

Non-contact suction cup, Bernoulli type

Φ20, Φ25, Φ30, Φ40, Φ60, Φ100

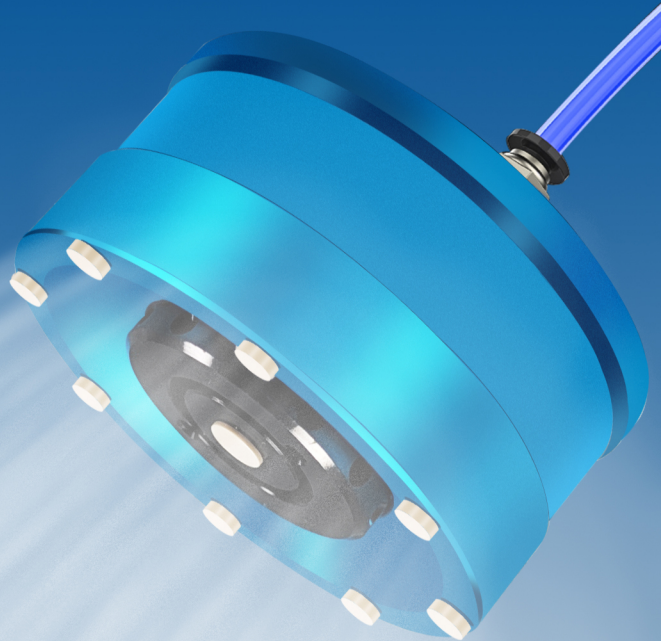
Brand new upgrade with
a larger flow rate

It can adsorb and handle
items such as thin cloth,
thin film, circuit boards,
etc.

Energy-saving
Reduce by up to 79%

• Low Vacuum • High Flow

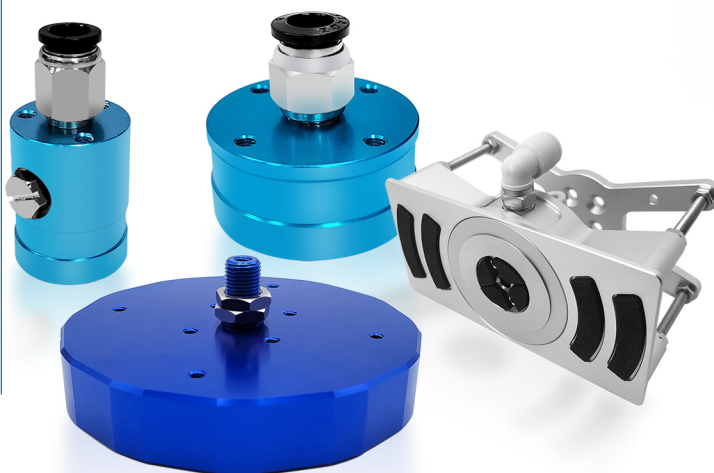
High lifting suction force: 65N



Four conventional models



Four upgraded models

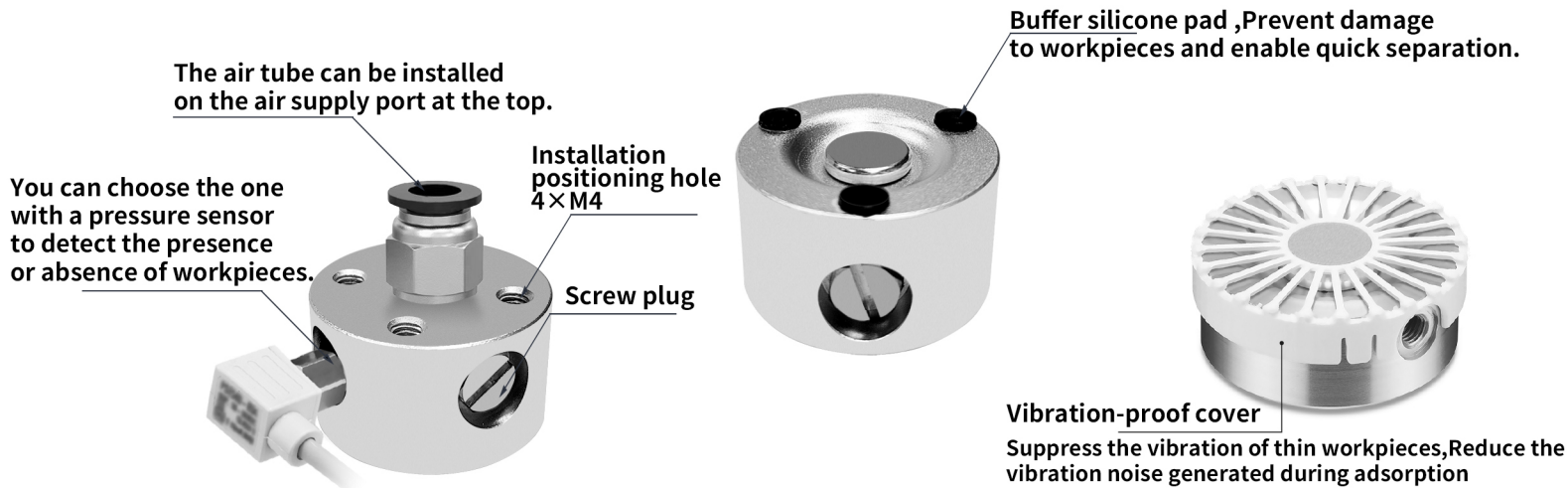


Non-standard
customized model

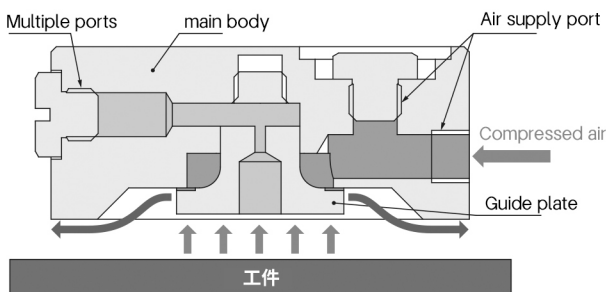


Non-contact suction cup, Bernoulli type

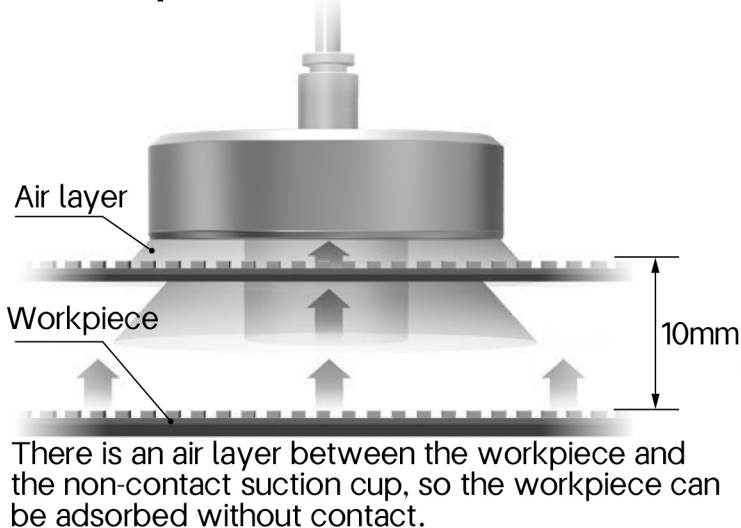
It can adsorb and transport thin cloth, thin film, circuit boards and other items.



Structure and operation principle



- Assist in the non-contact handling of workpieces
- The distance at which the workpiece can be adsorbed: 10mm



By installing sensors and other devices, it is possible to confirm the presence or absence of workpieces.

With multiple ports

Recommended sensor

Pressure sensor



Flow sensor



Application scenarios

Examples of usage

Circuit board



Bubble cushioning material



Thin cloth



Outer diameter of the main body(mm)	Φ20	Φ25	Φ30	Φ40	Φ60	Φ100
Air consumption[L/min(ANR)]	80	100	140	200	260	350
Adsorption force (N)	2	4	6.5	13	26	46
Adsorption weight (g)	200	250	300	400	500	1000
Pipe connection diameter	M5×0.8	M5×0.8	M5×0.8	M5×0.8	G1/8	G1/8
Main body material	Aluminum material					
Fluid used	Air					

Supply pressure: 5MPa

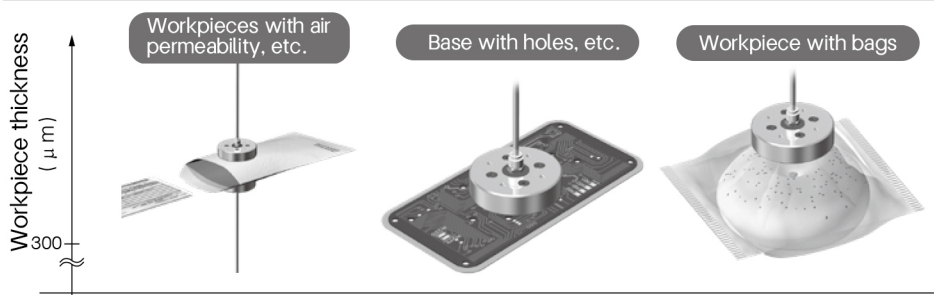
Action principle Release the air in a swirling direction.



● Cyclonic type

Compressed air supplied from the air supply port is ejected from the nozzles located on the side surface of the recess on the adsorption surface side, forming a swirling airflow. The swirling airflow is released into the atmosphere through the gap between the non-contact suction cup and the workpiece. Therefore, the cyclone effect will generate a vacuum region inside the swirling airflow, enabling non-contact adsorption of the workpiece. Due to the centrifugal force of the swirling airflow, a relatively strong adsorption force can be generated.

It is suitable for the adsorption of various workpieces.



Please install the guide rod before using the non-contact suction cup.

Regarding the guide rod, please take the following installation examples as a reference and prepare them for customers according to the application and the shape of the workpiece.

Reasons for the installation of the guide rod

■ Support of the workpiece

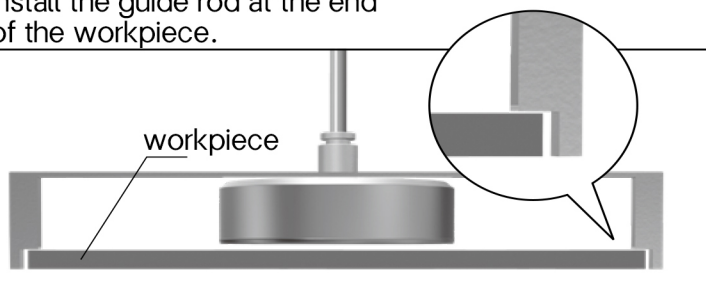
The non-contact suction cup has no restraining force for horizontal movement. Since it is necessary to support the workpiece, please install the guide rod at the end of the workpiece or other appropriate positions.

■ Prevent contact

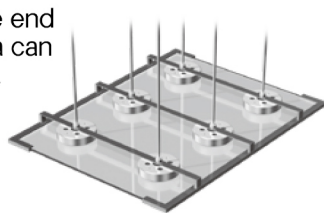
According to the usage conditions, sometimes the non-contact suction cup and the workpiece may come into contact during the adsorption process. In order to prevent contact, please install a guide rod that keeps the workpiece at a certain distance.

Installation examples

■ Install the guide rod at the end of the workpiece.

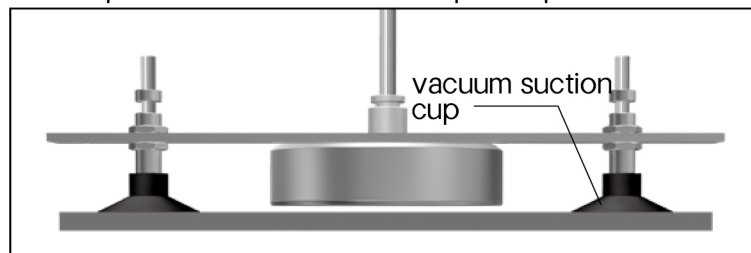


After installing the guide rod at the end of the workpiece, the contact area can be minimized as much as possible.

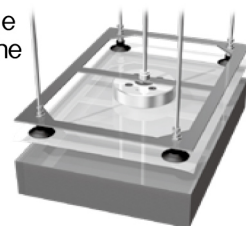


When using multiple ones

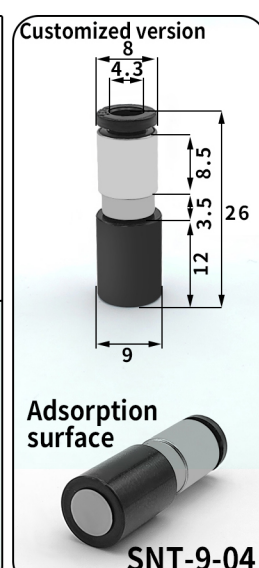
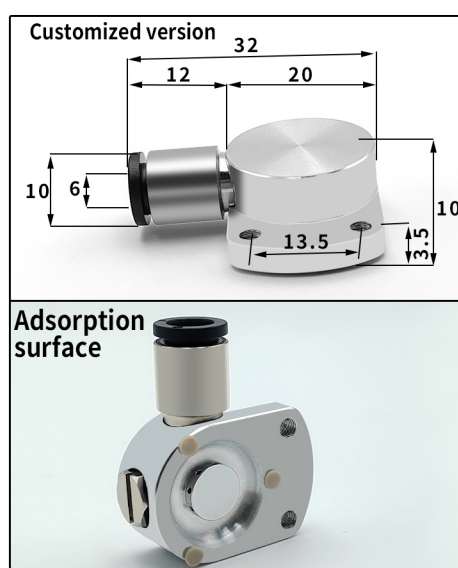
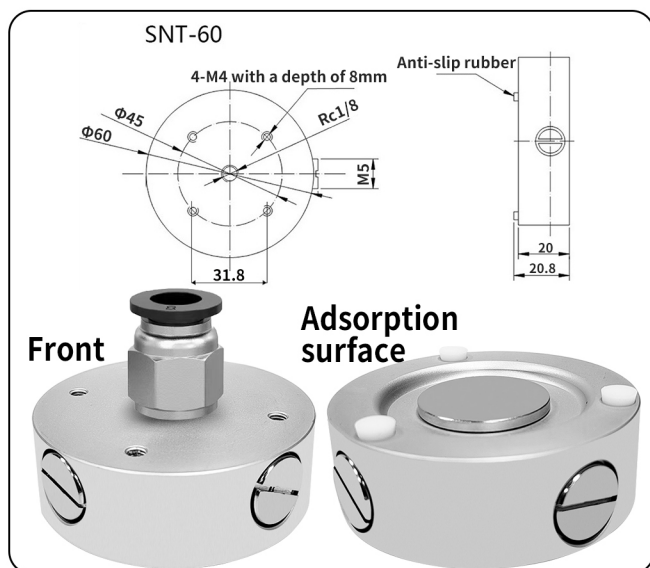
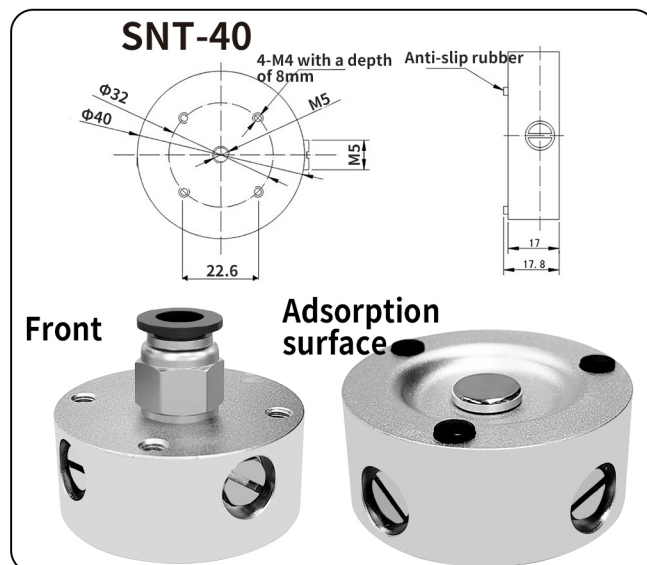
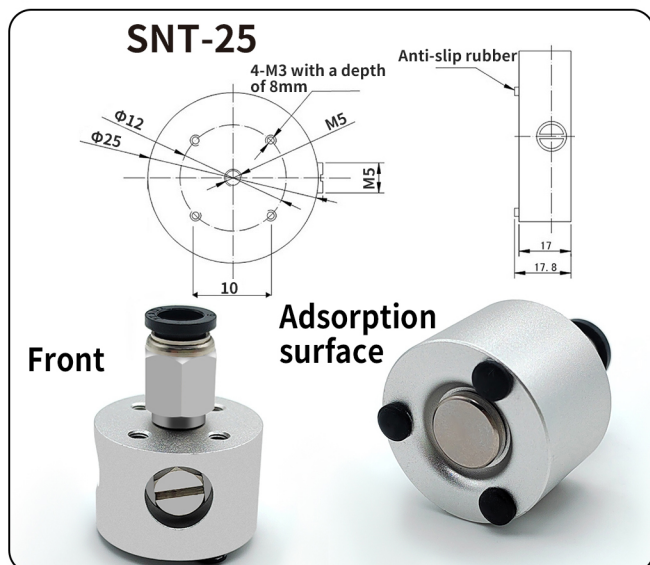
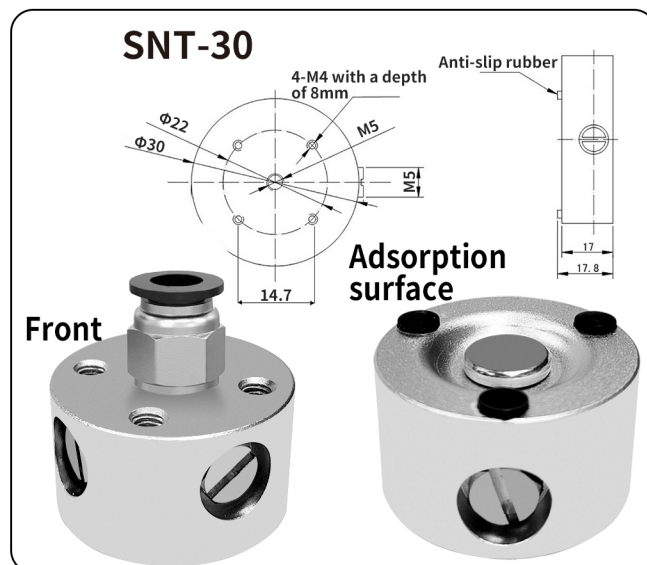
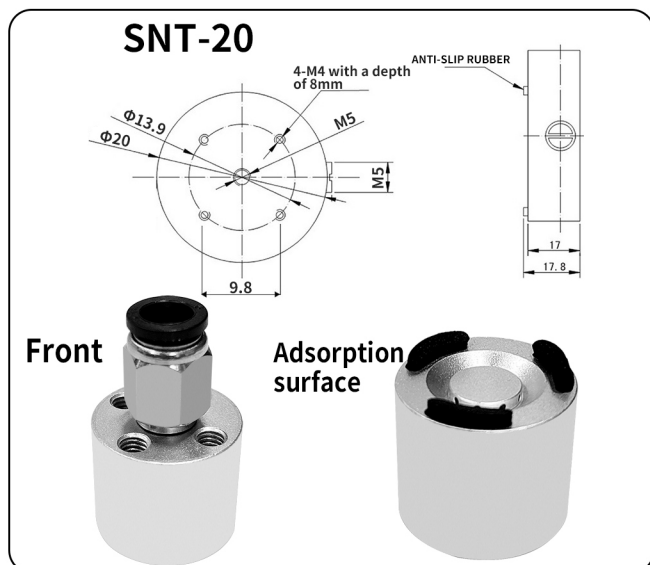
■ Install the guide rod on the upper surface of the workpiece (a vacuum suction cup is required).



Determine the position of the workpiece through the vacuum suction cup, and the non-contact suction cup needs to be used simultaneously during handling. In this way, the part in contact with the workpiece can be minimized as much as possible for handling.



OUTLINE DIMENSION DRAWING [REGULAR TYPE]

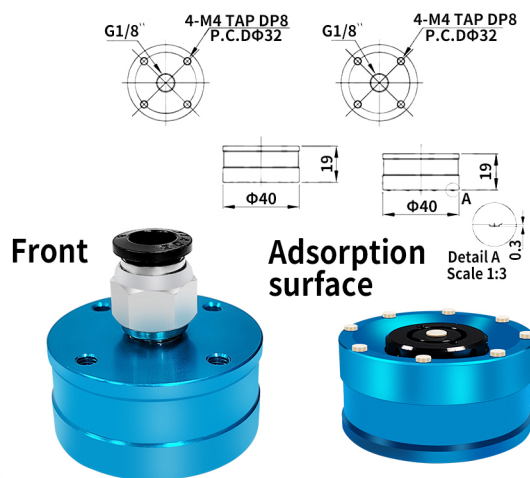


OUTLINE DIMENSION DRAWING [HIGH FLOW RATE UPGRADED VERSION]

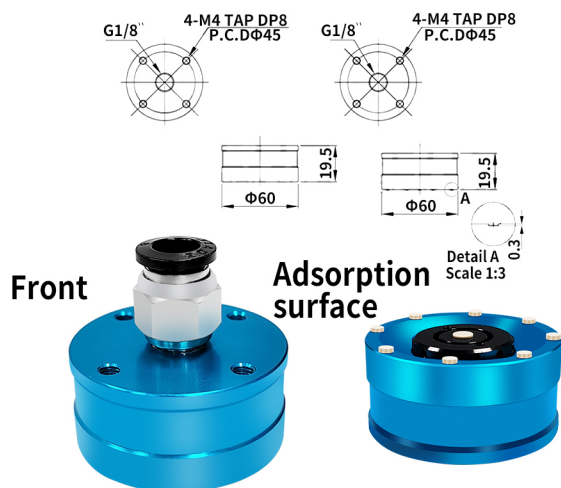
NF20-06-A-M5F



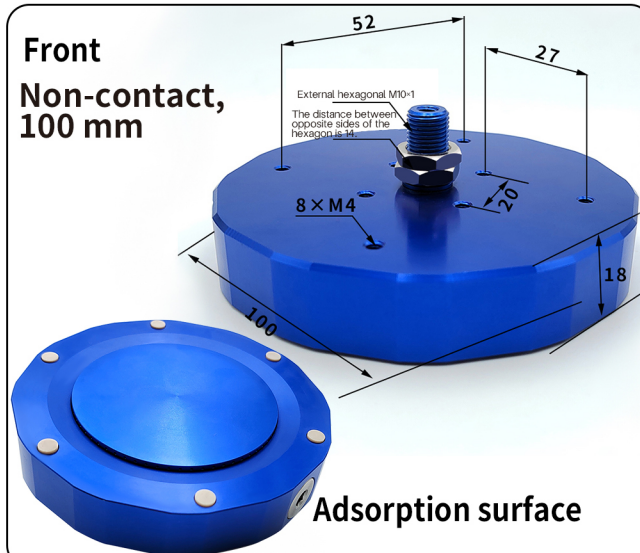
NF40-06-A-18F



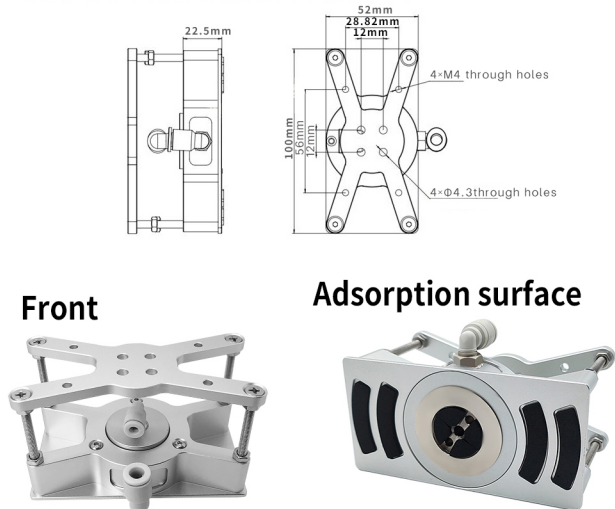
NF60-06-A-18F



Front Non-contact, 100 mm



KN-50-100 SINGLE HOLE



Front

KN-50-100 Double Holes

