

ZK2□A Series

Single Unit Ejector + With Valve + Without Energy Saving Function

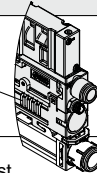
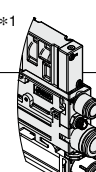
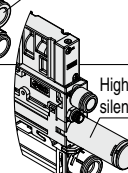
Refer to pages 36, 37, 39, and 40 for the port layouts (including circuit examples) and pages 57 to 59 for the dimensions.

How to Order

ZK2 **A** **12** **K** **5** **A** **L** **A** - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1 
B		Port exhaust 
G		High-noise reduction silencer exhaust 

*1 With exhaust port when 2 is 12 or 15

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

5 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*4
			2 outputs		
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		-100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve			Release valve
	N.C.	N.O.	Self-holding	N.C.
K	●	—	—	●
J	●	—	—	—
R	—	—	●*3	●
E	—	●	—	●

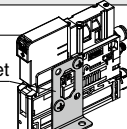



*3 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve. Refer to the precautions on page 90.

6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve: 300 mm (Connector assembly)*5	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
L	●	●	●	Cannot be selected when 5 is N
L1	None	●	●	Cannot be selected when 5 is P or T
L2	●	None	None	
L3	None	None	None	

*5 For the connector length other than 300 mm, order the connector assembly on page 44 separately.

8 Option*6 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included) 	—
D	With individual release pressure supply (PD) port (M3)*7 	Cannot be selected when 3 is J
E	Vacuum release flow adjustment needle*8 	Cannot be selected when 3 is J
J		Can be selected only for the combination of J and K
K		
W	With exhaust interference prevention valve 	When J is selected for 8, install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

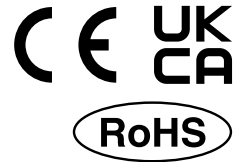
*6 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*7 Use a One-touch fitting or barb fitting (M-3AU-4) for piping. (O.D.: Within ø6.2)

*8 When "K," "R," or "E" is selected for 3, a vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Ejector System Vacuum Unit

ZK2□A Series



Single Unit Ejector + With Valve + With Energy Saving Function

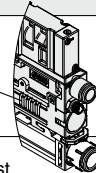
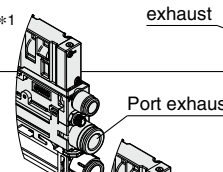
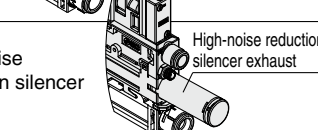
Refer to page 37 for the port layout (including a circuit example) and page 60 for the dimensions.

How to Order

ZK2 **A** **12** **K** **5** **K** **W** **A** - **08** -

1
2
3
4
5
6
7
8

1 Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1 
B		Port exhaust 
G		High-noise reduction silencer exhaust 

*1 With exhaust port when 2 is 12 or 15

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	N.O.	N.C.
K	●	—	●
E	—	●	●

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

5 Pressure switch for vacuum with energy saving function

Symbol	Pressure range [kPa]	Specifications		
		NPN	PNP	With unit selection function*3
K	-100 to 100	●	—	●
Q		●	—	None (SI unit only)
R		—	●	●
S		—	●	None (SI unit only)

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

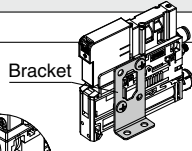

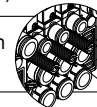
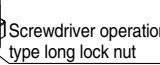
6 Connector

Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
W	●
L3	None

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

8 Option*4 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included) 	—
D	With individual release pressure supply (PD) port (M3)*5 	—
E	Vacuum release flow adjustment needle*6  	Can be selected only for the combination of J and K
J		
K		

*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*5 Use a One-touch fitting or barb fitting (M-3AU-4) for piping. (O.D.: Within ø6.2)

*6 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

ZK2□A Series

Single Unit Ejector + With Valve + IO-Link Compatible

Refer to pages 37 and 40 for the port layouts (including circuit examples) and page 60 for the dimensions.

How to Order

ZK2 **A** **12** **K** **5** **1** **H** **A** - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1
B		Port exhaust
G		High-noise reduction silencer exhaust

*1 With exhaust port when 2 is 12 or 15

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

6 Connector

Symbol	Lead wire with connector for IO-Link (With M12 connector): 300 mm
H	●
L3	None

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	N.O.	N.C.
K	●	—	●
E	—	●	●

5 IO-Link compatible vacuum pressure switch

Symbol	Pressure range [kPa]	Specifications	
		Energy saving function*3	With unit selection function*4
1	0 to -101	—	●
2		—	None (SI unit only)
3		—	●
4	-100 to 100	—	None (SI unit only)
5		●	●
6		●	None (SI unit only)

*3 In order to use the energy-saving function, 2 check valves are required. Symbols "1," "2," "3," and "4" for 5 are for a single check valve, so the energy-saving function cannot be used.

Symbols "5" and "6" for 5 are equipped with 2 check valves, so the energy-saving function can be used. However, when the vacuum is stopped, workpiece release by atmospheric release cannot be used.

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

8 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
D	With individual release pressure supply (PD) port (M3)*6	—
E	Vacuum release flow adjustment needle*7	Can be selected only for the combination of J and K
J		
K		
W	With exhaust interference prevention valve	Cannot be selected when 5 is 5 or 6

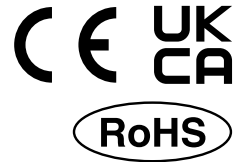
*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*6 Use a One-touch fitting or barb fitting (M-3AU-4) for piping. (O.D.: Within ø6.2)

*7 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Ejector System Vacuum Unit

ZK2□A Series



For Manifold Ejector + With Valve + Without Energy Saving Function


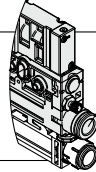
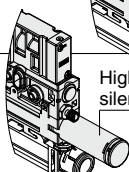
Refer to page 19 for How to Order Manifold, pages 37, 38, 40, and 41 for the port layouts (including circuit examples), and pages 62 to 64 for the dimensions.

How to Order

ZK2 **C** **12** **K** **5** **A** **L** **A** - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1  Direct exhaust End plate exhaust
F		Individual port exhaust  Individual port exhaust
H		High-noise reduction silencer exhaust  High-noise reduction silencer exhaust

*1 Combination of direct exhaust and end plate exhaust from each station

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

5 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*4
			2 outputs		
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		-100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve			Release valve
	N.C.	N.O.	Self-holding	N.C.
K	●	—	—	●
J	●	—	—	—
R	—	—	●*3	●
E	—	●	—	●

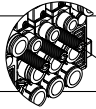
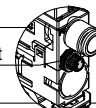
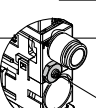
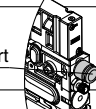

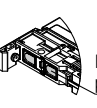
*3 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve. Refer to the precautions on page 90.

6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/release valve		For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
	Common wiring specification (Plug-in)	Individual wiring specification: 300 mm (Connector assembly)*5			
C	●	None	●		Cannot be selected when 5 is N
C1	●	None	None		Cannot be selected when 5 is P or T
L	None	●	●		Cannot be selected when 5 is N
L1	None	None	●		
L2	None	●	None		Cannot be selected when 5 is P or T
L3	None	None	None		

*5 For the connector length other than 300 mm, order the connector assembly on page 44 separately.

8 Option*6 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
E	Vacuum release flow adjustment needle*7  Screwdriver operation type long lock nut	Cannot be selected when 3 is J Can be selected only for the combination of J and K
J	Round lock nut  Lock nut	
K	Screwdriver operation type  Vacuum release flow adjustment needle	
L	Manifold individual supply specification*8  Individual supply port	—
P	With manifold common release pressure supply (PD) port 	Cannot be selected when 3 is J
W	With exhaust interference prevention valve  Exhaust interference prevention valve	When J is selected for 8 , install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

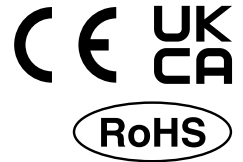
*6 When more than one option is selected, list the option symbols in alphabetical order. (Example -EL)

*7 When "K," "R," or "E" is selected for **3**, a vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

*8 When F or H is selected for **1** and L is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E.

Ejector System Vacuum Unit

ZK2□A Series



For Manifold Ejector + With Valve + With Energy Saving Function


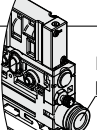
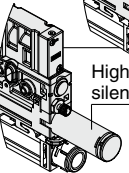
Refer to page 19 for How to Order Manifold, pages 38 and 42 for the port layouts (including circuit examples).

How to Order

ZK2 **C** **12** **K** **5** **K** **W** **A** - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1 <div>  <div>Direct exhaust</div> <div>End plate exhaust</div> </div>
F		Individual port exhaust <div>  <div>Individual port exhaust</div> </div>
H		High-noise reduction silencer exhaust <div>  <div>High-noise reduction silencer exhaust</div> </div>

*1 Combination of direct exhaust and end plate exhaust from each station

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve	Release valve
	N.C.	N.O.
K	●	—
E	—	●

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

5 Pressure switch for vacuum with energy saving function

Symbol	Pressure range [kPa]	Specifications		
		NPN	PNP	With unit selection function*3
K	-100 to 100	●	—	●
Q		●	—	None (SI unit only)
R		—	●	●
S		—	●	None (SI unit only)

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

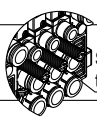
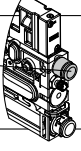
6 Connector

Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
W	●
L3	None

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

8 Option*4 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
E	Vacuum release flow adjustment needle*5 <div>  <div>Screwdriver operation type long lock nut</div> </div>	Can be selected only for the combination of J and K
J		
K		
L	Manifold individual supply specification*6 <div>  <div>Individual supply port</div> </div>	—
P	With manifold common release pressure supply (PD) port	—

*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -EL)

*5 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

*6 When F or H is selected for 1 and L is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E.

Ejector System

Vacuum Pump System

Specifications

Flow Rate Characteristics

Internal Circuits and Wiring Examples

Port Layout

Construction Replacement Parts

Exploded View of Manifold

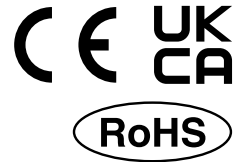
Dimensions

Accessories

Specific Product Precautions

Ejector System Vacuum Unit

ZK2□A Series



For Manifold Ejector + With Valve + IO-Link Compatible


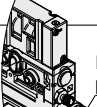
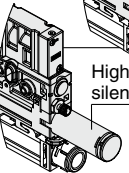
Refer to page 19 for How to Order Manifold, pages 38 and 42 for the port layouts (including circuit examples).

How to Order

ZK2 **C** **12** **K** **5** **1** **H** A - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1 <div>  <div>Direct exhaust</div> <div>End plate exhaust</div> </div>
F		Individual port exhaust <div>  <div>Individual port exhaust</div> </div>
H		High-noise reduction silencer exhaust <div>  <div>High-noise reduction silencer exhaust</div> </div>

*1 Combination of direct exhaust and end plate exhaust from each station

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

6 Connector

Symbol	Lead wire with connector for IO-Link (With M12 connector): 300 mm
H	●
L3	None

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve	Release valve
	N.C.	N.O.
K	●	—
E	—	●

5 IO-Link compatible vacuum pressure switch

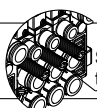
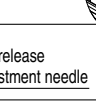

Symbol	Pressure range [kPa]	Specifications	
		Energy saving function*3	With unit selection function*4
1	0 to -101	—	●
2		—	None (SI unit only)
3		—	●
4	-100 to 100	—	None (SI unit only)
5		●	●
6		●	None (SI unit only)

*3 In order to use the energy-saving function, 2 check valves are required. Symbols "1," "2," "3," and "4" for 5 are for a single check valve, so the energy-saving function cannot be used.

Symbols "5" and "6" for 5 are equipped with 2 check valves, so the energy-saving function can be used. However, when the vacuum is stopped, workpiece release by atmospheric release cannot be used.

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

8 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
E	Vacuum release flow adjustment needle*6 <div>  <div>Screwdriver operation type long lock nut</div> </div>	Can be selected only for the combination of J and K
J		
K		
L	Manifold individual supply specification*7 <div>  <div>Individual supply port</div> </div>	—
P	With manifold common release pressure supply (PD) port <div>  <div>Exhaust interference prevention valve</div> </div>	—
W	With exhaust interference prevention valve	Cannot be selected when 5 is 5 or 6

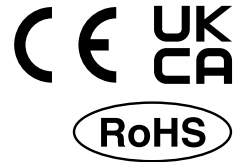
*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -EL)

*6 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

*7 When F or H is selected for 1 and L is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E.

Ejector System Vacuum Unit

ZK2□A Series



Single Unit For Manifold Ejector + Without Valve + Without Energy Saving Function

Refer to page 19 for How to Order Manifold.

How to Order

ZK2 **A** **12** **N** **0** **N** **N** **A** - **08** - **□**

1 2 3 4 5 6

1 Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1
B		Port exhaust
G		High-noise reduction silencer exhaust
C	For Manifold	Complex exhaust*2
F		Individual port exhaust
H		High-noise reduction silencer exhaust
		Direct exhaust

*1 With exhaust port when 2 is 12 or 15

*2 Combination of direct exhaust and end plate exhaust from each station

2 Nominal nozzle size*3

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*3 Refer to page 29 for the standard supply pressure per nozzle diameter.

4 Connector

Symbol	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
Y	●		Cannot be selected when 3 is N
Y1	None		Cannot be selected when 3 is P, T, or N
N	None		When "N" is selected for 3

3 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*4
			2 outputs		
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		-100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

5 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

6 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	Cannot be selected when 1 is C, F, or H
L	Manifold individual supply specification	Cannot be selected when 1 is A, B, or G
W	With exhaust interference prevention valve	Install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)

Ejector System

Vacuum Pump System

Specifications

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Ejector System Vacuum Unit

Individual Wiring/D-sub Connector/Flat Ribbon Cable Connector

ZK2□A Series

Manifold



Refer to pages 15 to 18 for the ejector installed to the manifold, pages 37, 38, 40 to 42 for the port layouts (including circuit examples), and pages 62 to 64 for the dimensions.

How to Order Manifold

ZZK2 04 A - A 1 L -

1 2 3 4 5

If the manifold parts (set of end plates for both ends and tension bolts) are shipped unassembled, please refer to page 48.

1 Stations*1

Symbol	Stations
01	1 station
02	2 stations
⋮	⋮
10	10 stations

*1 For adequate performance, the number of stations that can be operated simultaneously depends on the nozzle diameter. Refer to the Max. Number of Manifold Stations that can be Operated Simultaneously on page 29.

2 System/Port

Symbol	System	Port
A	Ejector system	ø8 (Common PV)
AN	Ejector system	ø5/16" (Common PV)

3 Exhaust

Symbol	Exhaust	Selectable single unit number
1	Complex exhaust*2	ZK2C
2	Individual exhaust	ZK2F, ZK2H

*2 Combination of direct exhaust and end plate exhaust from each station

4 Supply valve and release valve wiring*2

Symbol	Wiring	Selectable wiring for manifold (Refer to 6 on pages 15 to 17 and 4 on page 18.)										
		C	C1	L	L1	L2	L3	W	H	Y	Y1	N
L	Individual wiring	—	—	●	●	●	●	●	—	—	—	—
F	D-sub connector	●	●	—	—	—	—	—	—	—	—	—
P	Flat ribbon cable connector	●	●	—	—	—	—	—	—	—	—	—
N	No wiring (No valve)	—	—	—	—	—	—	—	—	●	●	●

*3 Common wiring F/P is available only for solenoid valve wiring. Individual wiring is specified for vacuum switches and sensors.

5 Option*4 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Selectable option for manifold (Refer to 9 on pages 15 to 17 and 6 on page 18.)						Note
		E	J	K	L	P	W	
Nil	Without option	●	●	●	—	—	●	—
B	With DIN rail mounting bracket*5	●	●	●	●	●	●	—
D	With common release pressure supply (PD) port	●	●	●	—	⊙*6	●	Cannot be selected when 9 is N
L	Manifold individual supply specification Individual supply port	●	●	●	⊙*6	—	●	—

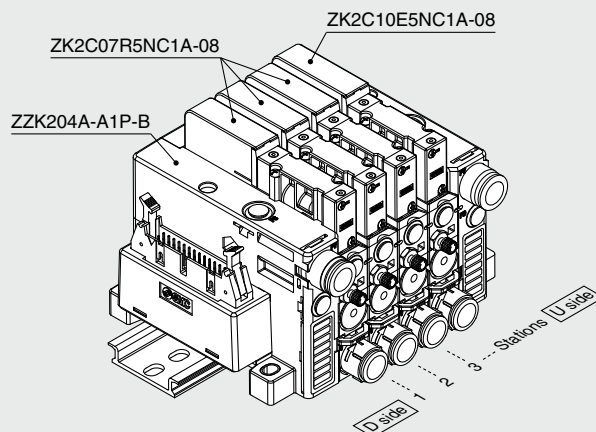
*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -BD)

*5 The DIN rail should be ordered separately. (Refer to page 48.)

*6 When the option D is selected, select P for single unit for manifold. When the option L is selected, select L for single unit for manifold. (⊙ must be selected.)

How to Order Valve Manifold Assembly

Example



ZZK204A-A1P-B 1 set (Manifold part number)

* ZK2C07R5NC1A-08 3 sets

* ZK2C10E5NC1A-08 1 set

→ * The asterisk denotes the symbol for the assembly.
* Prefix to the single unit part number.

- When the manifold is viewed from V port, the first station starts from the left (D side).
- After the manifold part number, specify the installed single unit from the first station.
- Complex exhaust and individual port exhaust cannot be mixed in the ejector system manifold.
- The DIN rail should be ordered separately. (Refer to page 48.)

ZK2□A Series



For Manifold Ejector + With Valve + Without Energy Saving Function

Refer to page 21 for How to Order Manifold.

How to Order Ejectors

ZK2 **C** **12** **K** **5** **A** **C** A - **08** - **□**

1 2 3 4 5 6 7 8

1 Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1 <div> Direct exhaust End plate exhaust </div>
F		Individual port exhaust <div> Individual port exhaust </div>
H		High-noise reduction silencer exhaust <div> High-noise reduction silencer exhaust </div>

*1 Combination of direct exhaust and end plate exhaust from each station

5 Pressure switch for vacuum/Pressure sensor

Specifications					
Symbol	Type	Pressure range [kPa]	NPN	PNP	With unit selection function*4
			2 outputs		
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		-100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*4 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

7 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 29 for the standard supply pressure per nozzle diameter.

3 Combination of supply valve and release valve

Symbol	Supply valve			Release valve
	N.C.	N.O.	Self-holding	N.C.
K	●	—	—	●
J	●	—	—	—
R	—	—	●*3	●
E	—	●	—	●

*3 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve. Refer to the precautions on page 90.

4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
	Common wiring specification (Plug-in)			
C	●	●		Cannot be selected when 5 is N
C1	●		None	Cannot be selected when 5 is P or T

8 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
E	Vacuum release flow adjustment needle*6 <div> Screwdriver operation type long lock nut Round lock nut Screwdriver operation type Vacuum release flow adjustment needle </div>	Cannot be selected when 3 is J Can be selected only for the combination of J and K
J		
K		
L	Manifold individual supply specification*7 <div> Individual supply port </div>	—
P	With manifold common release pressure supply (PD) port	Cannot be selected when 3 is J
W	With exhaust interference prevention valve <div> Exhaust interference prevention valve </div>	When J is selected for 3 , install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -EL)

*6 When "K," "R," or "E" is selected for **3**, a vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

*7 When F or H is selected for **1** and L is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E.

Ejector System Vacuum Unit

Fieldbus System

ZK2□A Series

Manifold



Refer to page 20 for the ejector installed to the manifold and pages 65 to 68 for the dimensions.

Fieldbus Compatible Vacuum Unit How to Order Manifolds

ZZK2 04 A - A 1 S6 Q 2 1 -

1 Stations*1

Symbol	Stations	Note
01	1 station	2 outputs per station (Supply valve/Release valve)
02	2 stations	
...	...	
08	8 stations	Max. 16 outputs

*1 For adequate performance, the number of stations that can be operated simultaneously depends on the nozzle diameter. Refer to the Max. Number of Manifold Stations that can be Operated Simultaneously on page 29.

2 System/Port

Symbol	System	Port
A	Ejector system	ø8 (Common PV)
AN		ø5/16" (Common PV)

3 Exhaust

Symbol	Exhaust	Selectable single unit number
1	Complex exhaust*2	ZK2C
2	Individual exhaust	ZK2F, ZK2H

*2 Combination of direct exhaust and end plate exhaust from each station

4 SI unit

Symbol	SI unit
S0	Without SI unit
S	EX260/EX500
S6	EX600

5 SI unit

EX260

Symbol		Protocol	Number of outputs	Communication connector specifications
Positive common (NPN)	Negative common (PNP)			
QA	QAN	DeviceNet®	32	M12
NA	NAN	PROFIBUS DP		M12
NC	NCN			D-sub
VA	VAN	CC-Link		M12
DA	DAN	EtherCAT		M12
FA	FAN	PROFINET		M12
EA	EAN	EtherNet/IP™		M12
—*3	GAN	Ethernet POWERLINK		M12
—*3	KAN	IO-Link	M12	

*3 Positive common (NPN) type is not available.

EX500

Symbol	SI unit	Number of outputs	Connector specifications
A3N	Gateway decentralized system 2	32*4, *5	M12

*4 16 outputs can be set by switching the built-in setting switch.

*5 When using the SI unit with 32 outputs, use the GW unit compatible with the EX500 Gateway Decentralized System 2 (128 points).

EX600*6

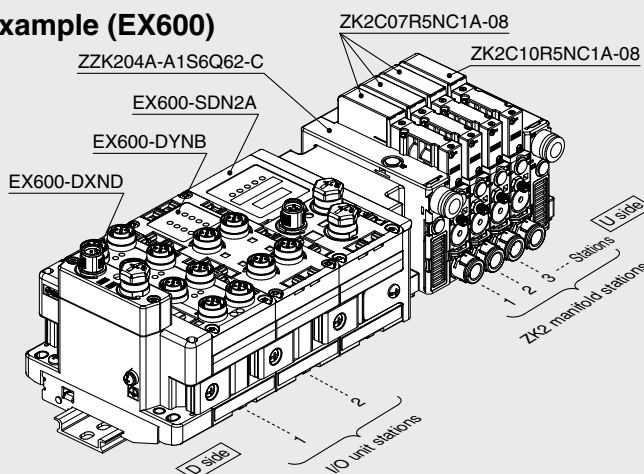
Symbol	Protocol	Number of outputs
Q	DeviceNet®	32
N	PROFIBUS DP	
V	CC-Link	
EB	EtherNet/IP™ (IO-Link unit)	
DA	EtherCAT (IO-Link unit)	
FA	PROFINET (IO-Link unit)	
WE	EtherNet/IP™ compatible wireless base*7	
WF	PROFINET compatible wireless base*7	
WS	Wireless remote*7	

*6 I/O unit cannot be mounted without SI unit.

*7 The wireless system is suitable for use only in a country where it is in accordance with the Radio Act and regulations of that country.

How to Order Valve Manifold Assembly

Example (EX600)



ZZK204A-A1S6Q62-C 1 set (Manifold part number)

* ZK2C07R5NC1A-08 3 sets

* ZK2C10R5NC1A-08 1 set

* EX600-DXND 1 set I/O unit part number (Station 1)

* EX600-DYNB 1 set I/O unit part number (Station 2)

* The asterisk denotes the symbol for the assembly.

* Prefix to the single unit part number.

- When the manifold is viewed from V port, the first station starts from the left (D side).
- After the manifold part number, state the ejectors to be mounted in order starting with the first station, and then state the I/O units in order starting with the first station as shown in the figure.
- Refer to page 54 for the I/O unit part numbers.
- Complex exhaust and individual port exhaust cannot be mixed in the ejector system manifold.
- The DIN rail should be ordered separately. (Refer to page 48.)

6 SI output polarity, End plate type

Only available for EX600

SI unit output polarity	M12 power supply connector B-coded (EX600-ED2)	7/8 inch power supply connector (EX600-ED3)	M12 power supply connector IN/OUT, A-coded	
			Pin arrangement 1 (EX600-ED4)	Pin arrangement 2 (EX600-ED5)
Without SI unit	Nil			
SI unit positive common	2	3	6	8
SI unit negative common	4	5	7	9

- * Ensure a match with the common specification of the valve to be used.
- * When not selecting an SI unit, the symbol will be "nil."

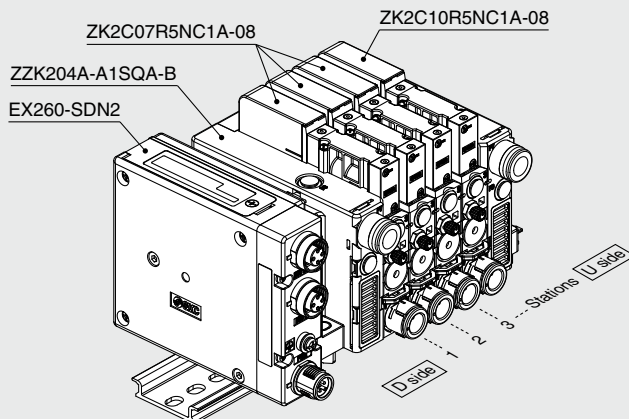
8 Option

Symbol	Type	Selectable options for manifold (Refer to "How to Order Ejectors" on page 20.)					
		E	J	K	L	P	W
Nil	Without option	●	●	●	—	—	●
B	With DIN rail mounting bracket for the EX260/EX500*8	●	●	●	●	●	●
C	With DIN rail mounting bracket for the EX600*8	●	●	●	●	●	●
D	With common release pressure supply (PD) port	●	●	●	—	⊙*9	●
L	Manifold individual supply specification	●	●	●	⊙*9	—	●

- *8 The DIN rail should be ordered separately. (Refer to page 46.)
- *9 When option "D" is selected, select option "P" for the single unit for manifold. When option "L" is selected, select option "L" for the single unit for manifold. (⊙ must be selected.)
- * When more than one option is selected, list the option symbols in alphabetical order. (Example -BD)

How to Order Valve Manifold Assembly

Example (EX260)



ZZK204A-A1SQA-B 1 set (Manifold part number)

* **ZK2C07R5NC1A-08 3 sets**

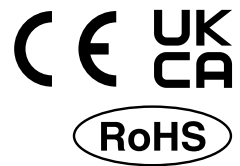
* **ZK2C10R5NC1A-08 1 set**

* The asterisk denotes the symbol for the assembly.
* Prefix to the single unit part number.

- When the manifold is viewed from V port, the first station starts from the left (D side).
- After the manifold part number, specify the installed single unit from the first station.
- Complex exhaust and individual port exhaust cannot be mixed in the ejector system manifold.
- The DIN rail should be ordered separately. (Refer to page 48.)

Vacuum Pump System Vacuum Unit

ZK2□A Series



Single Unit Vacuum Pump System + **With** Valve + **Without** Energy Saving Function

Refer to pages 36 and 38 for the port layouts (including circuit examples) and page 57 for the dimensions.

How to Order

ZK2P00 **K** **5** **A** **L** **A** - **08** - **□**

1 2 3 4 5 6

1 Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	Self-holding	N.C.
K	●	—	●
J	●*1	—	—
R	—	●*2	●

*1 Install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.
Refer to the precaution on page 90.

2 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

3 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*3
			2 outputs		
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		-100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

4 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/release valve: 300 mm (Connector assembly)*4	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
L	●	●	●	Cannot be selected when 3 is N
L1	None	●	●	
L2	●	None	None	Cannot be selected when 3 is P or T
L3	None	None	None	

*4 For the connector length other than 300 mm, order the connector assembly on page 44 separately.

5 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

6 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
C	Vacuum pump system PE port female thread specification (M3)	When R is selected for 1, D needs to be selected.
D	With individual release pressure supply (PD) port (M3)*6	Cannot be selected when 1 is J
E	Vacuum release flow adjustment needle*7	Cannot be selected when 1 is J Can be selected only for the combination of J and K
J		
K		

*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*6 Use a One-touch fitting or barb fitting (M-3AU-4) for piping. (O.D.: Within ø6.2)

*7 When "K" or "R" is selected for 1, a vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Vacuum Pump System Vacuum Unit

ZK2□A Series



Single Unit Vacuum Pump System + **With** Valve + IO-Link Compatible

Refer to page 38 for the port layout (including a circuit example).

How to Order

ZK2P00 K 5 1 H A - 08 - □

1
2
3
4
5
6

1 Combination of supply valve and release valve

Symbol	Supply valve	Release valve
	N.C.	N.C.
K	●	●

2 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

3 IO-Link compatible vacuum pressure switch

Symbol	Pressure range [kPa]	Specifications
		With unit selection function*1
1	0 to -101	●
2		None (SI unit only)
3	-100 to 100	●
4		None (SI unit only)

*1 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

4 Connector

Symbol	Lead wire with connector for IO-Link (With M12 connector): 300 mm
H	●
L3	None

5 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

6 Option*2 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
C	Vacuum pump system PE port female thread specification (M3)	—
D	With individual release pressure supply (PD) port (M3)*3	—
E	Screwdriver operation type long lock nut	Can be selected only for the combination of J and K
J	Round lock nut	
K	Screwdriver operation type	

*2 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*3 Use a One-touch fitting or barb fitting (M-3AU-4) for piping. (O.D.: Within ø6.2)

*4 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Ejector System

Vacuum Pump System

Specifications

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Vacuum Pump System Vacuum Unit

ZK2□A Series



For Manifold Vacuum Pump System + **With** Valve + **Without** Energy Saving Function

Refer to page 27 for How to Order Manifold, pages 36 and 39 for the port layouts (including circuit examples), and pages 62 to 64 for the dimensions.

How to Order

ZK2Q00 **K** **5** **A** **L** **A** - **08** - **□**

1 2 3 4 5 6

1 Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	Self-holding	N.C.
K	●	—	●
J	●*1	—	—
R	—	●*2	●

*1 Install the atmospheric release valve or vacuum release valve in the middle of the vacuum piping.

*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.

Refer to the precaution on page 90.

2 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

3 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*3
			2 outputs		
A	Pressure switch for vacuum	0 to −101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		−100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to −101	Analog output 1 to 5 V		
T		−100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

4 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/release valve		For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
	Centralized wiring specification (Plug-in)	Individual wiring specification: 300 mm (Connector assembly)*4			
C	●	None	●	●	Cannot be selected when 3 is N
C1	●	None	None	None	Cannot be selected when 3 is P or T
L	None	●	●	●	Cannot be selected when 3 is N
L1	None	None	●	●	
L2	None	●	None	None	Cannot be selected when 3 is P or T
L3	None	None	None	None	

*4 For the connector length other than 300 mm, order the connector assembly on page 44 separately.

5 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

6 Option*5 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
C	Vacuum pump system PE port female thread specification (M3)	When R is selected for 1, P needs to be selected.
E	Vacuum release flow adjustment needle*6	Cannot be selected when 1 is J. Can be selected only for the combination of J and K.
J		
K		
P	With manifold common release pressure supply (PD) port	Cannot be selected when 1 is J

*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -EP)

*6 When "K" or "R" is selected for 1, a vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Vacuum Pump System Vacuum Unit

ZK2□A Series



For Manifold Vacuum Pump System + With Valve + IO-Link Compatible

Refer to page 27 for How to Order Manifold and page 36 for the port layout (including a circuit example).

How to Order

ZK2Q00 K 5 1 H A - 08 - □

1
2
3
4
5
6

1 Combination of supply valve and release valve

Symbol	Supply valve	Release valve
	N.C.	N.C.
K	●	●

2 Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC

3 IO-Link compatible vacuum pressure switch

Symbol	Pressure range [kPa]	Specifications
		With unit selection function*1
1	0 to -101	●
2		None (SI unit only)
3	-100 to 100	●
4		None (SI unit only)

*1 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

4 Connector

Symbol	Lead wire with connector for IO-Link (With M12 connector): 300 mm
H	●
L3	None

5 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

6 Option*2 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Note
Nil	Without option	—
C	Vacuum pump system PE port female thread specification (M3)	—
E	Vacuum release flow adjustment needle*3	Can be selected only for the combination of J and K
J	Screwdriver operation type long lock nut	
K	Round lock nut	
K	Screwdriver operation type	—
P	With manifold common release pressure supply (PD) port	—

*2 When more than one option is selected, list the option symbols in alphabetical order. (Example -EP)

*3 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Ejector System

Vacuum Pump System

Specifications

Flow Rate Characteristics

Internal Circuits and Wiring Examples

Port Layout

Construction Replacement Parts

Exploded View of Manifold

Dimensions

Accessories

Specific Product Precautions

Vacuum Pump System Vacuum Unit

ZK2□A Series



Manifold

Refer to pages 25 and 26 for the vacuum pump system installed to the manifold, pages 36 and 39 for the port layouts (including circuit examples), and pages 62 to 64 for the dimensions.

How to Order Manifold

ZZK2 **04** A - **P** 2 **L** - **□**

1 2 3 4

If the manifold parts (set of end plates for both ends and tension bolts) are shipped unassembled, please refer to page 48.

1 Stations

Symbol	Stations
01	1 station
02	2 stations
⋮	⋮
10	10 stations

2 System/Port

Symbol	System	Port
P	Vacuum pump system	ø8 (Common PV) ø6 (Common PS)
PN		ø5/16" (Common PV) ø1/4" (Common PS)

3 Supply valve and release valve wiring*1

Symbol	Wiring	Selectable wiring for manifold 4 (Refer to pages 25 and 26.)						
		C	C1	L	L1	L2	L3	H
L	Individual wiring	—	—	●	●	●	●	●
F	D-sub connector	●	●	—	—	—	—	—
P	Flat ribbon cable connector	●	●	—	—	—	—	—

*1 Common wiring F/P is available only for solenoid valve wiring. Individual wiring is specified for vacuum switches and sensors.

4 Option*2 (For details on the Function/Application, refer to page 69.)

Symbol	Type	Selectable option for manifold 6 (Refer to pages 25 and 26.)				
		C	E	J	K	P
Nil	Without option	●	●	●	●	—
B	With DIN rail mounting bracket*3	●	●	●	●	●
D	With common release pressure supply (PD) port	●	●	●	●	◎*4

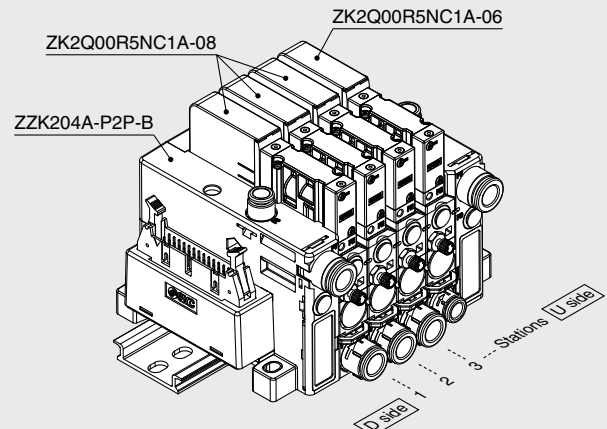
*2 When more than one option is selected, list the option symbols in alphabetical order. (Example -BD)

*3 The DIN rail should be ordered separately. (Refer to page 48.)

*4 When D is selected for manifold option, select P for single unit option. (◎ must be selected.)

How to Order Valve Manifold Assembly

Example



ZZK204A-P2P-B 1 set (Manifold part number)

* ZK2Q00R5NC1A-08 3 sets

* ZK2Q00R5NC1A-06 1 set

→* The asterisk denotes the symbol for the assembly.

* Prefix to the single unit part number.

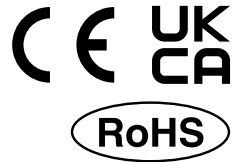
· When the manifold is viewed from V port, the first station starts from the left (D side).

· After the manifold part number, specify the installed single unit from the first station.

· The DIN rail should be ordered separately. (Refer to page 48.)

Air Operated Specification Vacuum Unit

ZK2□A Series



For Manifold Ejector System

How to Order

Refer to pages 80 to 84 for the port layouts (including circuit examples) and page 89 for the dimensions.

Single unit for manifold part number

ZK2 **H** **12** **Q** **1** **B** **Y** **A** - **08** - **□**

1 2 3 4 5 6

Air Operated • Supply valve: N.C./Release valve: N.C.

1 Body/Exhaust type

Symbol	Body	Exhaust type
C	For Manifold	Complex exhaust*1 Direct exhaust End plate exhaust
F		Individual port exhaust Individual port exhaust
H		High-noise reduction silencer exhaust High-noise reduction silencer exhaust

*1 Combination of direct exhaust and end plate exhaust from each station

2 Nominal nozzle size*2

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

*2 Refer to page 78 for the standard supply pressure per nozzle diameter.

3 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN 2 outputs	PNP	With unit selection function*3
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E			●	—	●
F	Pressure sensor	-100 to 100	●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

4 Connector (Pressure switch for vacuum)

Symbol	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
Y	●		Cannot be selected when 3 is N
Y1	None		Cannot be selected when 3 is P, T, or N
N	None		When "N" is selected for 3

6 Option*4

Symbol	Type	Note
Nil	Without option	—
E	Vacuum release flow adjustment type long lock nut	Can be selected only for the combination of J and K
J	Round lock nut	
K	Screwdriver operation type	
M	Manifold individual supply specification*6	Multiple options cannot be selected.
P	With manifold common release pressure supply (PD) port	
W	With exhaust interference prevention valve	

*4 When more than one option is selected, list the option symbols in alphabetical order. (Example -EM)

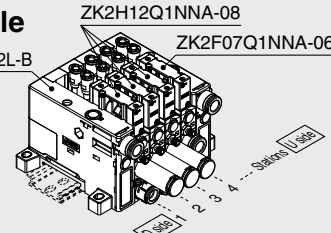
*5 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

*6 When F or H is selected for 1 and M is selected for the option, the space for adjusting the needle is reduced. Products which can be operated more easily can be specified by option E.

How to Order Valve Manifold Assembly

Example

ZK2H12Q1NNA-08
ZK2F07Q1NNA-06
ZZK204A-A2L-B



Manifold part number

ZZK2 **04** **A** - **A** **2** **L** - **□**

7 8 9 10

If the manifold parts (set of end plates for both ends and tension bolts) are shipped unassembled, please refer to page 48.

7 Stations*7

Symbol	Stations
01	1 station
02	2 stations
⋮	⋮
10	10 stations

*7 For adequate performance, the number of stations that can be operated simultaneously depends on the nozzle diameter. Refer to the Max. Number of Manifold Stations that can be Operated Simultaneously on page 78.

9 Exhaust

Symbol	Exhaust	Note
1	Complex exhaust*8	Select this option when "C" is selected for 1 Body/Exhaust type.
2	Individual exhaust	Select this option when "H" or "F" is selected for 1 Body/Exhaust type.

*8 Combination of direct exhaust and end plate exhaust from each station

10 Option*9

Symbol	Type	Note
Nil	Without option	—
B	With DIN rail mounting bracket	The DIN rail should be ordered separately.
D	With common release pressure supply (PD) port	Select this option when "P" is selected for 3 Option.
M	Manifold individual supply specification	Select this option when "M" is selected for 3 Option. Multiple options cannot be selected.

*9 When more than one option is selected, list the option symbols in alphabetical order. (Example -BD)

8 System/Port

Symbol	System	Port
A	Ejector system	ø8 (Common PV)
AN	Ejector system	ø5/16" (Common PV)

Air Operated Specification

Specifications

Port Layout

Construction Replacement Parts

Exploded View of Manifold

Dimensions

Specific Product Precautions

[1] When shipped, the single unit for manifold is already built into the manifold:

After the manifold part number, specify the single unit for manifold part number from the first station.

In addition, prefix an asterisk to the single unit for manifold part number to indicate that it is to be built into the manifold.

Ex.) ZZK204A-A2L-B1 (Manifold 4 stations)

* ZK2H12Q1NNA-083 (Single unit for manifold: Stations 1 to 3)

* ZK2F07Q1NNA-061 (Single unit for manifold: Station 4)

[2] When only ordering the single unit for manifold:

Order using the single unit for manifold part number.

Ex.) ZK2H12Q1NNA-08

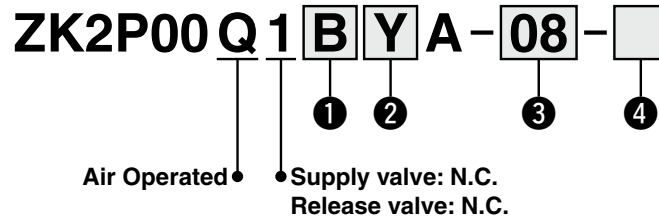
- When the manifold is viewed from V port, the first station starts from the left (D side).
- Complex exhaust and individual port exhaust (High-noise reduction silencer exhaust) cannot be mixed in the ejector system manifold.
- The DIN rail should be ordered separately. (Refer to page 48.)

ZK2□A Series

Single Unit Vacuum Pump System

Refer to page 79 for the port layout (including a circuit example) and page 88 for the dimensions.

How to Order



1 Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*1
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D		-100 to 100	—	●	None (SI unit only)
E			●	—	●
F			●	—	None (SI unit only)
H	Pressure sensor	0 to -101	—	●	●
T		-100 to 100	—	●	●
N	Without pressure switch for vacuum/pressure sensor		Analog output 1 to 5 V		

*1 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

2 Connector (Pressure switch for vacuum)

Symbol	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
Y	●	—	Cannot be selected when 1 is N
Y1	None	—	Cannot be selected when 1 is P, T, or N
N	None	—	When "N" is selected for 1

3 Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

4 Option*2

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
C	Vacuum pump system breathing (PE) port female thread specification (M3)	—
E	Screwdriver operation type long lock nut	Can be selected only for the combination of J and K
J	Round lock nut	
K	Screwdriver operation type	

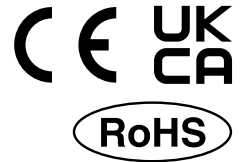
*2 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

*3 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Air Operated Specification Vacuum Unit

ZK2□A Series

For Manifold Vacuum Pump System



Refer to page 79 for the port layout (including a circuit example) and page 89 for the dimensions.

How to Order

Single unit for manifold part number

ZK2Q00 Q 1 B Y A - 08 - □

Air Operated • • Supply valve: N.C./Release valve: N.C.

① Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN 2 outputs	PNP	With unit selection function*1
A	Pressure switch for vacuum	0 to -101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D		-100 to 100	—	●	None (SI unit only)
E			●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to -101	Analog output 1 to 5 V		
T		-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*1 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

② Connector (Pressure switch for vacuum)

Symbol	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
Y	●		Cannot be selected when ③ is N
Y1	None		Cannot be selected when ③ is P, T, or N
N	None		When "N" is selected for ③

③ Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8
07	ø1/4"
09	ø5/16"

④ Option*2

Symbol	Type	Note
Nil	Without option	—
C	Vacuum pump system breathing (PE) port female thread specification (M3)	—
E	Vacuum release flow adjustment	Can be selected only for the combination of J and K
J	Round lock nut	
K	Screwdriver operation type	

*2 When more than one option is selected, list the option symbols in alphabetical order. (Example -C-J)

*3 A vacuum release flow adjustment needle is installed as standard. However, select it when improved operability is required.

Manifold part number

ZZK2 04 A - Q 2 L - □

If the manifold parts (set of end plates for both ends and tension bolts) are shipped unassembled, please refer to page 48.

⑤ Stations

Symbol	Stations
01	1 station
02	2 stations
⋮	⋮
10	10 stations

⑥ System/Port

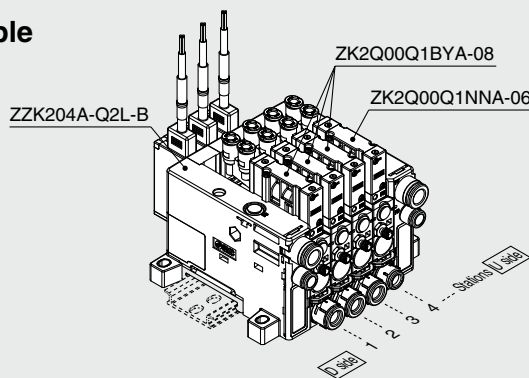
Symbol	System	Port
Q	Vacuum pump system	ø8 (Common PV)
		ø6 (Common release pressure)
QN		ø5/16" (Common PV)
		ø1/4 (Common release pressure)

⑦ Option

Symbol	Type	Note
Nil	Without option	—
B	With DIN rail mounting bracket	The DIN rail should be ordered separately.

How to Order Valve Manifold Assembly

Example



[1] When shipped, the single unit for manifold is already built into the manifold:

After the manifold part number, specify the single unit for manifold part number from the first station.

In addition, prefix an asterisk to the single unit for manifold part number to indicate that it is to be built into the manifold.

Ex.) ZZK204A-Q2L-B.....1 (Manifold 4 stations)

* ZK2Q00Q1BYA-08.....3 (Single unit for manifold: Stations 1 to 3)

* ZK2Q00Q1NNA-06.....1 (Single unit for manifold: Station 4)

[2] When only ordering the single unit for manifold:

Order using the single unit for manifold part number.

Ex.) ZK2Q00Q1BYA-08

- When the manifold is viewed from V port, the first station starts from the left (D side).
- The DIN rail should be ordered separately. (Refer to page 48.)

Air Operated Specification

Specifications

Port Layout

Construction Replacement Parts

Exploded View of Manifold

Dimensions

Specific Product Precautions