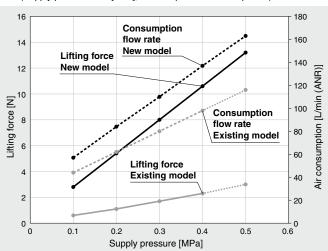
# Bernoulli Type Non-contact Gripper

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

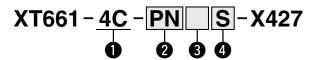


# High lifting force compared with the existing model: 4.4 times

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



#### How to Order



# Outer body diameter

ø40 mm

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

None

With pressure sensor Part no.: PSE541-M5

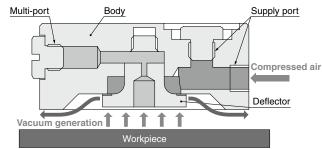
Pressure sensor

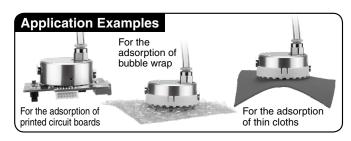
## **3** Cover

Nil	None	
V	With vibration suppression cover	

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

Construction and working principle





# **Specifications**

Fluid		Air*1		
Operatin	g pressure	0.1 to 0.5 MPa		
Ambient	and operating	-5 to 60°C (No freezing)		
temperat	tures	With pressure sensor: 0 to 50°C		
Grease		Grease-free		
Material	Body	Aluminum alloy		
Materiai	Vibration suppression cover	Synthetic resin*2		
Weight		48.8 [g] (Basic type/Without plug)		
Pressure	e 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.

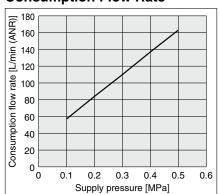


# XT661-X427

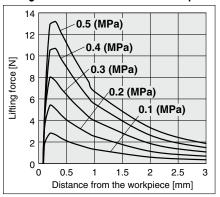
## **Lifting Force**

# 14 12 10 8 10 8 0 0 0.1 0.2 0.3 0.4 0.5 0.6 Supply pressure [MPa]

# **Consumption Flow Rate**



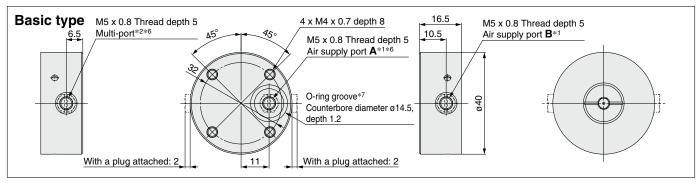
## Lifting Force-Distance from the Workpiece

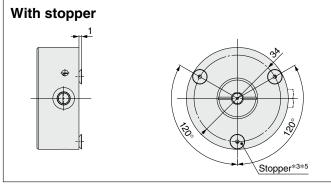


- \* These graphs show the data when adsorbing smooth and non-permeable workpieces with a basic type model.

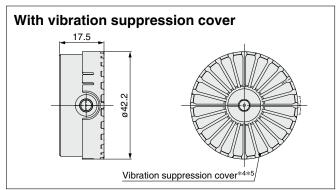
  Lifting force values when adsorbing workpieces with bumps or permeable workpieces will be lower than those shown in the graphs above.
- \* For the lifting force when using a stopper or vibration suppression cover, use the following values as a guide for the distance from the workpiece. With stopper: 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.