



Vacuum Element/Common Precautions

Must read before use



Caution Warning Design.

1. There should be safety design in case of accident caused by power failure or gas source failure, which reduces the vacuum degree.

The vacuum degree is reduced, the suction force of the suction cup is insufficient, and the moving workpiece is separated, which will cause personal and device damage. Safety measures such as falling prevention track device should be designed.

2. Select a vacuum generator with appropriate suction flow rate.

a. Where there is leakage from a workpiece or pipe.

If the inhalation flow is insufficient, the adsorption is poor.

b. Where the pipe is long or thick.

The volume of the pipe increases, and the adsorption response time is too long.

3. In the case where one vacuum generator drives more than two suction cups, once the workpiece on one suction cup falls off, the workpiece on other suction cups will also fall off.

Because a workpiece on the suction cup falls off, the vacuum becomes smaller, so it is necessary to choose an appropriate vacuum safety valve.

The effective cross-sectional area of the pipe shall meet the requirements.

The effective cross-sectional area of the vacuum side piping should be selected according to the maximum suction capacity of the vacuum generator. There should be no throttling and no leakage in the piping.

The effective cross-sectional area of the supply piping should be selected according to the maximum air consumption of the vacuum generator. The effective cross-sectional area of the tubes, pipe joints and valves should also be large enough to minimize the pressure loss in front of the vacuum generator.

In addition, the air source should be designed to consider the maximum air consumption of the vacuum generator and other pneumatic circuits.



Caution on installation

1. The exhaust port of the vacuum generator must not be blocked. Once blocked, the vacuum cannot be generated.



Caution on Distribution

1. The pipe shall not be spiral.

The vacuum side and supply side should not be spiral piping, should be as short and straight as possible. The response time increases with the increase of pipe volume.

2. The Effective Cross-Sectional Area of the Pipe on the Exhaust Side of the Vacuum Generator Should Be as Large as Possible.

Once the exhaust is throttled, the performance of the vacuum generator deteriorates.

3. Do not damage or bend the pipe.



Caution Operating environment

1. It shall not be used in the atmosphere of corrosive gas, chemical drugs, seawater, water or steam, or in the case where the above substances are attached.

2. It shall not be used in explosive atmosphere.

3. Do not use in places where vibration or impact is generated. You can confirm the specifications of each series.

4. In the case of sunlight exposure, a protective cover should be added.

5. Radiation heat should be blocked in places with heat sources around.

6. In case of water droplets, oil and solvent splashing or adhesion of the above substances, appropriate protective measures should be taken.

7. In cases where the vacuum components are surrounded and powered for a long time, heat dissipation measures should be taken to ensure that the vacuum components are used within the temperature range.



Caution Maintenance

1. Clean the vacuum filter and muffler regularly.

The performance of the vacuum generator is reduced when the filter and muffler holes are blocked. In dusty situations, a vacuum filter with high flow rate should be used.