## Vacuum Unit ( E ROHS 25A-ZK2 Series

**How to Order Single Unit** 

Ejector System (with Valve)

25A-ZK2 A 12 Ejector System (without Valve) 25A-ZK2 A

> Remains blank when no option is selected.

Supply valve

System/Body type

	ystem/bu	ay type		
Symbol	System	Body type	Exhaust type	
A			Silencer exhaust	Built-in silencer
В	Ejector system	Single unit	Port exhaust*1	
G			High-noise reduction silencer exhaust	

\*1 Port size of exhaust port: ø8 (Metric)

With silencer

Combination of supply valve and release valve\*3

а	na release valve	Release valve	
Symbol	Supply valve	Release valve	
*5 <b>K</b>	N.C.	N.C.	
J	N.C.	None	
R	Self-holding release valve linked*4	N.C.	
N	None	None	

- $\stackrel{\frown}{*3}$  Only non-locking type is available for the manual override for "K," "J," and "R."
- \*4 Self-holding type maintains vacuum by instantaneous energization (20 ms or more). Stopping the vacuum turns on the release valve. (signal to stop vacuum not needed)
- \*5 When the digital pressure switch for vacuum with energy saving function is selected for 5, select "K" for 3 Combination of supply valve and release valve.

#### 2 Nominal nozzle size

Symbol	System	Nominal size
07	,	ø0.7
10	Ejector	ø1.0
12	system*2	ø1.2
15		ø1.5

\*2 Standard supply pressure for nozzle size 07 to 12: 0.35 MPa 15: 0.4 MPa

#### A Rated voltage\*6

<u> </u>	iaica roitage		
Symbol	Voltage		
5	24 VDC		
6	12 VDC		
0	When 3 is "N"		

\*6 Rated voltage for the supply and release valve

Manifold type is not available.

#### 5 Pressure sensor/Digital pressure switch for vacuum specifications

Symbol	Туре	Pressure range [kPa]	S	Specifications		sensor	
P	Pressure	0 to -101	Analo	og output 1 to 5 V			
Т	sensor	-100 to 100	Analo	og output 1 to 5 V			
Α			NPN	Unit selection function*7	20.11		
В		0 to -101	2 outputs	SI unit only*8	Digital pressi switch for va-		
С			PNP	Unit selection function*7	Switch for vacuum		
D	Digital pressure switch for vacuum		2 outputs	SI unit only*8			
Е			NPN	Unit selection function*7			
F		-100 to 100	2 outputs	SI unit only*8		Digital pressure switch	
Н			PNP	Unit selection function*7		for vacuum with energy	
J			2 outputs	SI unit only*8		saving function	
K	Digital pressure		NPN	Unit selection function*7	/	,	
Q	switch for vacuum	• '	1 output	SI unit only*8		3	
R	with energy saving	-100 10 100	PNP	Unit selection function*7			
S	function*9		1 output	SI unit only*8			
N		Vithout pres					

- \*7 The Unit selection function is not available in Japan due to the New Measurement Law.
- \*8 Fixed unit: kPa
- \* When "K," "Q," "R," or "S" is selected, select "K" for 3 Combination of supply valve and release valve. Select "W" or "L3" for 6.



• PS: Pilot pressure supply port • PD: Individual release pressure supply port

#### 6 Supply valve/Release valve/Digital pressure switch for vacuum connector specifications

	apply raire, it		tan processio emiten	tor vacadin connector opcomoducione			
Symbol			<b>5</b> Lead wire with connector for pressure				
		Lead wire with connector	switch/ sensor*13				
L		<u></u> 0*11	<u></u> *14				
L1		×*12	○*14				
L2	L-type plug connector	○*11	×*15				
L3		×*12	×*15				
w			ire for switch with aving function				
Υ		-valve	○*14				
Y1		y/release valve) selected for <b>3</b>	×				
N	When "N" is selected for both 3 and 5 (without supply/release valve, without switch, pressure sensor)						
*10. Salanaid valva with light/aurga valtage auppressor							

- \*10 Solenoid valve with light/surge voltage suppressor
- \*11 The standard lead wire length for the solenoid valve is 300 mm.
- \*12 For lead wire lengths other than the standard, select "L1 or L3," and order a connector assembly with the desired length. (Refer to page 143.)
- \*13 The standard lead wire length for the pressure sensor is 3 m. The standard length for the lead wire with connector for the vacuum pressure switch and the lead wire length for the switch with energy saving function is 2 m.
- \*14 Select "L," "L1," or "Y" when the pressure sensor (P, T) is selected for § Pressure sensor/ Digital pressure switch for vacuum specifications. Since only the grommet type is available for the pressure sensor, the sensor without a lead wire cannot be selected.
- \*15 Select when no vacuum pressure switch, pressure sensor, or vacuum pressure switch with connector without a lead wire is used.

#### Single Unit and Options\*22

		and Opti					
0	0	8	4	6	6	0	8
System/	Nominal	Combination of supply	Rated	Pressure sensor/digital pressure	Supply valve/release valve/digital pressure	Vacuum (V)	Optional
Body type	nozzle size	valve and release valve	voltage	switch for vacuum specifications	switch for vacuum connector specifications	port	specifications
				P/T	L/L1		
		К		A/B/C/D/E/F/H/J	L/L1/L2/L3		B/D/J/K/W
		r.		N	L2/L3		
				K/Q/R/S	L3/W	1	B/D/J/K
	07	07 10 R 12 15 J		P/T	L/L1	1	
	10			A/B/C/D/E/F/H/J	L/L1/L2/L3	06	B/D/J/K/W
A/B/G	•			N	L2/L3		
	12			P/T	L/L1	08	
	15			A/B/C/D/E/F/H/J	L/L1/L2/L3	1	B/W
				N	L2/L3	1	
		N 0		P/T	Υ	1	
			A/B/C/D/E/F/H/J	Y/Y1	1	B/W	
				N	N		

\*22 When "J" or "N" is selected for 3 Combination of Supply Valve and Release Valve, "D," "J," and "K" cannot be selected for **3** Optional Specifications/Functions/Applications.

For options not listed in the table above, please contact SMC.

\* Refer to the Web Catalog when mounting single unit to DIN rail.

# Vacuum (V) port\*16

		<u> </u>	. (a) a
Symbol	Type	Port size	
06	Metric size	ø6 One-touch fitting	
08		ø8 One-touch fitting	V

\*16 Supply (PV) port size of single unit: ø6

#### 8 Optional Specifications\*17

Symbol	Туре						
Nil	Without option						
В	With one bracket for mounting a single unit (A mounting screw is attached.)						
D	With individual release pressure supply (PD) port*18						
J	Vacuum break flow adjusting needle Round lock nut type						
K	Vacuum break flow adjusting needle Screwdriver operation type						
w	With exhaust interference prevention valve*19, *20, *21						

- \*17 When more than one option is selected, list the option symbols in an alphabetical order. Example) -BJ
- \*18 Only M3 is available for PD port size. Use One-touch fittings or barb fittings with O.D. ø6.2 or less for piping. (Recommended fitting: M-3AU-4)
- \*19 To prevent backflow of the exhaust air, not for holding vacuum. This option does not completely stop the backflow of the exhaust air. Select the port exhaust type according to the application.
- \*20 When "J" is selected for 3 Combination of supply valve and release valve and "W" (exhaust interference prevention valve type) is selected for 3 Optional specifications/ Functions/Applications, install a release valve or vacuum breaker.
- When "K," "Q," "R," or "S" is selected for § Pressure sensor/Digital pressure switch for vacuum specifications, a model with an exhaust interference prevention valve is provided. So, it is not necessary to select "W."

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Click here for details.

Control Valves Directional

Air Cylinders

Related Products

Actuators Air Grippers

Air Preparation

Air Filters

Modular F.R.L./Pressure Control Equipment

Switches

142

#### **Replacement Parts/How to Order**

■ Valve assembly



Applicable system

A For ejector system

<b>U</b> \	/alve type
K	Supply valve N.C., Release valve N.C.
R	Supply valve, self-holding type (Linked to release valve)
J	Supply valve only (Single)

Rated voltage

5	24 VDC	
6	12 VDC	

<u>4</u>	Lead	wire	entry	direction
		-tvna	nlua co	nnector with

L	L-type plug connector with lead wire (Individual wiring)
LO	L-type plug connector, without connector

Select the ZK2-VAAK LO-A for a switch with energy saving function. This assembly does not include special cable assembly for a switch with energy saving function.

■ Vacuum pressure switch assembly

Rated pressure range and function

Е	0 to -101 kPa	Vacuum pressure switch	Open collector 2 autnute
F	-100 to 100 kPa	vacuum pressure switch	Open collector 2 outputs
٧	-100 to 100 kPa	Pressure switch with energy saving function	Open collector 1 output

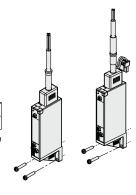
Output specifications

Α	NPN
В	PNP

Unit specifications

Nil	Unit selection function*1
M	SI unit only*2

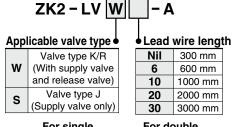
- \*1 The unit selection function is not available in Japan due to the Measurement Law.
- \*2 Fixed unit: kPa

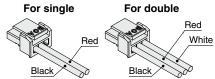


#### 4 Lead wire with connector

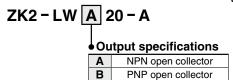
Nil		None	
G	With	When <b>1</b> is E or F···For vacuum pressure switch, Lead wire with connector (Length 2 m)	
G	wire	When <b>1</b> is V···For switch with energy saving function, Lead wire with connector (Length 2 m)	

■ Connector assembly





- Lead wire with connector for vacuum pressure switch (When individual lead wire is necessary, order with the part number below.)
- Lead wire with connector for vacuum pressure switch
   ZS 39 5G
- Lead wire with connector for switch with energy saving function



■ Pressure sensor assembly

Rated pressure range and specifications

1	0 to -101 kPa, Output: 1 to 5 V, Accuracy: ±2% F.S. or less	
3	-100 to 100 kPa, Output: 1 to 5 V, Accuracy: ±2% F.S. or less	



■ High-noise reduction silencer case assembly

Exhaust port size

4	ø4	For nozzle size 07, 10
6	ø6	For nozzle size 12, 15

## **Optional Specifications/Functions/Applications**

Symbol	Type	Function/Application
Syllibol	Туре	Function/Application
В	With one bracket for mounting a single unit (Mounting screw is attached.)	Use when a single unit is mounted to the floor in an upright position is requested. (The part number for ordering only a bracket is 25A-ZK2-BK1-A. Bolt nuts are included.)
D	With individual release pressure supply (PD) port	Use when supply pressure for vacuum release which pressure is different from the ejector supply pressure is requested.
J	Vacuum break flow adjusting needle Round lock nut type	Thicker than standard hexagon type. More suitable for hand tightening. Round lock nut improves operability when the exhaust port type is used.
K	Vacuum break flow adjusting needle Screwdriver operation type	Slotted type improves fine adjustment performance when the exhaust port type is used.
w	With exhaust interference prevention valve Exhaust interference prevention valve	When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.

Auto Switches

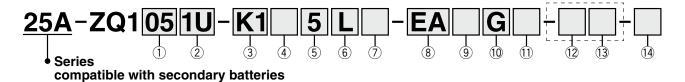


## **Space Saving Vacuum Ejector**

25A-ZQ Series

#### **How to Order**

## **Ejector Unit**



1) Nozzle nominal size

2 Exhaust type

05	ø0.5
07	ø0.7
10	ø1.0

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*1	Normally open	Normally closed
J1 Normally closed		None
J2*1 Normally open		None
Q1 Latching positive common Normally		Normally closed
Q2 Latching positive common None		None
N1 Latching negative common N		Normally closed
N2 Latching negative common None		None

<sup>\*1</sup> 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)*2	
Υ	DC low wattage type (0.5 W)*2	

\*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
<b>1</b> *3	100 VAC (50/60 Hz)	
<b>2</b> *3	200 VAC (50/60 Hz)	_
<b>3</b> *3	110 VAC (50/60 Hz)	_
<b>4</b> *3	220 VAC (50/60 Hz)	_
5	24 VDC	•
6	12 VDC	•

<sup>\*3</sup> 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	Solenoid valve combination	FIIOL Valve	Applicable power supply voltage [V]					
no.	symbol	symbol	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	Υ	_	_	_	_	•	•
6	J2	Nil	_	_	_	_	•	•
7	Q1	Nil	_	_	_	_	•	•
8	Q2	Nil	•	•	•	•	•	•
9	N1	Nil	_	_	_	_	•	•
10	N2	Nil	_	_	_	_	•	•

<sup>\*</sup> 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)	

#### Manual override\*4

	Nil	Non-locking push type Latching type: Push-locking type
3 71		Locking type (Q1/Q2/N1/N2: Not applicable)

\*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\*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	

\*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.

#### 11 Check valve\*8

Nil	None
K	With check valve

\*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.

#### 

- 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)

S	ymbol	Applicable tubing O.D.
	0	Without fitting (M5 x 0.8)

#### 13 Fitting (P port)

Symbol	Applicable tubing O.D.	Object spec
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

## 9 Vacuum pressure switch unit specifications

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

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

## (1) Vacuum pressure switch lead wire specifications

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

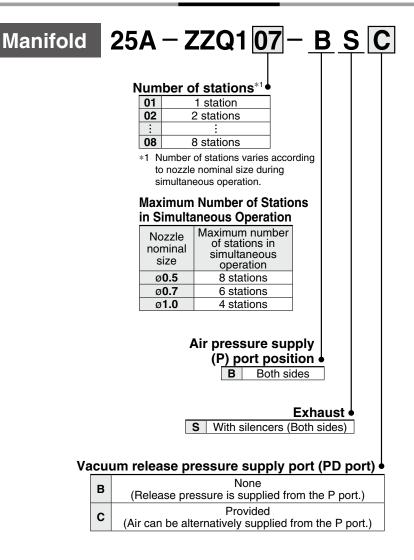
#### 14 CE-compliant

Nil	_
Q	CE-compliant

\* CE-compliant: For DC only.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

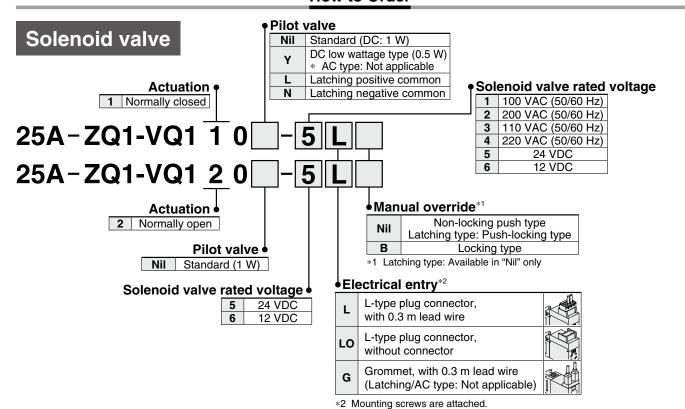
#### **How to Order**



\* The 25A- series specifications and dimensions are the same as those of the standard model.

Click here for details.

# Switches



switch 25A-ZQ1-Z			
	Vacuum pressure switch specifications ←		
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		

## 

Nil With unit switching functio			
M	Fixed SI unit*2		
Р	With unit switching function*1 (Initial value psi)		

- \*1 Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
- \*2 Fixed unit: kPa

#### Vacuum pressure switch lead wire specifications

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

## Symbol Applicable tubing O.D.

• Cneck valve**		
Nil	None	
K	With check valve	

\*3 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, but it is incapable of completely preventing overflow. During usage, please inspect thoroughly with actual machine.

Fitting (V port)

Without fitting (M5 x 0.8)

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

#### **∆Warning**

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

Lead wire with connector part no.	Note
ZS-39-5G	Lead wire length 2 m (With connector cover)

\* The 25A- series specifications and dimensions are the same as those of the standard model.



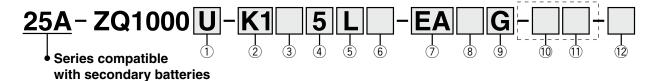


## **Space Saving Vacuum Pump System**

# 25A-ZQ Series

#### **How to Order**

## Vacuum pump unit



#### 1 Body type

U	For single unit
М	For manifold

## ② Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve
K1	Normally closed	Normally closed
K2*1	Normally open	Normally closed
J1	Normally closed	None
J2*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

The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state.

As for "K1," "K2," "Q1" and "N1," use the vacuum release valve when a workpiece is detached.

Concerning "J1," "J2," "Q2" and "N2," devise the circuit for the vacuum release additionally when a workpiece is detached.

\*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.

#### 3 Pilot valve (Refer to Table (1).)

Nil	Standard (DC: 1 W)*2
Υ	DC low wattage type (0.5 W)*2
*2 Avo	id energizing the solenoid valve for

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

## (4) Solenoid valve rated voltage (Refer to Table (1).)

		CE-compliant
<b>1</b> *3	100 VAC (50/60 Hz)	
<b>2</b> *3	200 VAC (50/60 Hz)	_
<b>3</b> *3	110 VAC (50/60 Hz)	_
<b>4</b> *3	220 VAC (50/60 Hz)	_
5	24 VDC	•
6	12 VDC	•

\*3 CE-compliant products are not available for "1," "2," "3" and "4."

#### Table (1) Combination of Solenoid Valve, Pilot Valve and Rated Voltage

Combination	Solenoid valve combination	nination   Filot valve		Applicabl	e power	supply v	oltage [V	]
no.	symbol	symbol	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	_	_	_	_	•	•

 $<sup>\</sup>ast\,$  Combinations 1 to 10 in the above table are the only possible options.

Auto Switches

#### ⑤ 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)	B

#### 6 Manual override\*4

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

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

#### 7 Vacuum pressure switch suction filter\*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

<sup>\*5</sup> 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

#### **8 Vacuum pressure switch** unit specifications

Nil With unit switching function*6		
M	Fixed SI unit*7	
Р	With unit switching function*6 (Initial value psi)	

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

#### 9 Vacuum pressure switch lead wire specifications

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

#### 10 Fitting (V port)\*8

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### 11 Fitting (PS / PV port)\*8

Symbol	Applicable tubing O.D.	Part no.	Object spec.
Nil Without port		_	Manifold
0	Without fitting (M5 x 0.8)	_	Single unit

#### 12 CE-compliant

Nil	_
Q	CE-compliant

\* CE-compliant: For DC only.

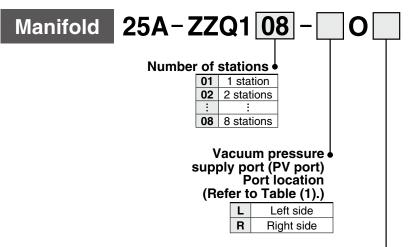
\*8 For filter only (Without vacuum pressure switch) When neither V port fitting nor PS/PV port fitting are needed, enter nothing or -00 in the dotted line "How to Order".

> \* The 25A- series specifications and dimensions are the same as those of the standard model.

> > Click here for details.



#### **How to Order**



## Table (1) Air Pressure Supply Port Location on the Manifold

DD port	Manifold	Manifold Left		Right			
FD poit	Port location	PS	PV	PD	PS	PV	PD
В	L (Left side)	_		_	<b>●</b> *1	_	_
Ь	R (Right side)	<b>●</b> *1	_	_	_		_
С	L (Left side)	_				_	•
	R (Right side)	•	_		_		

\*1 The position of each port is shown as right and left sides viewed from the front side of the vacuum port.

Release pressure is commonly supplied from the PS port.

\* PS: Pilot pressure supply port, PV: Vacuum pressure supply port, PD: Release pressure supply port

#### Release pressure supply port (PD port)

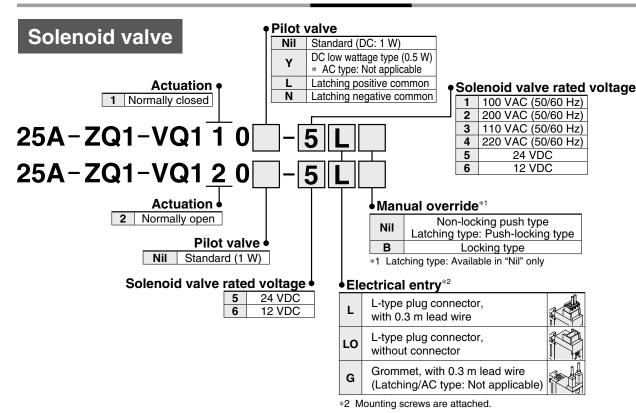
B None (Release pressure is supplied from the PS port.)C Provided (Air can be alternatively supplied from the PS port.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Click here for details.



#### **How to Order**





## Vacuum pressure switch specifications to -101 kPa/NPN open collector 2 outputs, with suction filter

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	

#### Vacuum pressure switch unit specifications

Nil With unit switching function	
M	Fixed SI unit*2
P	With unit switching function*1 (Initial value psi)

- \*1 Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.
- \*2 Fixed unit: kPa

## Vacuum pressure switch lead wire specifications

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

Fitting (V port)

Symbol Applicable tubing O.D.

O Without fitting (M5 x 0.8)

#### Check valve\*3

Nil	None
K	With check valve

\*3 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, but it is incapable of completely preventing overflow. 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 vacuum release valve. (Without a vacuum release valve, the workpiece may not be released.)

Lead wire with connector part no.	Note	
ZS-39-5G	Lead wire length 2 m (With connector cover)	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Click here for details.

Air Cylinders Control Valves

Auto Switches