

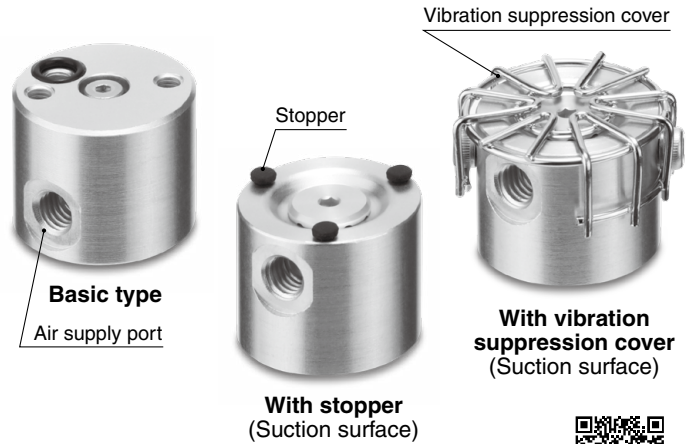
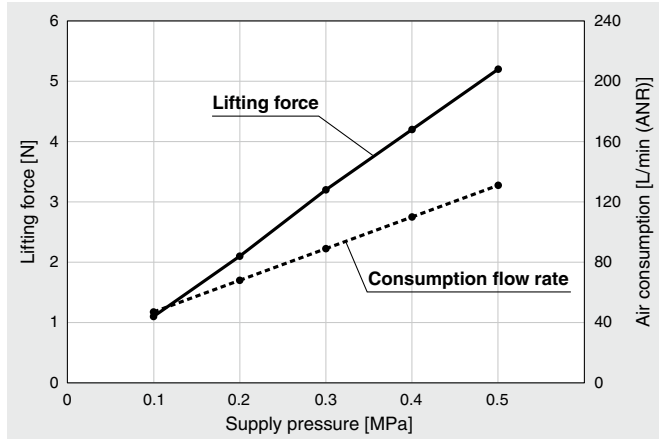
Bernoulli Gripper

ø20

Body size ø20 has been added.

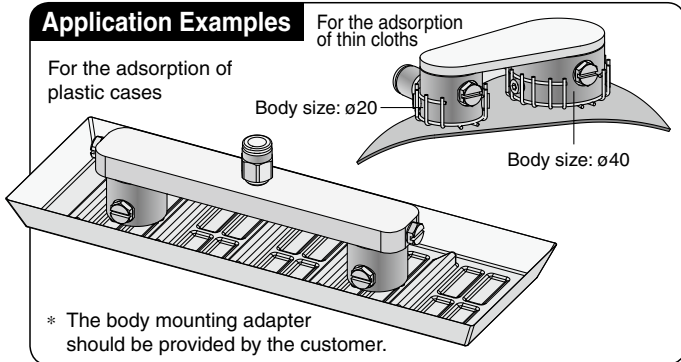
For the adsorption transfer of thin cloths, films, printed circuit boards, etc.

Lifting Force and Air Consumption

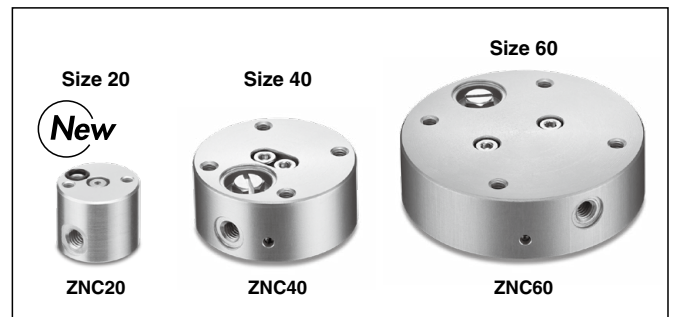


Learn more about the ZNC40 and 60 here.

Application Examples



Body Size Variations



How to Order

ZNC 20 - X1

① ② ③ ④

① Body size

20	ø20 mm
----	--------

② Body material

Nil	Aluminum
P	Resin
S	Stainless steel

③ Attachment

Nil	Basic type (Without attachment)	
PN	With stopper	NBR (Black)
PS		Silicone rubber (White)
VS	With vibration suppression cover	Stainless steel

* The stopper and vibration suppression cover cannot be used in combination.

④ Pressure sensor

Nil	None
S	With pressure sensor Part no.: PSE541-M5-X2

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

Specifications

Model		ZNC20	
Lifting force [N] ^{*1, *3}		5.2	
Air consumption [L/min(ANR)] ^{*2, *3}		131	
Type		Bernoulli	
Fluid		Air	
Operating pressure		0.1 to 0.5 MPa	
Proof pressure		0.75 MPa	
Ambient and operating temperatures ^{*4}	Body material	Aluminum	-5 to 80°C (0 to 50°C)
		Resin	-5 to 40°C (0 to 40°C)
		Stainless steel	-5 to 80°C (0 to 50°C)
Grease		Grease-free	
Weight [g] ^{*5}	Body material	Aluminum	12
		Resin	7
		Stainless steel	34
Pressure sensor ^{*6}		PSE541-M5-X2 (Grease-free) Rated pressure range: 0 to -101 kPa	

*1 Lifting force of the basic type at the max. supply pressure
Value when a flat, non-breathable workpiece is adsorbed

*2 Air consumption at the max. supply pressure

*3 For tubing size: ø6 x ø4, length: 500 mm

*4 No freezing or condensation. The values in () are for models with a pressure sensor.

*5 Weight for the basic type without a plug

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

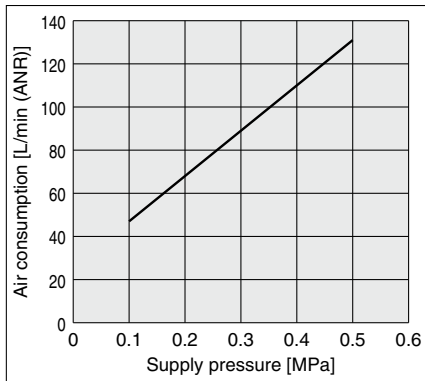
ZNC20-X1



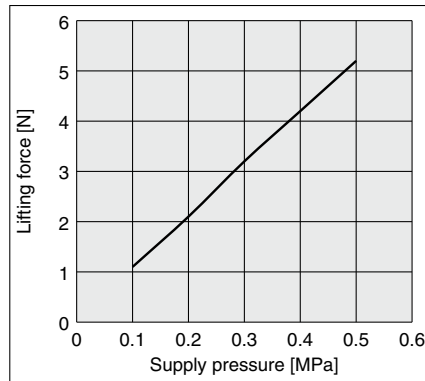
21-E772

ZNC20-X1

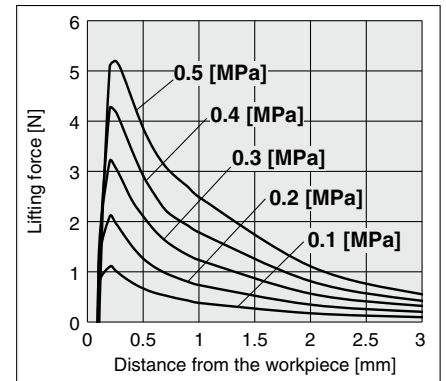
Air Consumption



Lifting Force



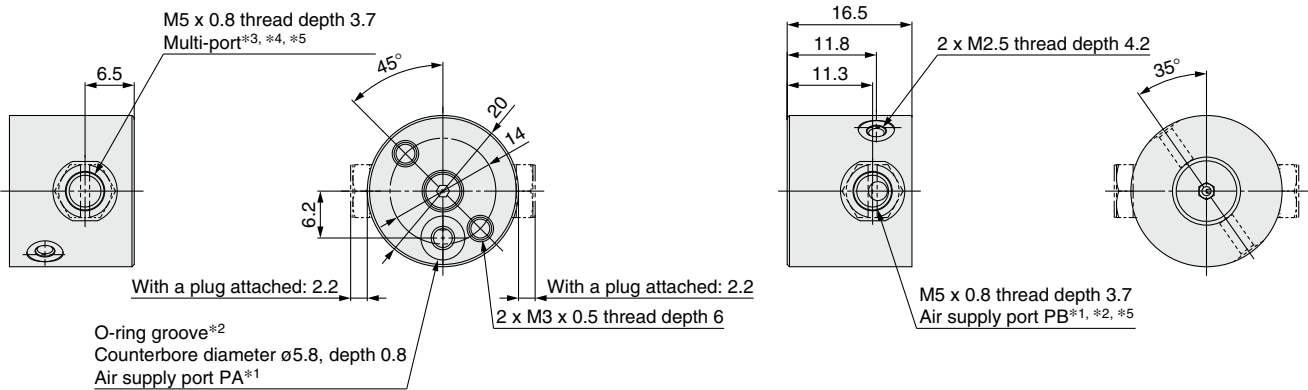
Lifting Force–Distance from the Workpiece



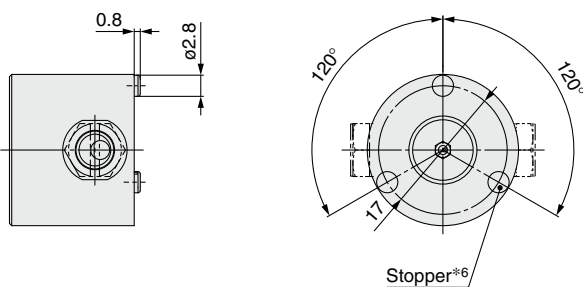
- * The lifting force changes depending on the shape, size, surface unevenness, breathability, flexibility, etc., of the workpiece. Use the values shown in the graphs above as a reference, and confirm using the actual machine.
- * For the lifting force when using a stopper or vibration suppression cover, 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

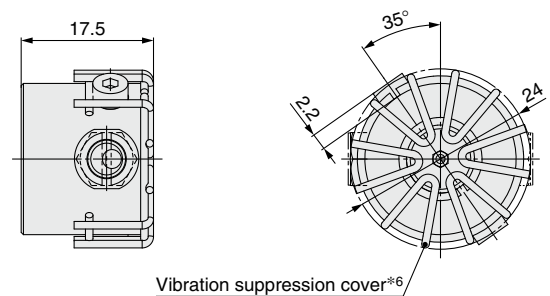
Basic type



With stopper



With vibration suppression cover



- *1 Supply air to either air supply port PA or PB. Plug the unused air supply port.
- *2 An O-ring (5.8 x 3.8 x 1) and a plug for the air supply port PB are included with the product. Be sure to attach the O-ring. For details on how to mount the product, refer to the "Specific Product Precautions."
- *3 Use the multi-port as a sensor mounting or release port.
- *4 Seal the multi-port with a plug when not in use.
- *5 The product is shipped with a plug in the multi-port. After determining which port to use, it is recommended that adhesive be applied to the threads of the air supply port and the multi-port.

- *6 The stopper and vibration suppression cover cannot be used in combination.
- * The pressure sensor is shipped together with the product but does not come assembled.
- * For pressure sensor details, refer to the PSE540 series in the **Web Catalog** and the Operation Manual.



ZNC20-X1

Specific Product Precautions

Be sure to read this before handling the products.

Mounting

When mounting the product, be sure to attach the O-ring included with the product. Also, the mounting surface should be smooth (Recommended surface roughness: Rz 25 or less).

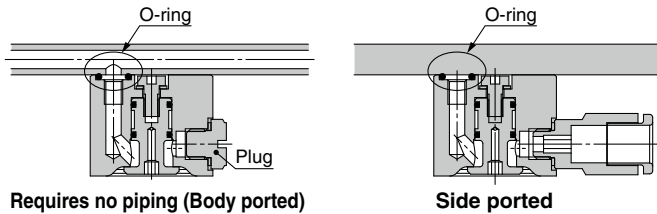
When using the product without piping (body ported), seal the side port with the attached plug.

When piping from the side, cover the supply port on the top of the product with the mounting surface.

Installation on a mounting surface with a rough surface, scratches or dents, or mounting an unsuitable O-ring may cause sealing failure.

Attached O-ring

Model	Size
ZNC20□	5.8 x 3.8 x 1



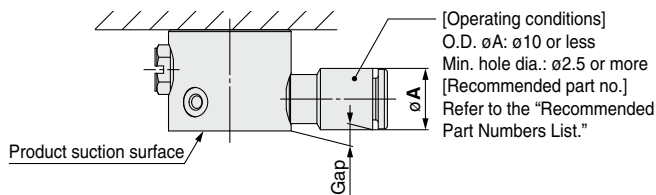
Requires no piping (Body ported)

Side ported

Handling

Use fittings with the following specifications or recommended part numbers.


If the outside diameter of the fitting is too large, it may protrude from the product suction surface, causing interference with workpieces. Also, if the min. hole diameter of the fitting is too small, the performance may not be achieved.



Recommended Part Numbers List

Series	Variations	Model
One-touch fittings	Male connector	KQ2H04-M5□
	Hexagon socket head male connector	KQ2S04-M5□
	Hexagon socket head male connector	KQ2S06-M5□
Metal One-touch fittings	Hexagon socket head male connector	KQB2S04-M5
Miniature fittings	Barb fitting for nylon tubing	M-5AN-6
	Barb fitting for soft tubing	M-5AU-6
Stainless steel One-touch fittings Metal parts: Stainless steel 303	Male connector	KQ2H04-M5G1
	Hexagon socket head male connector	KQ2S04-M5G1
Stainless steel 316 One-touch fittings	Hexagon socket head male connector	KQG2S04-M5
Miniature fittings/ Stainless steel 316	Barb fitting for soft tubing	MS-5AU-6

□: A (Brass), N (Brass + Electroless nickel plating)

 **Safety Instructions** Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.