



In-line Style Vacuum Ejector

Series ZU

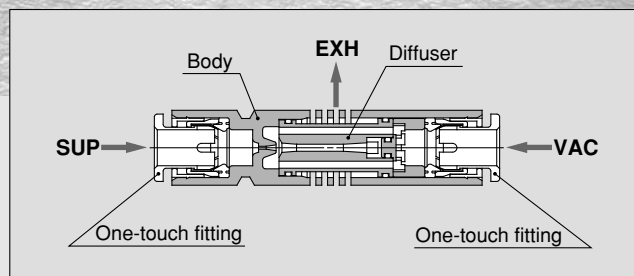
Space-saving ejector that can be installed in-line with the piping



Nozzle diameter: $\varnothing 0.5$, $\varnothing 0.7$

Style S: High Vacuum

L: Large Flow Capacity



- Vacuum port and supply port are located collinearly to facilitate piping
- Lightweight construction achieved through the use of a resin body
 - Nozzle diameter $\varnothing 0.5$: **6.5g**
 - $\varnothing 0.7$: **7.0g**
- The white colour matches bright operating environments
- Built-in One-touch fittings (copper free measures taken)

ZX

ZR

ZM

ZY

ZH

ZU

ZL

ZF

ZP

ZCU

Vacuum related

Precautions

Be sure to read before handling.

Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the products mentioned in this catalogue, and refer to p.3.0-2 for precautions on every series.

Installation

Caution

Make sure that an excessive loads or moments are not applied to the ejector body because of pipe connections.

Matching The Ejector to The Vacuum Circuit

Caution

For precautions associated with the matching the ejector to the vacuum circuit, refer to the technical data in "Best Pneumatics 3".

Handling One-touch Fittings

Caution

Installing and removing a tube with a One-touch fitting

1) Installing a tube

- ① Cut a tube at a right angle. The tube must not have any cuts on its periphery. Use tube cutter TK-1, 2, or 3. Do not use a pair of pliers, nippers, or scissors because they could result in an uneven cut or cause the tube to become flattened. As a result, it might not be possible to connect the tube, or after the tube has been connected, it could pull out or allow air to leak. Make sure to cut the tube at a sufficient length.
- ② Grasp the tube, push it in slowly, and make sure to insert it all the way.
- ③ After inserting the tube all the way, lightly pull on the tube to make sure that it does not pull out. If the tube is not inserted all the way, it could pull out or cause air leakage.

2) Removing a tube

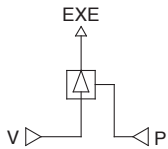
- ① Fully push in the release bushing. At the same time, push the collar evenly.
- ② Keeping the release bushing pushed so that it will not retract, pull out the tube. If the release bushing is not pushed in sufficiently, it could wedge in further, making it difficult to pull out the tube.
- ③ The removed tube can be reused by cutting off the portion that was wedged in. If the tube is reused without cutting off the wedged portion, it could lead to air leakage, or the inability to remove the tube.

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Circuit



How to Order

ZU 05 S

• Max. vacuum pressure

S	-85kPa
L	-48kPa

• Nozzle diameter

05	ø0.5mm
07	ø0.7mm

Specifications

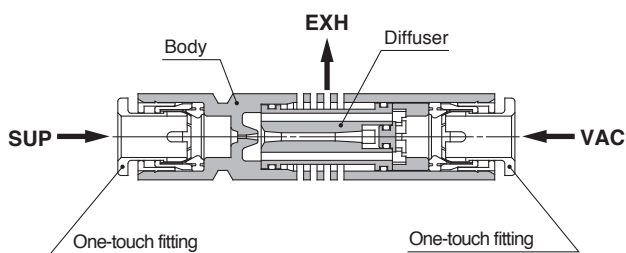
Fluid	Air
Max. operating pressure	0.6MPa
Standard supply pressure	0.45MPa
Operating temperature range	5 to 60°C
Applicable tube O. D.	SUP port: ø6 VAC port: ø6

Model

Style	Model	Nozzle dia. (mm)ø	Max. vacuum pressure* (kPa)	Max. suction flow (l/min)	Air consumption (l/min)	Weight (g)
High vacuum	ZU05S	0.5	-85	7	14	6.5
	ZU07S	0.7	-85	10	29	7.0
Large flow capacity	ZU05L	0.5	-48	12	14	6.5
	ZU07L	0.7	-48	16	29	7.0

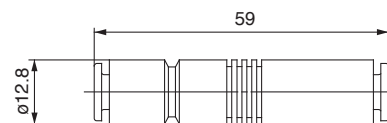
*Supply pressure: 0.45MPa

Construction



Dimensions

ZU05S/ZU05L



ZU07S/ZU07L



ZX

ZR

ZM

ZY

ZH

ZU

ZL

ZF

ZP

ZCU

Vacuum related

In-line Style Vacuum Ejector: *Series ZU*

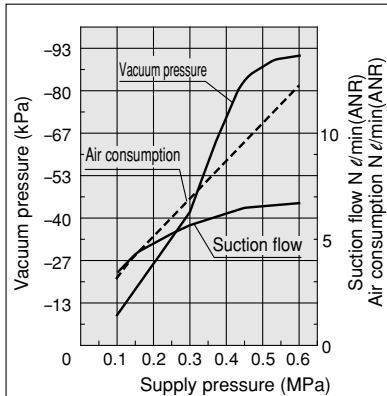
Exhaust Characteristics/Flow Characteristics

Flow characteristics: At 0.45MPa

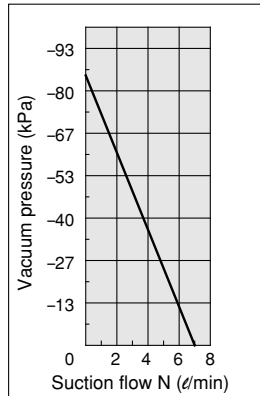
ZU05S

Max. vacuum pressure: -85kPa

Exhaust



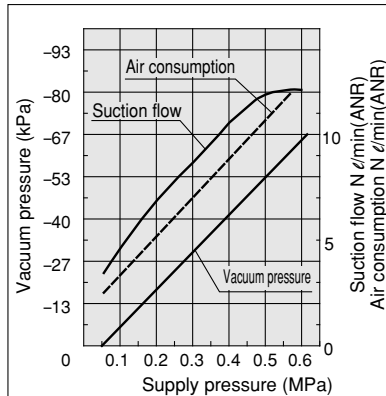
Flow



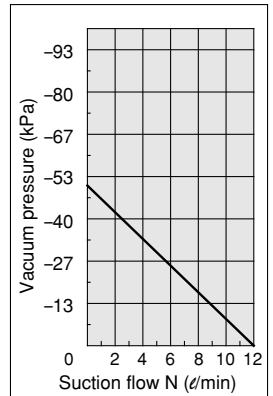
ZU05L

Max. vacuum pressure: -48kPa

Exhaust



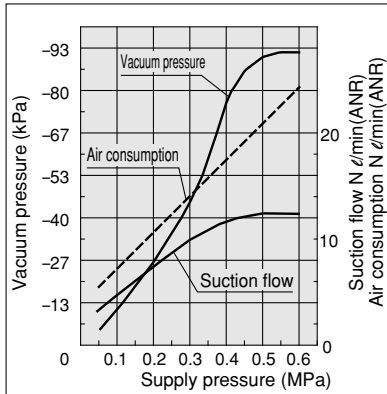
Flow



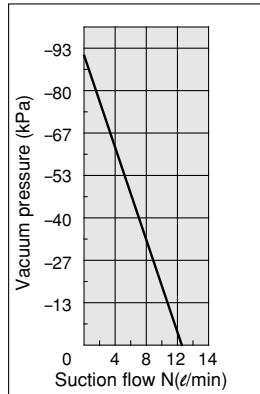
ZU07S

Max. vacuum pressure: -85kPa

Exhaust



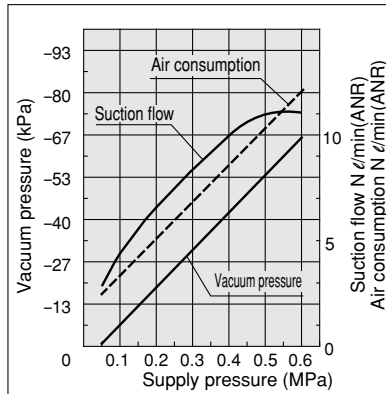
Flow



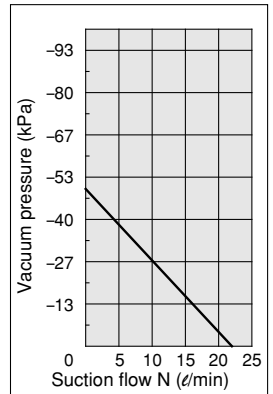
ZU07L

Max. vacuum pressure: -48kPa

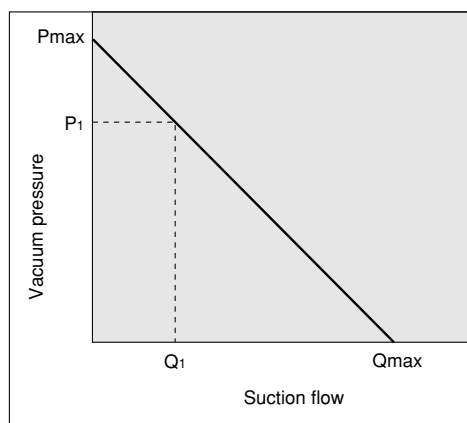
Exhaust



Flow



How to Read Graphs



Flow characteristics are expressed in ejector vacuum pressure and suction flow. If suction flow rate changes, the change in vacuum pressure will also be noticed. Normally this relationship is expressed in ejector standard use. In the graph, P_{max} is max. vacuum pressure and Q_{max} is max. suction flow. The values are specified according to the catalogue. Changes in vacuum pressure are expressed in the order below.

- ① When ejector suction flow becomes 0, vacuum pressure is at maximum (P_{max}).
- ② When suction port is opened gradually, air can flow through, (air leakage), suction flow increases, but vacuum pressure decreases. (condition P_1 and Q_1)
- ③ When suction port is opened further, suction flow moves to maximum value (Q_{max}), but vacuum pressure approaches 0 (atmospheric pressure).

When vacuum port (vacuum piping) has no leakage, vacuum pressure becomes maximum. Vacuum pressure decreases as leakage increases. When leakage amount equals max. suction flow, vacuum pressure is near 0. In the case when ventirative or leaky work should be adsorbed, please note that vacuum pressure will not be high.