




# Atom Vacuum Generator

Cleaner | More efficient | More stable

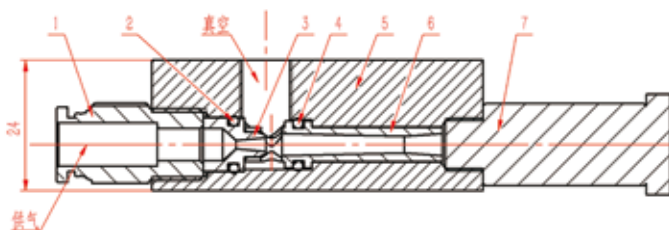
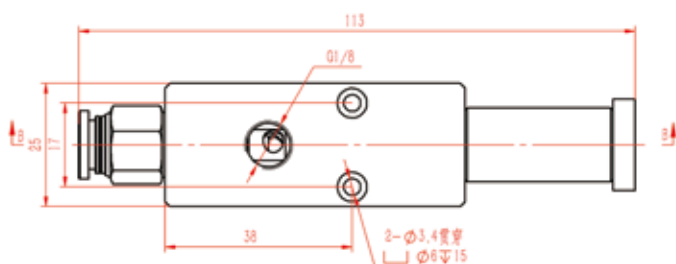
-  Single maximum vacuum flow 290L/min
-  Maximum vacuum degree -90kpa
-  Maintenance-free use 4500h



- Atom vacuum generator is an all-in-one portable vacuum generator developed by atomrobot for high-speed sorting. It supplies air by way of positive pressure, which is without the need for a vacuum pump, to be able to easily and quickly provide negative pressure airflow.
- Core components are integrally formed with high-strength ABS. It is stable chemically. It is clean and dust-free, as well as oil and corrosion resistance. The maximum operating temperature is 80°C, which can be used in a wider range of operations.
- Overall structure is simple and the installation is convenient, which can be easily arranged in any air path. The generating tube can be easily disassembled and replaced. A shell can also be customized according to various on-site conditions, which is convenient for maintenance and replacement. It is applicable to various automatic sorting, handling, stacking and other processes.

## VG-L-01-15-S

- ❏ Small size: It can be easily arranged on the air box or air piping.
- ❏ Low air consumption: The minimum air consumption of a single unit is only 40L/min, to be convenient for the use of multi units at the same time.
- ❏ Sensitive response: Corresponding time is less than 100ms, which is more suitable for fast switching occasions.
- ❏ Low noise: Noise is less than 40dB.



### Core Parameters

Model	VG-L-01-15-S
Maximum operating pressure	0.6MPa
Nozzle diameter	1.5mm
Range of operating temperature	5-50°C
Recommended air supply pipe diameter	Φ8mm
Recommended vacuum air pipe diameter	Φ8mm
Maximum air consumption	100L/min
Maximum vacuum flow	60L/min

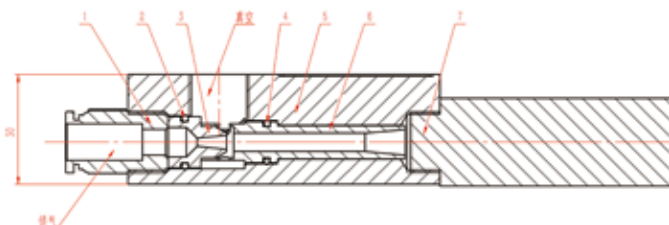
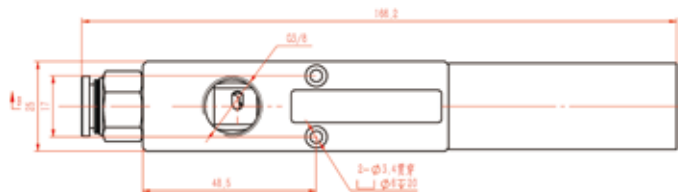
### Components Composition

S/N	Name	Model
1	Air pipe connector	SQC8-02
2	Seal ring	XTK21-d1.8-D6.9
3	Tube head	ZFKSQ-11-01
4	Seal ring	XTK21-d1.8-D6
5	Tube box	ZFKSQ-11-03
6	Tube tail	ZFKSQ-11-02
7	Muffler	RS01

Note: The environment shall be free from dust, oil and organic solvents as far as possible.

## VG-L-01-20-S

- ❏ Simple structure: Simple structure, high cost-effective, it is convenient for disassembling and maintenance.
- ❏ Large flow: The nozzle is 2mm, and the single-stage generating tube can reach 102L/min vacuum flow.
- ❏ Sensitive response: The corresponding time is less than 100ms, which is more suitable for fast switching occasions.
- ❏ Low noise: Noise is less than 45dB.



### Core Parameters

Model	VG-L-01-20-S
Maximum operating pressure	0.6MPa
Nozzle diameter	2mm
Range of operating temperature	5-50°C
Recommended air supply pipe diameter	Φ10mm
Recommended vacuum air pipe diameter	Φ12mm
Maximum air consumption	238L/min
Maximum vacuum flow	102L/min

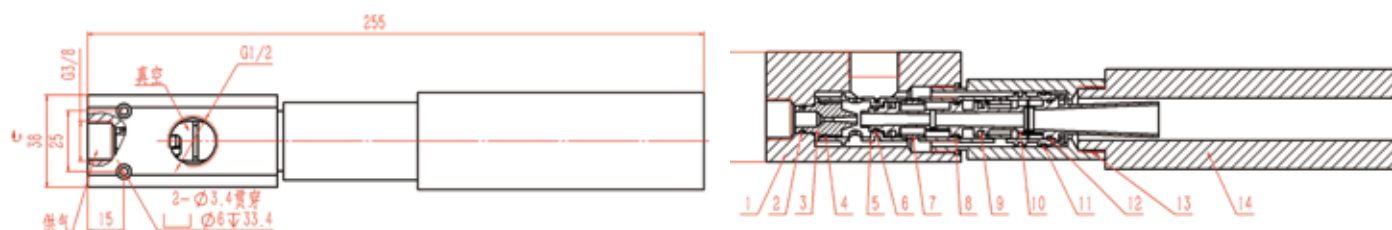
### Components Composition

S/N	Name	Model
1	Air pipe connector	PC1003
2	Seal ring	XTK21-d1.8-D11.2
3	Tube head	ZFKSQ-06-01
4	Seal ring	XTK21-d1.8-D8.5
5	Tube box	ZFKSQ-06-03
6	Tube tail	ZFKSQ-06-02
7	Muffler	MSH-03

Note: The environment shall be free from dust, oil and organic solvents as far as possible.

## VG-H-03-16-S

- Occurs in multistages: Adopting a multistage series vacuum generation structure, the air consumption is less than the vacuum flow rate, which is more energy-saving.
- Higher vacuum: The highest vacuum degree can reach -90kpa.
- Faster suction speed: The suction time of 1L volume reaching -50kpa vacuum degree is less than 800ms.
- Flexible use: The generator tube can be used independently with a self-made housing or bracket, which has achieved a higher degree of integration.



### Core Parameters

Model	VG-H-03-16-S
Maximum operating pressure	0.6MPa
Nozzle diameter	1.6mm
Range of operating temperature	5-50°C
Recommended air supply pipe diameter	Φ10mm
Recommended vacuum air pipe diameter	Φ12mm-Φ16mm
Maximum air consumption	121L/min
Maximum vacuum flow	290L/min

Note: The environment shall be free from dust, oil and organic solvents as far as possible.

### Components Composition

S/N	Name	Model
1	Mounting block	ZHFSQ-13-10
2	Seal ring	XTF01-9
3	Nozzle	ZFKSQ-13-14
4	Seal ring	XTF01-12.5
5	Outer sleeve	ZKFSQ-13-13
6	Seal ring	XTF01-8
7	Non-return valves	ZKFSQ-13-16
8	Seal ring	XTF01-12.5
9	Non-return valves	ZKFSQ-13-16
10	Generating tube	ZKFSQ-13-12
11	Seal ring	XTF01-20
12	Seal ring	XTF01-14
13	Muffler seat	ZKFSQ-13-11
14	Muffler	MSH-06