

# Vacuum Flow

Series ZH□-□□-X185

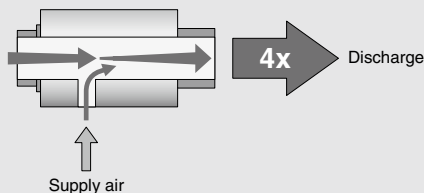
By supplying compressed air,

## Large blow and vacuum flow rate available



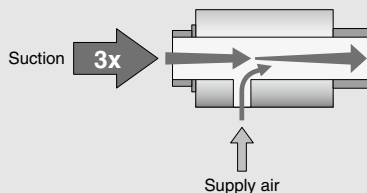
### ● A blow flow rate 4 times the supply air

A discharge flow rate 4 times the supply air can be generated.  
Contributes to reduction in flow consumption if discharge requires flow rate.

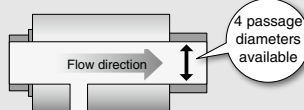


### ● A vacuum flow rate 3 times the supply air

A suction flow rate 3 times the supply air can be generated.  
Contributes to reduction in flow consumption if suction requires flow rate.



### ● Large passage diameter available for suction of machining chips, particles, etc.



### ● Dust bag available

### ● Mounting bracket available

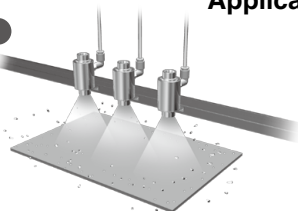
### ● Maintenance free

No regular motor maintenance is necessary compared with an electric blower.

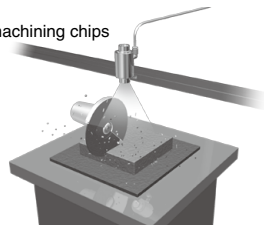
## Application Examples

### Blow

Blowing away water droplets

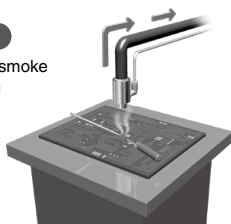


Blowing away machining chips



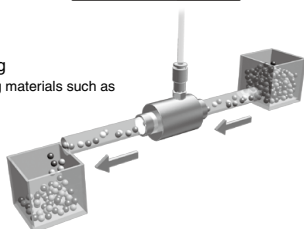
### Vacuum

Vacuumping the smoke during soldering



Transferring

\* Transferring materials such as pellets



\* SMC does not guarantee the entire system. Please think the system shown above as an example. A workpiece that is harder than the body material (aluminum alloy) may damage to the inside of the body, causing the performance to lower. The compatibility should be judged by the customer before adopting the product.

## How to Order

RoHS

### ZH 20 - B □ - X185

Passage diameter

Symbol	mmφ
10	13
20	21.6
30	30
40	42

#### Bracket

Nil	Without bracket
B	With bracket

#### Dust bag

Nil	Without dust bag
D*	With dust bag (Supplied with product)

\* Hose band attached

## Warning

- Because suctioned matter is ejected together with exhaust, do not direct an exhaust port at a person or equipment.
- Do not use in an atmosphere having corrosive gases, chemicals, sea water, water steam, or where there is direct contact with any of these.

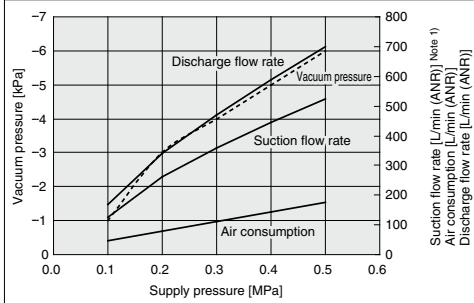
Refer to front matter 53 for Safety Instructions and pages 899 to 901 for Vacuum Equipment Precautions.

## Specifications

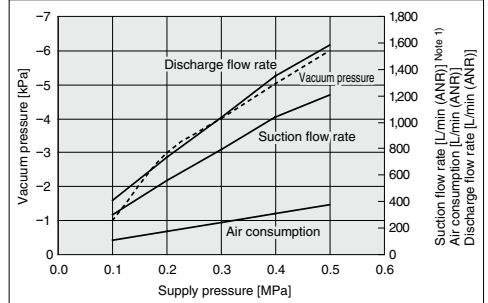
Model	ZH10-X185	ZH20-X185	ZH30-X185	ZH40-X185
Body material	Aluminum alloy			
Seal material	NBR			
Bracket material	Steel			
Dust bag material	Polyester			
Hose band material	Stainless steel			
Passage diameter	φ13	φ21.6	φ30	φ42
Fluid	Air			
Supply pressure range	0 to 0.7 MPa			
Weight (g)	110	430	970	2000
Bracket assembly	ZH-BK1-10-A	ZH-BK1-20-A	ZH-BK1-30-A	ZH-BK1-40-A
Dust bag assembly	ZH-DB1-10-A	ZH-DB1-20-A	ZH-DB1-30-A	ZH-DB1-40-A

## Flow Characteristics

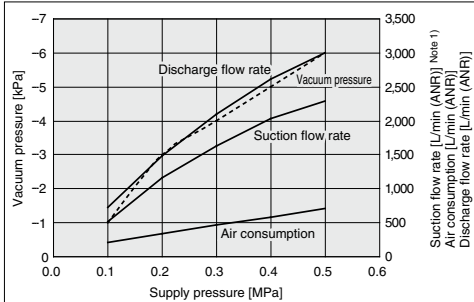
### ZH10-X185



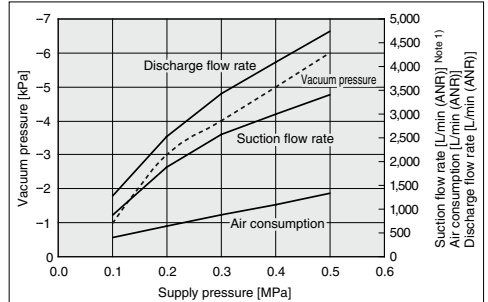
### ZH20-X185



### ZH30-X185



### ZH40-X185



Note 1) Suction flow rate is a theoretical value.

Note 2) The above characteristics are when the discharge outlet is under atmospheric pressure.

Note 3) Back pressure should be avoided if you mount a filter or some devices to catch the suctioned particles on the suction outlet side of this product.

## Recommended Sonic Conductance and Solenoid Valves (Reference)

Model	ZH10-□-X185	ZH20-□-X185	ZH30-□-X185	ZH40-□-X185
C (dm <sup>3</sup> /s·bar)	1.48 or more	3.12 or more	5.92 or more	11.08 or more
Solenoid valve (Reference)	VQZ200	VP300	VP500	VP700
Sonic conductance C [dm <sup>3</sup> /s·bar]	1.7	4.2	8.9	15.3

SP

ZCUK

AMJ

AMV

ZH-X185

Related Equipment

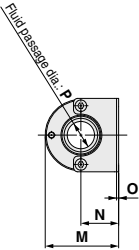
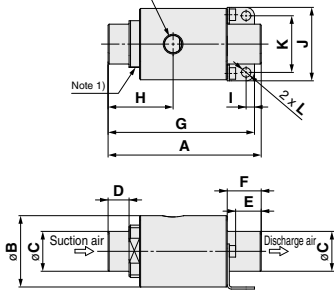
Series **ZH**□-□□-**X185**



**Dimensions**

**ZH<sup>10</sup><sub>20</sub>-□□-X185**

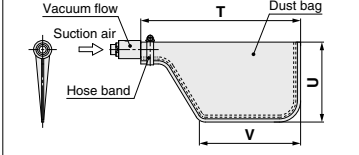
Air pressure supply (P) port  
Thread size: **Q**



**Without bracket**



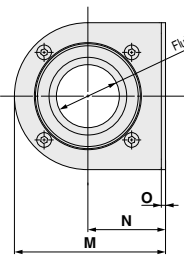
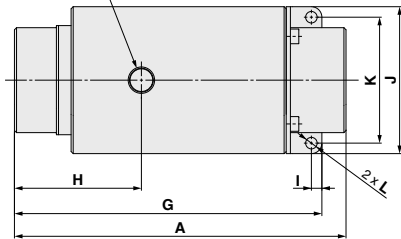
**When dust bag is mounted**



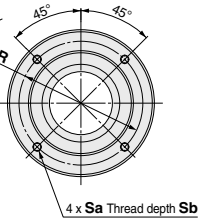
Model	A	øB	øC	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Sa	Sb	T	U	V
<b>ZH10-□-X185</b>	73	34	19	10	13.2	16.2	69.8	31	4	35	27	4.5	35	18	1	13	Rc1/8	28	M3 x 0.5	5	300	150	190
<b>ZH20-□-X185</b>	119.5	55	32	15	19.5	23.5	111	48	4	56	48	4.5	56.5	29	1	21.6	Rc1/4	44	M4 x 0.7	8	400	200	250

**ZH<sup>30</sup><sub>40</sub>-□□-X185**

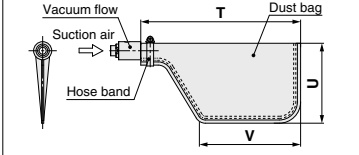
Air pressure supply (P) port  
Thread size: **Q**



**Without bracket**



**When dust bag is mounted**



Model	A	øB	øC	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Sa	Sb	T	U	V
<b>ZH30-□-X185</b>	158	70	50	20	24.5	28.5	146.5	60.5	5	70	60	5.5	72	37	2	30	Rc1/4	59	M4 x 0.7	10	500	250	310
<b>ZH40-□-X185</b>	203	90	64	25	27.2	33.5	196.8	74.5	6	90	78	6.5	92	47	2.3	42	Rc3/8	76	M4 x 0.7	10	500	250	310

Note 1) This thread portion is intended to adjust the product characteristics.  
Do not use it for mounting. Otherwise, the adjustment at shipment may deviate.

