Manifold Specifications

Manifold style	Stacking
Common SUP port*	Rc(PT) 1/4
Individual SUP port*	Rc(PT) 1/8
Common EXH port	Rc(PT) 1/2, 3/4
EXH port location	Right side/Left side/Both sides**
Max. number of stations	Max.10 stations
Silencer	ZZM-SA(with bolts)

*Mixed mounting of common SUP and individual SUP types possible.
**Right or left to the VAC port.

Maximum Ejector Stations

Manifold model \ Ejector model	ZM053 ZM054	ZM073 ZM074	ZM103 ZM104	ZM133 ZM134
ZZM Stations -06 R/L	10	8	5	4
ZZM Stations -06B	10	10	8	6
ZZM Stations -04 R/L	10	8	5	4
ZZM Stations -04B	10	10	8	6

*Effective area of external silencer is 160mm^2.

How to Order Ejector Manifold

ZZM 06 — [ ] 06 R — R

Multi-ejecter
Series ZM
Manifold

Number of stations

01	1 station
⋮	⋮
05	5 stations
⋮	⋮
10	10 stations(Max.)

Port thread

—	Rc(PT)
T	NPTF
F	G(PF)

Common EXH port side

04	1/2
06	3/4
S	Silencer for ZZM (ZZM-SA)

Port and silencer location**

R	Right side
L	Left side
B	Both sides

**Right or left to the VAC port

Right side/Left side/Both sides**

—	Both sides
R	Right side
L	Left side

**Right or left to the VAC port

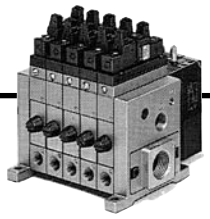
*Indicate the ejector model no. below the manifold base no.

<Ordering Example>

Manifold: ZZM06-06R(1 pc.)

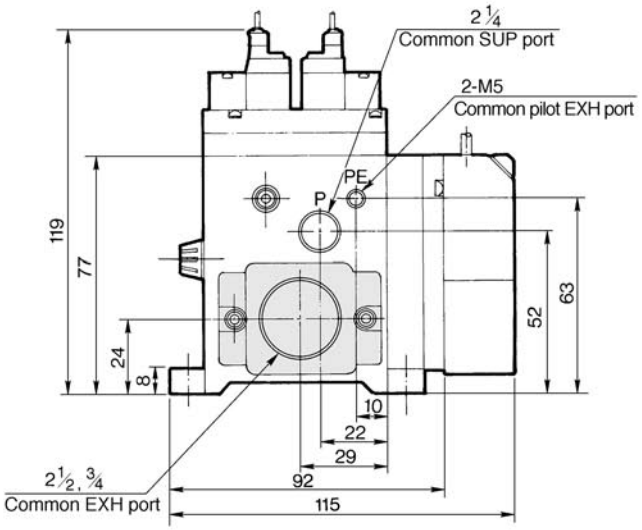
Ejector: ZM103H-J5LZ(3 pcs.)

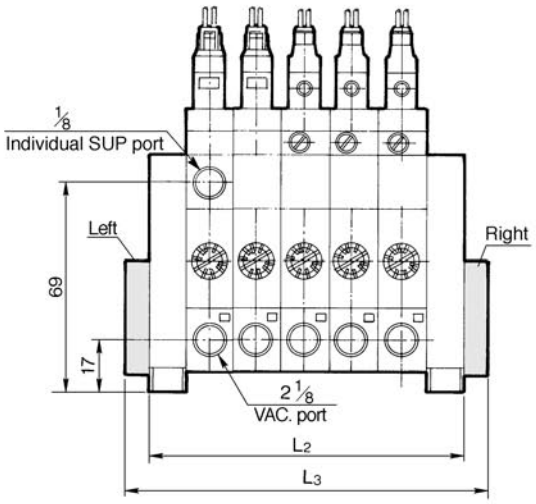
ZM133H-J5LZ(3 pcs.)

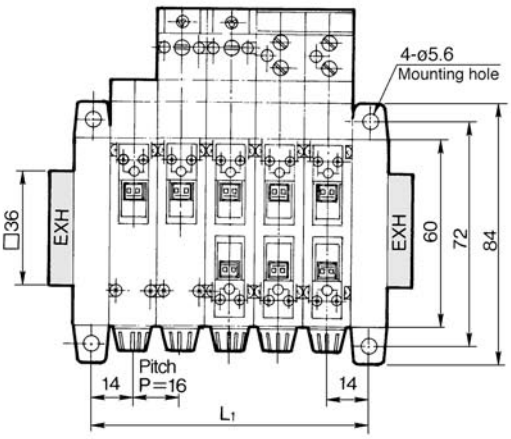


Manifold

ZZM **Stations of the ejector** – **Common EXH port** **Port location**

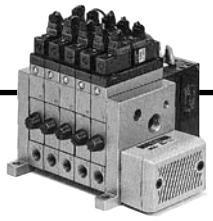






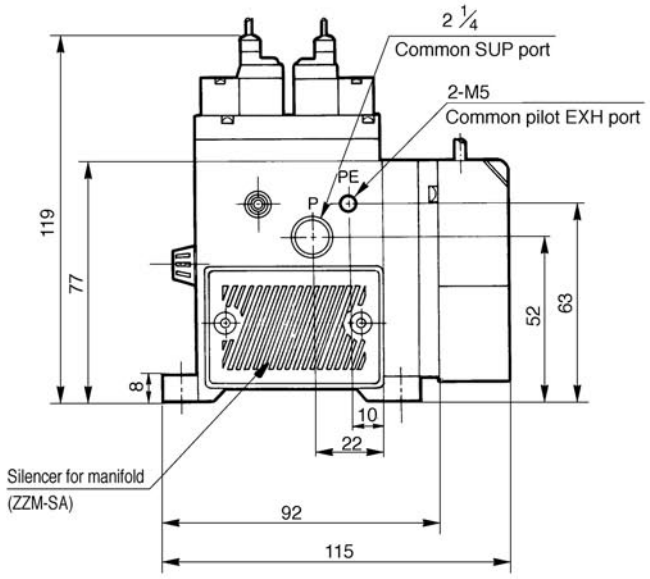
(mm)

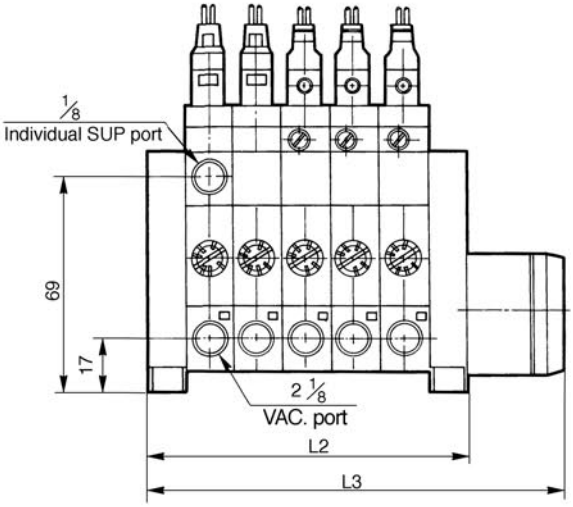
L / Stations	1	2	3	4	5	6	7	8	9	10
L1	28	44	60	76	92	108	124	140	156	172
L2	40	56	72	88	104	120	136	152	168	184
L3	56	72	88	104	120	136	152	168	184	200

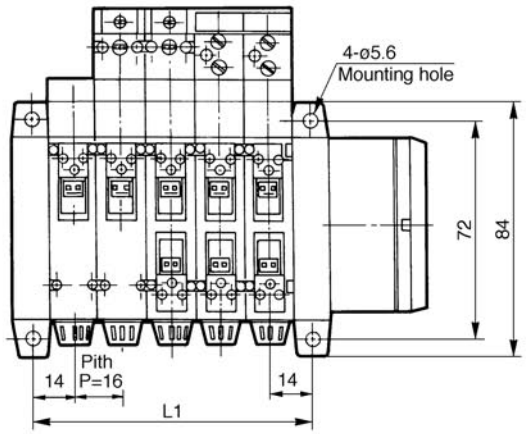


Manifold/With Silencer

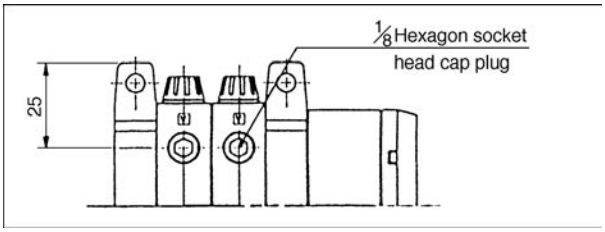
ZZM Stations of the ejector –S Silencer location







VAC. port electrical entry (In case of side entry/With plug at the bottom)



(mm)

L / Stations	1	2	3	4	5	6	7	8	9	10
L1	28	44	60	76	92	108	124	140	156	172
L2	40	56	72	88	104	120	136	152	168	184
L3	72	88	104	120	136	152	168	184	200	216

Series ZM (Consult SMC for detailed specifications, dimensions, and delivery.)

Made to Order Specifications

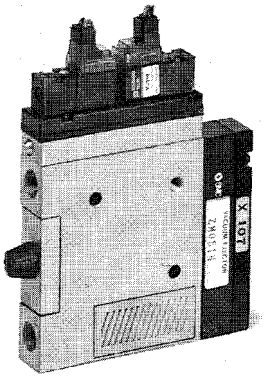
Order Made

① Double Check Valve/For Manifold

Single: ZM | Nozzle dia. | Body | Supply pressure | Valve | Voltage | Electrical entry | X107

X107: Double check valve

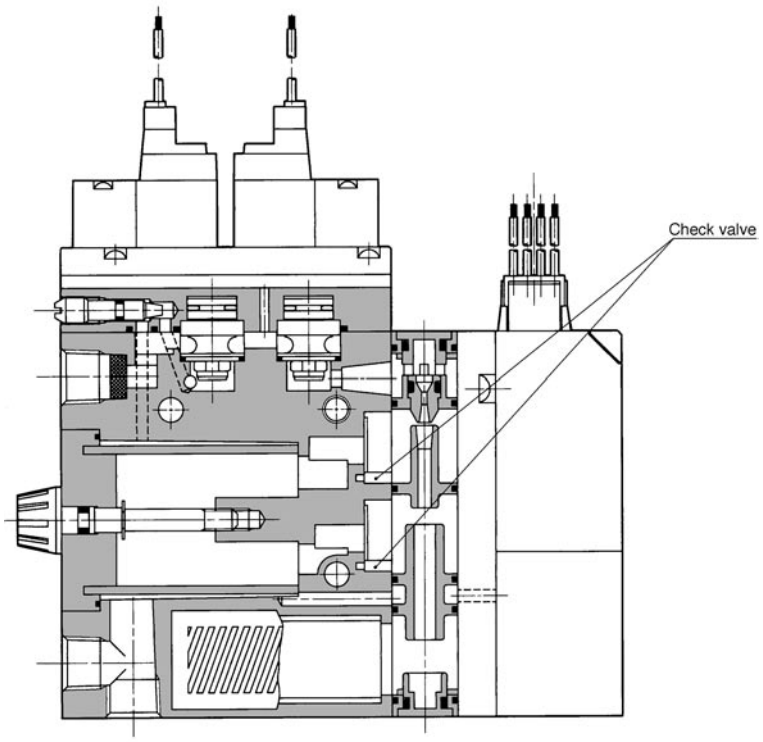
When a manifold is used, the exhaust that is discharged to the silencer could flow out to the vacuum port side. To prevent this from occurring, a check valve is used.



⚠ Warning

① It cannot be used for maintaining a vacuum.
② Use a vacuum release valve (the workpiece cannot be released without a vacuum release valve.)

Construction



Series ZM (Consult SMC for detailed specifications, dimensions, and delivery.)
Made to Order Specifications

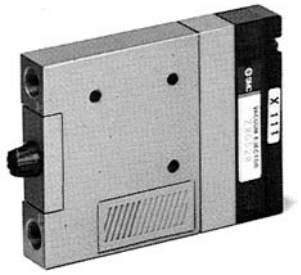
②With Individual Exhaust Spacer

Single: ZM | Nozzle dia. | Body | Supply pressure | X111

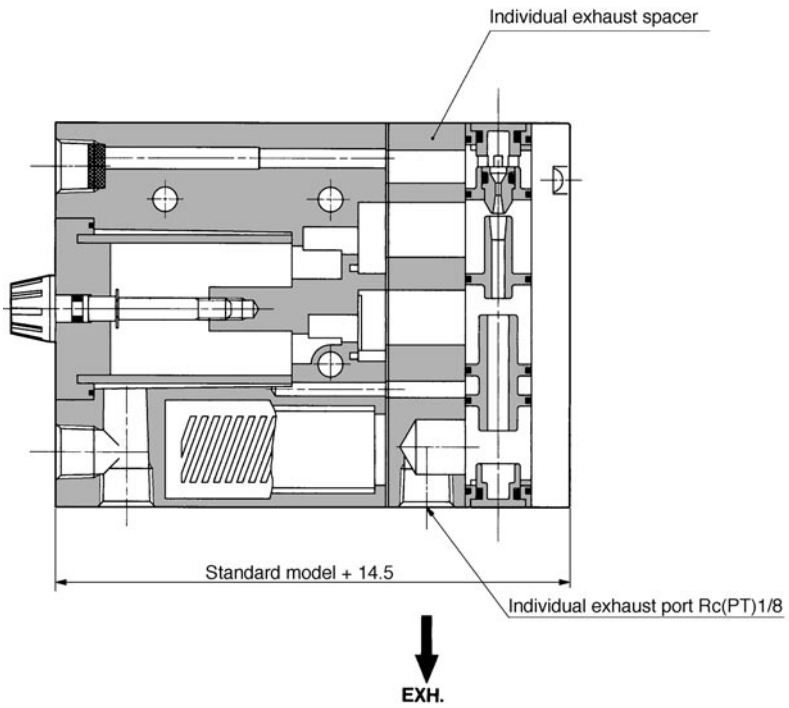
X111: Individual exhaust spacer

When using an individual ejector in a clean room, the exhaust can be discharged outside of the clean room by attaching an individual exhaust spacer. (The spacer can also be installed when using a manifold. Contact SMC for mounting dimensions.)
∗It is possible to manufacture it with a switch.

⚠ Caution
To connect a pipe to the exhaust port, do not use an elbow joint because it creates resistance and prevents the system from attaining a sufficient vacuum.



Construction



Series ZM (Consult SMC for detailed specifications, dimensions, and delivery.)

Made to Order Specifications

❸ Double Solenoid Supply Valve

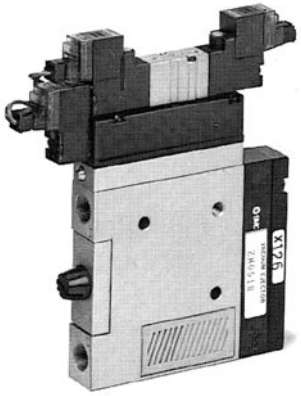
Single: ZM | Nozzle dia. | Body | Supply pressure | Valve | Voltage | Electrical entry | X126

Double solenoid valve

–X126	With release valve
–X135	Without release valve

This is an air supply pilot valve that is made with double solenoids.
∗It is possible to manufacture it with a switch.

Note) The –X126 model cannot be manufactured with an L plug connector for electrical entry. Therefore, use a grommet type or an M plug connector.



Construction