

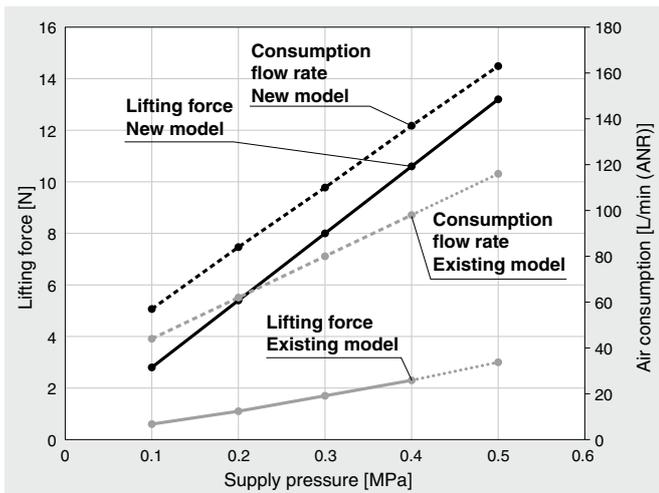
# Bernoulli Type Non-contact Gripper

For the adsorption transfer of thin cloths, films, printed circuit boards, etc.

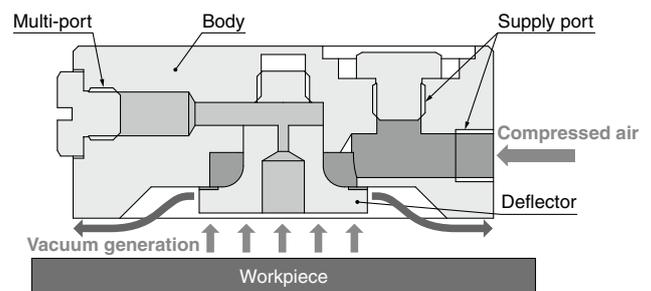


## High lifting force compared with the existing model: 4.4 times

(Supply pressure: 0.5 [MPa], For non-permeable workpieces)



## Construction and working principle



## Application Examples



## How to Order

**XT661 - 4C - PN S - X427**

- ① ② ③ ④

### ① Outer body diameter

4C	ø40 mm
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### ② Stopper material

Nil	Without stopper
PN	NBR (Black)
PS	Silicone rubber (White)

### ③ Cover

Nil	None
V	With vibration suppression cover

### ④ Pressure sensor

Nil	None
S	With pressure sensor Part no.:PSE541-M5

\* Can only be selected when "Without stopper" is selected for the stopper material

## Specifications

Fluid	Air*1
Operating pressure	0.1 to 0.5 MPa
Ambient and operating temperatures	-5 to 60°C (No freezing) With pressure sensor: 0 to 50°C
Grease	Grease-free
Material	Body: Aluminum alloy Vibration suppression cover: Synthetic resin*2
Weight	48.8 [g] (Basic type/Without plug)
Pressure sensor*3	PSE541-M5 Rated pressure range: 0 to -101 kPa

\*1 Air purification rating: JIS B 8392-1 (ISO 8573-1) Quality degree: 4, 4.3 or higher

\*2 Compliant with the FDA (U.S. Food and Drug Administration) regulation 21CFR§177. Compliant with the standards for "Synthetic resin apparatus and containers/packaging" (D2) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

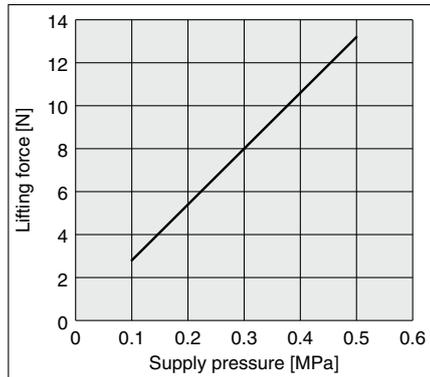
\*3 For pressure sensor details, refer to the PSE540 series in the Web Catalog and the Operation Manual.

**XT661-X427**

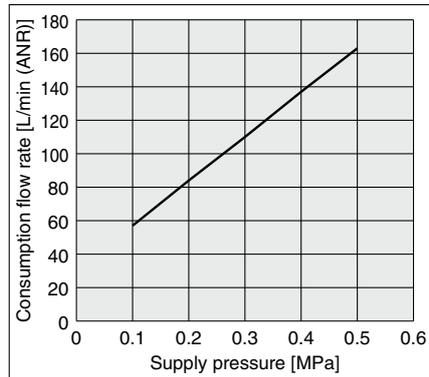


# XT661-X427

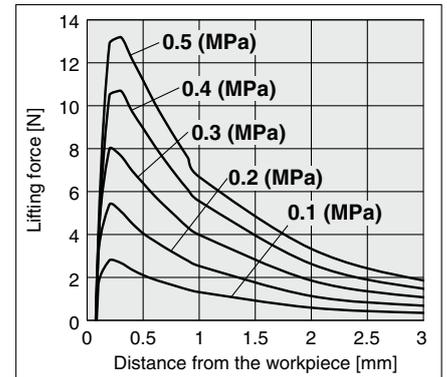
## Lifting Force



## Consumption Flow Rate



## Lifting Force–Distance from the Workpiece

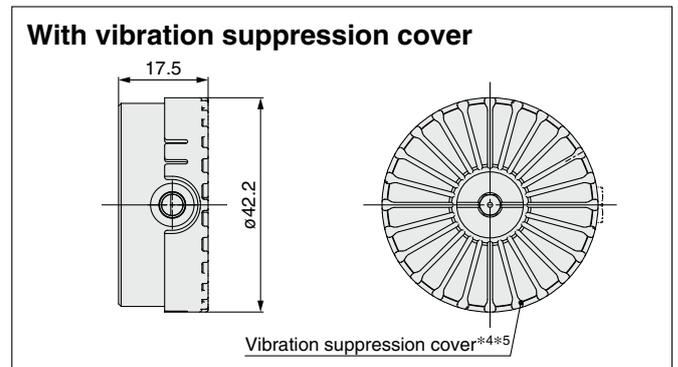
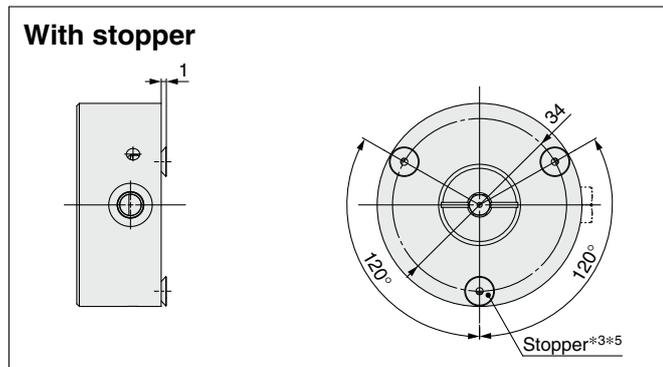
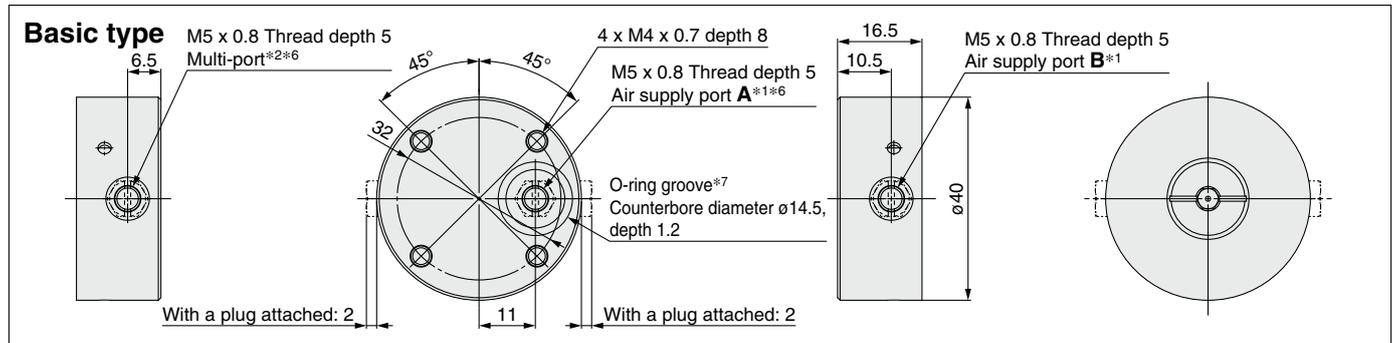


\* These graphs show the data when adsorbing smooth and non-permeable workpieces with a basic type model.

Lifting force values when adsorbing workpieces with bumps or permeable workpieces will be lower than those shown in the graphs above.

\* For the lifting force when using a stopper or vibration suppression cover, use the following values as a guide for the distance from the workpiece. With stopper: 1 mm, With vibration suppression cover: 1.5 mm

## Dimensions



\*1 Supply air to either air supply port A or B. Seal the unused ports with plugs.

\*2 Seal the multi-port with a plug when not in use.

\*3 When using a stopper, the workpiece comes into contact with the stopper.

\*4 When using a vibration suppression cover, the workpiece comes into contact with the cover.

\*5 The stopper and cover cannot be used together.

\*6 The product is shipped with plugs in the air supply port A and multi-port.

\*7 The O-ring is not included. Attach an O-ring (14.5 x 11.5 x 1.5) if necessary.

\* The pressure sensor is shipped together with the product but does not come assembled.

\* The value of the pressure sensor differs depending on the workpiece. Customers should conduct a test with the actual product before use.

## Safety Instructions

Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) before use.