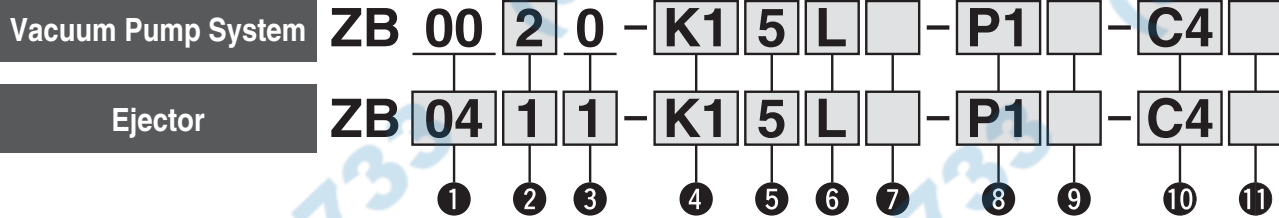


Compact Vacuum Unit Series ZB



How to Order Single Unit

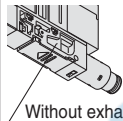
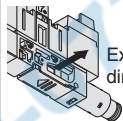
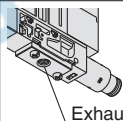


1 Nominal Nozzle Size

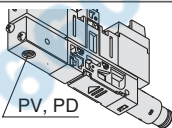
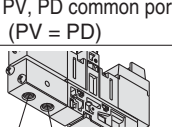
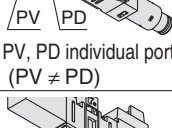
Symbol	Nominal nozzle size	Applicable supply valve and standard supply pressure	
		Large flow (N.C.)	Latching
00 ^{Note 1)}	—	●	—
03	ø0.3 mm	● 50.8 psi (0.35 MPa)	● 58 psi (0.4 MPa)
04	ø0.4 mm	● 50.8 psi (0.35 MPa)	● 65.3 psi (0.45 MPa)
05	ø0.5 mm	● 50.8 psi (0.35 MPa)	—
06	ø0.6 mm	● 72.5 psi (0.5 MPa)	—

Note 1) Vacuum pump system only

3 Exhaust Type

0	For vacuum pump system (Without silencer)	 Without exhaust port
1	Silencer exhaust (Individual exhaust)	 Exhaust direction
2	Port exhaust (Individual exhaust)	 Exhaust port

2 Body Type

Symbol	Body specification	Port specification ^{Note 2)}
1	Single unit	 PV, PD PV, PD common port (PV = PD)
2	Single unit	 PV PD PV, PD individual port (PV ≠ PD)
3	For manifold	 No distinction

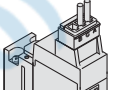
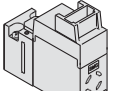
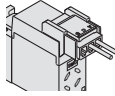
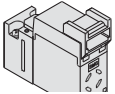
Note 2) Names of the ports and functions are as follows.

- PV: Air pressure SUP port (Ejector)
Vacuum pressure SUP port (Vacuum pump system)
- PD: Release pressure SUP port (For the unit with PD port, select the model with a release valve for 4.)
Specify the port specification of the body for manifold with the manifold model number.

5 Rated Voltage

5	24 VDC
6	12 VDC

6 Supply Valve/Release Valve Electrical Entry^{Note 4)}

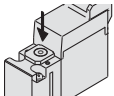
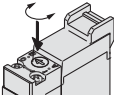
L	L-type plug connector With lead wire	
LO	L-type plug connector Without connector	
M	M-type plug connector With lead wire ^{Note 5)}	
MO	M-type plug connector Without connector ^{Note 5)}	

Note 4) All with light and surge suppressor.

Lead wire length is 11.8 inch (300 mm) for the models with lead wire. For other lead wire length, select a model without connector and include the connector assembly part number in **Table 2** on page 9.

Note 5) M- and MO-type connectors cannot be selected for models with pressure sensor or pressure switch for vacuum.

7 Manual Override^{Note 6)}

Nil	Non-locking push type	
B	Locking type (Tool required) Semi-standard	

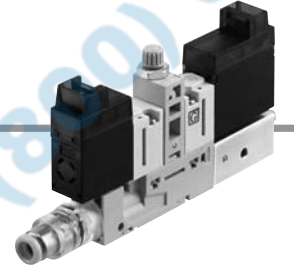
Note 6) Latching type (supply valve) has the push-locking type only, but either the push type or the locking type can be selected for the release valve.

4 Combination of Supply Valve and Release Valve^{Note 3)}

Symbol	Supply valve	Release valve	Applicable body type			
			Ejector		Pump system	
			PV = PD	PV ≠ PD	PV = PD	PV ≠ PD
K1	Normally closed	Normally closed	●	●	—	●
J1	Normally closed	None	●*	—	●*	—
Q1	Latching (Positive common)	Normally closed	●	●	—	—
Q2	Latching (Positive common)	None	●*	—	—	—

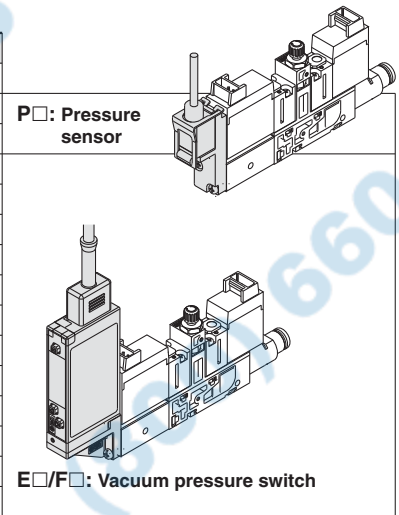
* Vacuum break by port open to atmosphere

Note 3) Refer to **Table 1** on page 9 for the part number of supply valve and release valve of each specification. Latching type is applicable only to the ejector nozzle sizes ø0.3 and ø0.4



8 Pressure Sensor/Vacuum Pressure Switch Specifications

Symbol	Type	Pressure range psi (kPa)	Specifications
Nil	Without pressure sensor/vacuum pressure switch		
P1	Pressure sensor	0 to -14.6 (0 to -101)	Output: 1 to 5 V, accuracy: $\pm 2\%$ F.S. or less ^{Note 7)}
P3		-14.5 to 14.5 (-100 to 100)	Output: 1 to 5 V, accuracy: $\pm 2\%$ F.S. or less ^{Note 7)}
EA	Vacuum pressure switch	0 to -14.5 (0 to -101)	NPN 2 outputs With unit switching function ^{Note 8)}
EAM			SI unit only ^{Note 9)}
EAP			With unit switching function [Initial value psi] ^{Note 8)}
EB			With unit switching function ^{Note 8)}
EBM			SI unit only ^{Note 9)}
EBP		With unit switching function [Initial value psi] ^{Note 8)}	
FA		-14.5 to 14.5 (-100 to 100)	NPN 2 outputs With unit switching function ^{Note 8)}
FAM			SI unit only ^{Note 9)}
FAP			With unit switching function [Initial value psi] ^{Note 8)}
FB			With unit switching function ^{Note 8)}
FBM	SI unit only ^{Note 9)}		
FBP	With unit switching function [Initial value psi] ^{Note 8)}		



Note 7) Only the lead wire length 118 inch (3 m) is available for the pressure sensor.
 Note 8) The unit switching function is not available in Japan due to a new measurement law.
 Note 9) Fixed unit: kPa

9 Lead Wire with Connector for Vacuum Pressure Switch

Nil	Without lead wire with connector (No need to specify for pressure sensor type.)
G	Lead wire with connector and connector cover, Lead wire length 78.7 inch (2 m)

10 Vacuum (V) Port ^{Note 11)}

C2	Straight $\phi 2$ mm one-touch fitting	Metric size	Note 10) With suction filter
C4	Straight $\phi 4$ mm one-touch fitting		
N1	Straight $\phi 1/8$ " one-touch fitting	Inch size	
N3	Straight $\phi 5/32$ " one-touch fitting		
L2	Elbow $\phi 2$ mm one-touch fitting	Metric size	Note 10) With suction filter
L4	Elbow $\phi 4$ mm one-touch fitting		
LN1	Elbow $\phi 1/8$ " one-touch fitting	Inch size	
LN3	Elbow $\phi 5/32$ " one-touch fitting		

Note 10) The filter included in this product is of a 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.

Note 11) Be sure to hold the filter case when connecting and disconnecting the tube for the elbow type.

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 Option ^{Note 12)}

Nil	Without option
B	With bracket for single unit (Enclosed with the product for shipment without being assembled) Bracket
K	Screwdriver handling type vacuum break needle

Note 12) When multiple options are selected, state them in alphabetical order.