

Vacuum Ejector

Series ZH

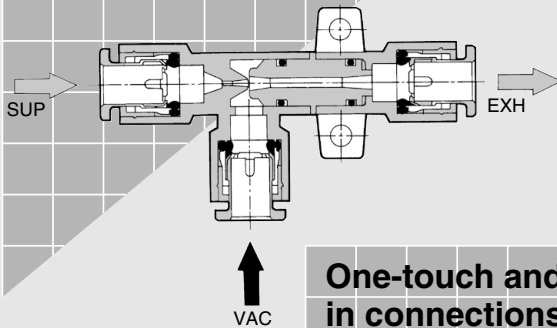
Box Type (Built-in Silencer)/Body Ported Type

Nozzle diameter: $\varnothing 0.5, \varnothing 0.7, \varnothing 1.0, \varnothing 1.3, \varnothing 1.5, \varnothing 1.8, \varnothing 2.0$
Type S: Standard type
L: Large flow type

ZK2
ZQ
ZR
ZA
ZX
ZM
ZMA
ZL
ZH
ZU
ZYY
ZYX

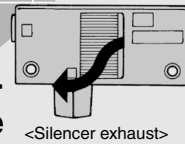
Compact and lightweight

The nozzle and the body, which have been made into a composite resin construction, are compact and lightweight.
Nozzle diameter $\varnothing 0.5 \sim 28$ g



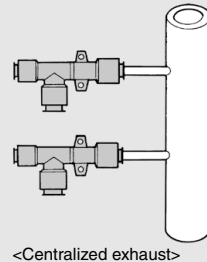
Box type (Built-in silencer) Body ported

Two types are available in the series: the box type with a silencer exhaust, and the body ported type, with an individual exhaust.



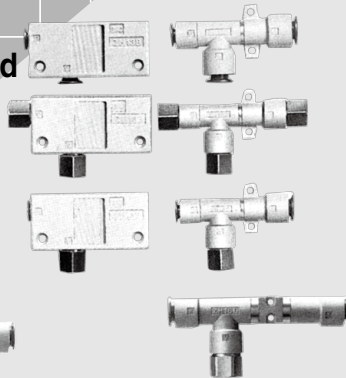
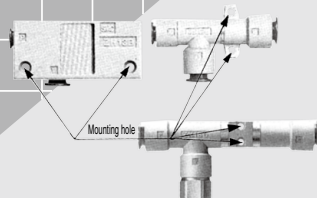
One-touch and screw-in connections can be combined.

To suit the operating conditions, port connections can be combined with a choice of one-touch and screw-in connections.



Body can be mounted and secured.

The body ported type is also provided with mounting holes for securing the body.



Vacuum Ejector Box Type (Built-in Silencer)/Body Ported Type Series ZH



How to Order



Note Refer to "Table (1)" and "(2)" for the combination available for SUP, VAC and EXH port connection.

**Box type
(Built-in silencer)**

ZH **07** B **S** - **06** - **06**

**Body ported type
(Without silencer)**

ZH **07** D **S** - **01** - **01** - **01**



Nozzle diameter

05	0.5
07	0.7
10	1.0
13	1.3
15	1.5
18	1.8
20	2.0

Maximum vacuum pressure

S	-88 kPa
L	-48 kPa

SUP. port size ^{Note)}

Symbol	Size	Style
06	6	One-touch
08	8	One-touch
10	10	One-touch
12	12	One-touch
01	Rc 1/8	Screw-in
02	Rc 1/4	Screw-in
03	Rc 3/8	Screw-in
F01	G 1/8	Screw-in
F02	G 1/4	Screw-in
F03	G 3/8	Screw-in

VAC. port size ^{Note)}

Symbol	Size	Style
06	6	One-touch
10	10	One-touch
12	12	One-touch
16	16	One-touch
01	Rc 1/8	Screw-in
02	Rc 1/4	Screw-in
03	Rc 3/8	Screw-in
04	Rc 1/2	Screw-in
F01	G 1/8	Screw-in
F02	G 1/4	Screw-in
F03	G 3/8	Screw-in
F04	G 1/2	Screw-in

EXH. port size ^{Note)}

Symbol	Size	Style
06	6	One-touch
08	8	One-touch
10	10	One-touch
12	12	One-touch
16	16	One-touch
01	Rc 1/8	Screw-in
02	Rc 1/4	Screw-in
03	Rc 3/8	Screw-in
04	Rc 1/2	Screw-in
F01	G 1/8	Screw-in
F02	G 1/4	Screw-in
F03	G 3/8	Screw-in
F04	G 1/2	Screw-in

Note) Do not make the piping diameter smaller, such as by connecting a reducer to the exhaust port, etc., since it may lower the performance.

* The thread ridge shape is conforming to G thread standard (JIS B 0202), but other shapes are not conforming to ISO16030 and ISO1179.

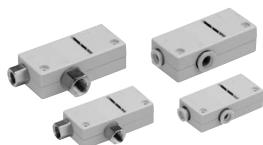
Table (1) Combination of Connection

Body type		SUP	VAC	EXH
Box type (Built-in silencer)	1	One-touch	One-touch	-
	2	One-touch	Screw-in	-
	3	Screw-in	Screw-in	-
Body ported type (Without silencer)	1	One-touch	One-touch	One-touch
	2	One-touch	Screw-in	One-touch
	3	Screw-in	Screw-in	Screw-in

Table (2) Port Size

Model	Connection (One-touch/Screw-in)		
	SUP	VAC	EXH
ZH05B	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	-
ZH07B			
ZH10B			
ZH13B	ø8, Rc 1/8 G 1/8	ø10, Rc 1/4 G 1/4	-
ZH15B			
ZH05D	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8
ZH07D			
ZH10D	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	ø8, Rc 1/8 G 1/8
ZH13D			
ZH15D	ø10, Rc 1/4 G 1/4	ø12, Rc 3/8 G 3/8	ø12, Rc 3/8 G 3/8
ZH18D			
ZH20D	ø12, Rc 3/8 G 3/8	ø16, Rc 1/2 G 1/2	ø16, Rc 1/2 G 1/2

Vacuum Ejector Box Type (Built-in Silencer)/Body Ported Type **Series ZH**



Box type: Type B

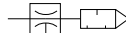


Body ported type: Type D

Ejector Symbol



Body ported type
(Without silencer)
ZH□□□□



Box type
(Built-in silencer)
ZH□□□□

Model

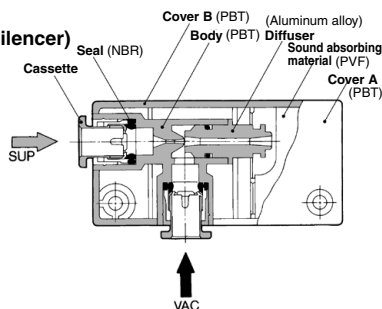
Model	Nozzle diameter (mm)	Body type	Max. vacuum pressure* (kPa)		Maximum suction flow rate (L/min (ANR))		Air consumption (L/min (ANR))		Connection (One-touch/Screw-in)			Weight (g)
			Type S	Type L	Type S	Type L	Type S/Type L	SUP	VAC	EXH		
ZH05B□	0.5	Box type (Built-in silencer)	-88	-48	5	8	13	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	-	-	28
ZH07B□	0.7				12	20	23					28
ZH10B□	1.0				24	34	46					33
ZH13B□	1.3				40	70	78					66
ZH05D□	0.5	Body ported type (Without silencer)	-88	-48	5	8	13	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	ø6, Rc 1/8 G 1/8	-	11
ZH07D□	0.7				12	20	23					12
ZH10D□	1.0				24	34	46					16
ZH13D□	1.3				40	70	78					27
ZH15D□	1.5	Body ported type (Without silencer)	-88	-53	55	75	95	ø10, Rc 1/4 G 1/4	ø12, Rc 3/8 G 3/8	ø12, Rc 3/8 G 3/8	-	43
ZH18D□	1.8				65	110	150					55
ZH20D□	2.0				85	135	185					95

Fluid: Air, Operating temperature: 5 to 50 C, Max. operating pressure: 0.6 MPa, Standard supply pressure: 0.45 MPa

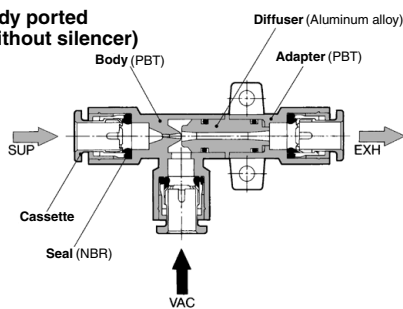
* Supply pressure: 0.45 MPa.

Construction

Box type (Built-in silencer)



Body ported (Without silencer)



⚠ Precautions

- Be sure to read before handling.
- Refer to front matter 35 for Safety Instructions and pages 899 to 901 for Vacuum Equipment Precautions.

⚠ Caution

Mounting

Make sure that an excessive amount of load or moment is not applied to the ejector body due to pipe connections or installation.

Exhaust piping

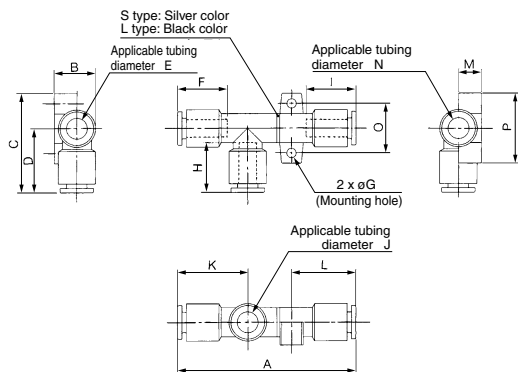
On the ZH□□□□ models, keep exhaust ports open on at least one side. Make sure that the back pressure of the exhaust pipe on the ZH□□□□ models is 0.005 MPa or less. (Reference: Using tubing with an applicable diameter, its length must be 0.5 m or less.)
(Port indication: P: supply port; V: vacuum port; E: exhaust port.)

Selection and sizing

Refer to the vacuum equipment model selection on pages 877 to 898.

Body Ported Type (Without silencer): ZH05D_L-□-□-□, ZH15D_L-□-□-□

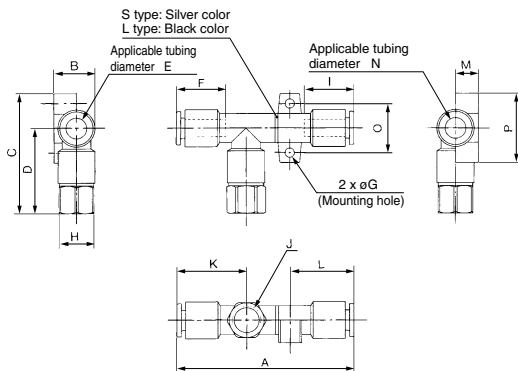
One-touch connection



Model	A	B	C	D	øE	F	øG	H
ZH05DS-06-06-06	58.5	14.2	34	22	6	16.8	3.2	16.8
ZH05DL-06-06-06								
ZH07DS-06-06-06	61	14.2	34	22	6	16.8	3.2	16.8
ZH07DL-06-06-06								
ZH10DS-06-06-08	66	17.2	37	23	6	16.8	4.2	16.8
ZH10DL-06-06-08								
ZH13DS-08-10-10	74.5	20	42.5	27.5	8	18.7	4.2	21.6
ZH13DL-08-10-10								
ZH15DS-10-12-12	93.3	22.5	47	29.5	10	21.6	4.2	21.8
ZH15DL-10-12-12								

Model	I	øJ	K	L	M	øN	O	P
ZH05DS-06-06-06	16.8	6	24	21	7.8	6	17	24
ZH05DL-06-06-06				22				
ZH07DS-06-06-06	18.7	6	26	24.5	9.6	8	20	28
ZH07DL-06-06-06				27				
ZH10DS-06-06-08	21.6	10	28	27	10.7	10	22	30
ZH10DL-06-06-08				28				
ZH13DS-08-10-10	21.6	12	31.5	33	12	12	27	35
ZH13DL-08-10-10				33				
ZH15DS-10-12-12	21.6	12	31.5	33	12	12	27	35
ZH15DL-10-12-12				33				

One-touch and screw-in connection



Model	A	B	C	D	øE	F	øG	H
ZH05DS-06-01-06	58.5	14.2	41.5	29.5	6	16.8	3.2	12
ZH05DL-06-01-06								
ZH07DS-06-01-06	61	14.2	41.5	29.5	6	16.8	3.2	12
ZH07DL-06-01-06								
ZH10DS-06-01-08	66	17.2	44.5	30.5	6	16.8	4.2	12
ZH10DL-06-01-08								
ZH13DS-08-02-10	74.5	20	53.5	38.5	8	18.7	4.2	17
ZH13DL-08-02-10								
ZH15DS-10-03-12	93.3	22.5	58.5	41	10	21.6	4.2	19
ZH15DL-10-03-12								
ZH05DS-06-F01-06	58.5	14.2	41.5	29.5	6	16.8	3.2	12
ZH05DL-06-F01-06								
ZH07DS-06-F01-06	61	14.2	41.5	29.5	6	16.8	3.2	12
ZH07DL-06-F01-06								
ZH10DS-06-F01-08	66	17.2	44.5	30.5	6	16.8	4.2	12
ZH10DL-06-F01-08								
ZH13DS-08-F02-10	74.5	20	54	39	8	18.7	4.2	17
ZH13DL-08-F02-10								
ZH15DS-10-F03-12	93.3	22.5	58.5	41	10	21.6	4.2	19
ZH15DL-10-F03-12								

Model	I	J	K	L	M	øN	O	P
ZH05DS-06-01-06	16.8	Rc 1/8	24	21	7.8	6	17	24
ZH05DL-06-01-06				22				
ZH07DS-06-01-06	18.7	Rc 1/8	26	24.5	9.6	8	20	28
ZH07DL-06-01-06				27				
ZH10DS-06-01-08	21.6	Rc 1/4	28	27	10.7	10	22	30
ZH10DL-06-01-08				28				
ZH13DS-08-02-10	21.6	Rc 3/8	31.5	33	12	12	27	35
ZH13DL-08-02-10				33				
ZH15DS-10-03-12	21.6	G 3/8	24	21	7.8	6	17	24
ZH15DL-10-03-12				22				
ZH05DS-06-F01-06	16.8	G 1/8	24	21	7.8	6	17	24
ZH05DL-06-F01-06				22				
ZH07DS-06-F01-06	18.7	G 1/8	26	24.5	9.6	8	20	28
ZH07DL-06-F01-06				27				
ZH10DS-06-F01-08	21.6	G 1/4	28	27	10.7	10	22	30
ZH10DL-06-F01-08				28				
ZH13DS-08-F02-10	21.6	G 3/8	31.5	32.8	12	12	27	35
ZH13DL-08-F02-10				33				
ZH15DS-10-F03-12	21.6	G 3/8	31.5	32.8	12	12	27	35
ZH15DL-10-F03-12				33				

* Please contact SMC for combinations other than listed above.