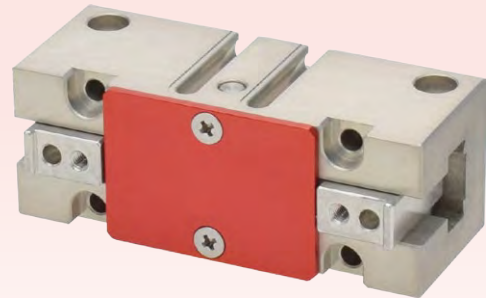


Two-Jaw Chuck

Smart Series

# Two-Jaw Chuck

Model KSC



Powered by Third-Party Source: Smart Series

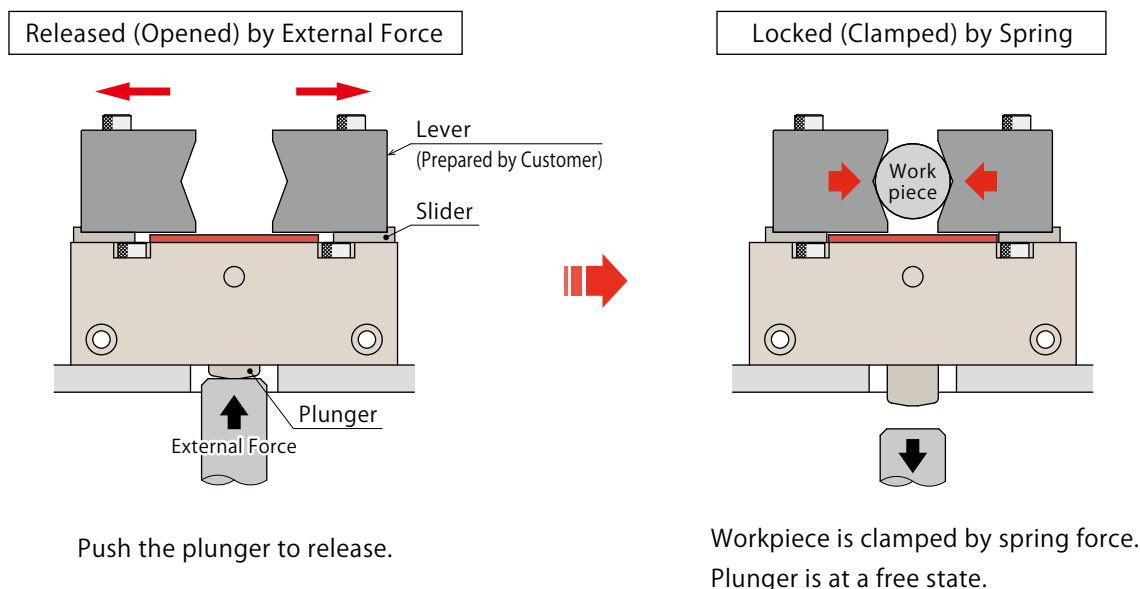
## Spring Lock and External Force to Release

Exclusively for Clamping the Closing Side

### Features

## Holds and Centers Workpiece

※ Exclusively designed for closing side only. Not capable of clamping the opening side by external force.



- **High Accuracy**

Enables high repeatability and is suitable for high-accuracy application.

Repeatability (Slider Direction):  $\pm 0.01$  mm

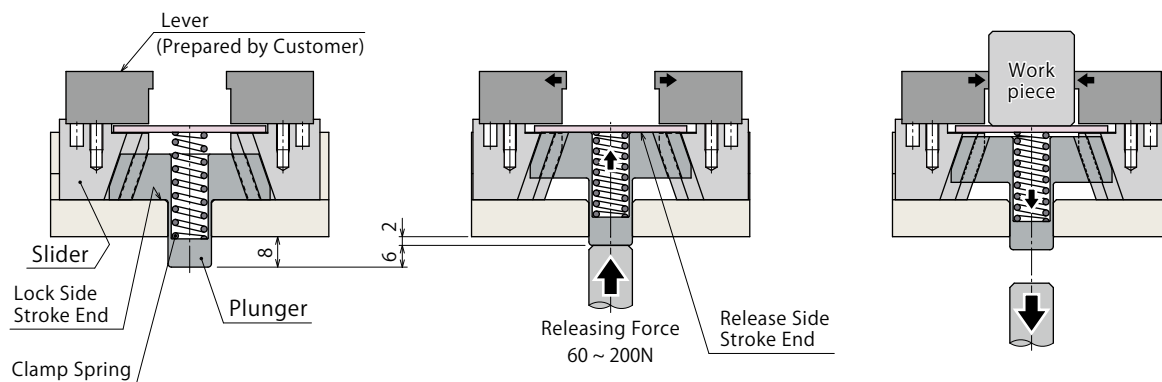
- **Easy to Machine the Mounting Surface of Lever**

Only slot for locating pin and bolt hole need to be machined for mounting the lever.

Complicated serration machining is not required.

## Action Description

※ This is a simplified drawing. Actual components are different.



### Closed State

Pushed by the clamp spring, the plunger is at the lock side stroke end.

※ Clamping force is not exerted in a closed state.

### Opened State

Pushed by releasing force, the plunger is at the release side stroke end.

※ Using outside the range of releasing force may result in failure to open, and damage on the product.

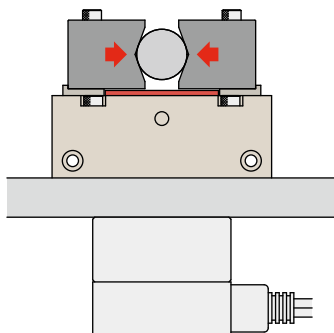
### Clamped State

Workpiece is clamped by the clamp spring.

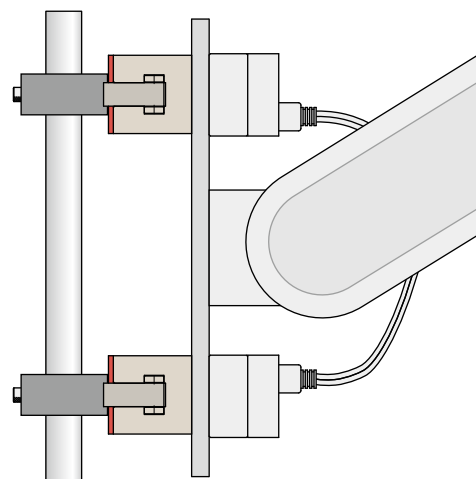
※ Determine a lever shape and clamping point in consideration of workpiece loading/unloading.

## Application Example

### • For Centering Vise



### • For End of Arm Tooling



Model No. Indication

KSC050 0

1

1 Design No.

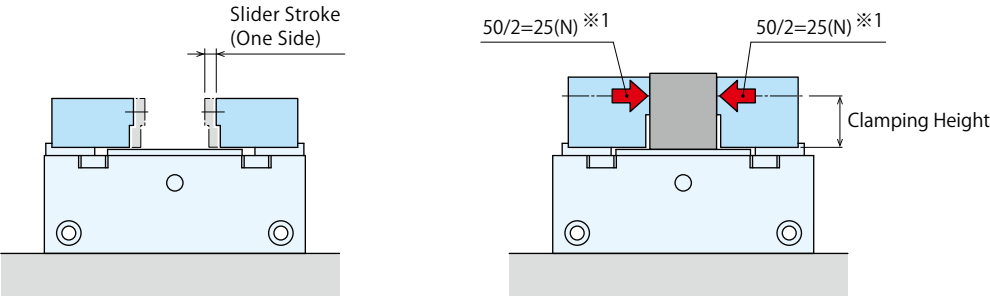
0 : Revision Number

Specifications

Model No.		KSC0500	
Clamping Force ※1		N	About 50
Releasing Force	Minimum	N	60
	Maximum	N	200
Slider Stroke (One Side)		mm	2.5
Max. Clamping Height		mm	30
Repeatability (Slider Direction) ※2		mm	±0.01
Operating Temperature		℃	0 ~ 120
Weight		g	About 110

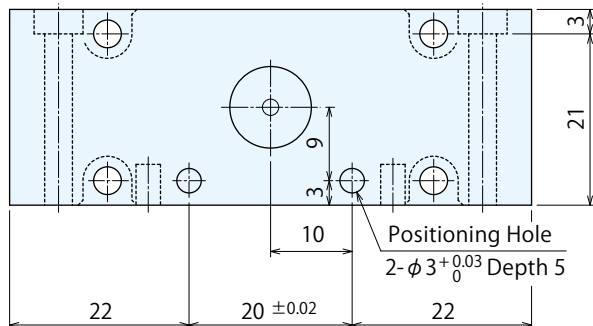
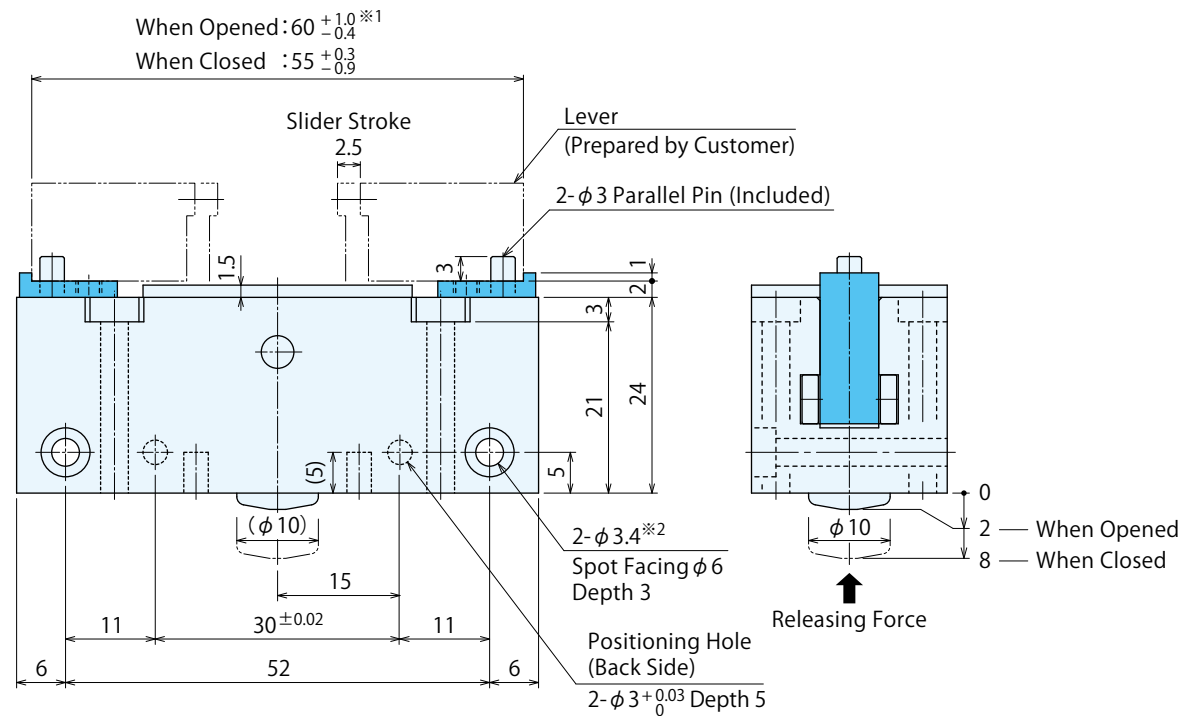
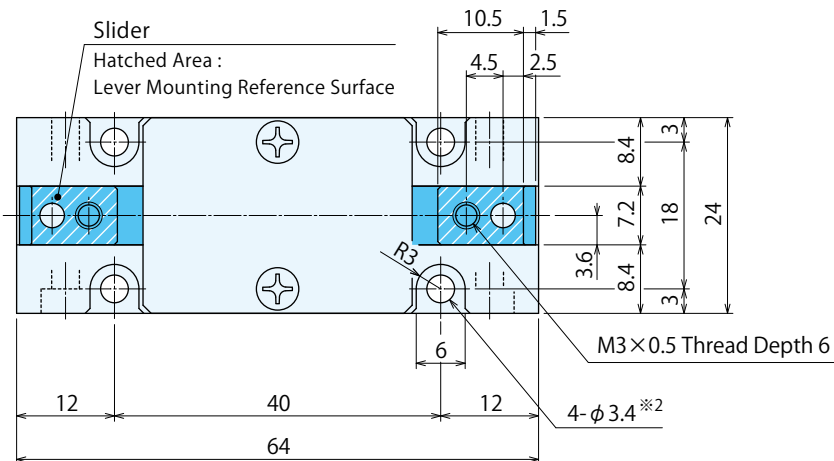
Notes :

- ※1. It shows the total value of clamping force on both sides.  
※2. It shows the repeatability under the same condition (without a load).

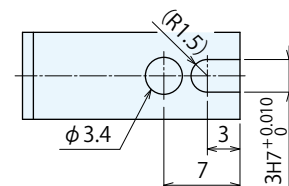
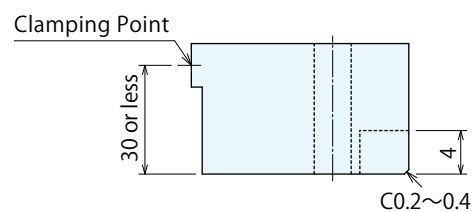


## External Dimensions

※ This drawing shows the opened (released) state of KSC0500.



## Lever Design Dimensions



### Notes :

- ※1. Please determine a clamping point in consideration of dimensional tolerances.
- ※2. Mounting direction of the main body can be selected from either the side or the bottom.
  1. Mounting bolts are not provided with the product. Please prepare them according to the mounting position. (Refer to P.5 'Installation of Two-Jaw Chuck' .)
  2. This product is locked by spring and released by releasing force.
  3. Install levers on the top of the slider when in use.

## Cautions

### Notes for Design

#### 1) Check Specifications

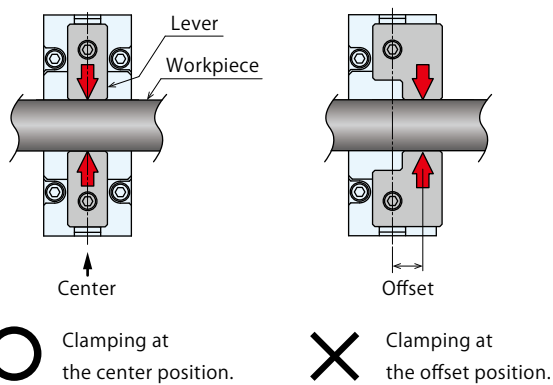
- This product is locked by the built-in spring and released by applying external force. Apply a force in the range shown in the specifications (refer to P.3 Releasing Force) to release. Applying excessive load on the cylinder leads to deformation and galling.
- Please use each product according to the specifications.

#### 2) About Levers

- Install levers on the top surface of the slider according to the shape of the workpiece to be clamped.

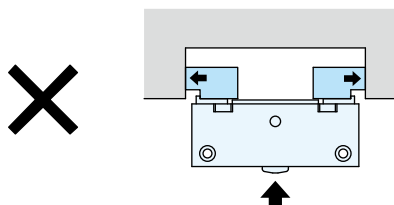
#### 3) Clamp a workpiece at the center of the slider.

- This product is not applicable for offset clamping.



#### 4) Do Not Clamp in Opening Direction

- This product is designed for clamping the closing side only and incapable of clamping the opening side by external force.



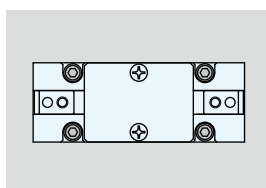
#### 5) Operating Environment

This product has no function that prevents foreign substances. Do not use under environment with coolant and cutting chips.

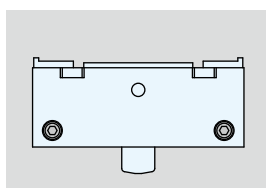
#### 6) Mounting Direction of Main Body

Mounting direction of the main body can be selected from either the side or the bottom.

Please prepare the number of mounting bolts according to the mounting direction.



Mounting from the bottom  
Number of Mounting Bolts : 4



Mounting from the side  
Number of Mounting Bolts : 2

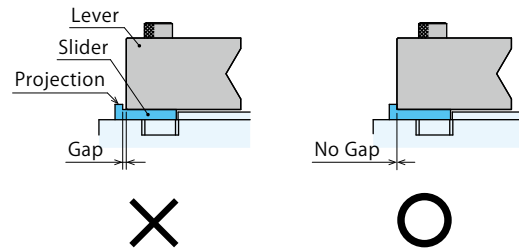
### Installation Notes

#### 1) Installation of the Lever

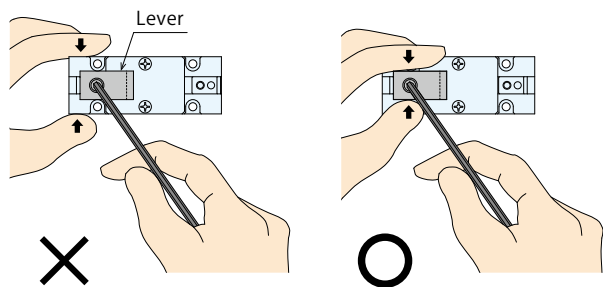
- Use hexagonal socket bolts and tighten them with the torque shown in the list below. Installation failure causes the deformation of lever and decrease of clamping force.

Model No.	Mounting Bolt Size	Tightening Torque (N·m)
KSC0500	M3×0.5	1.3

- The lever should be extended to the projection at the top of the slider.



- Hold the lever when mounting and removing to avoid applying torque directly to the slider.



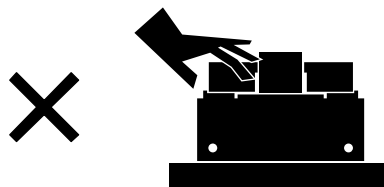
#### 2) Installation of Two-Jaw Chuck

- Use hexagonal socket bolts in multiple bolt holes according to the mounting direction and tighten them with the torque in the list below.

Model No.	Mounting Bolt Size	Tightening Torque (N·m)
KSC0500	M3×0.5	1.3

## ● Notes on Handling

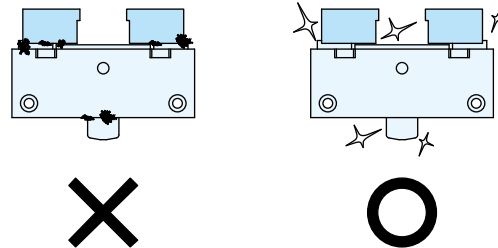
- 1) It should be operated by qualified personnel.
  - Machines and devices should be operated and maintained by qualified personnel.
- 2) Do not operate or remove the product unless the safety protocols are ensured.
  - ① Machines and devices can only be inspected or prepared when it is confirmed that the safety devices are in place.
  - ② Before the product is removed, make sure that the above-mentioned safety devices are in place. Shut off the pressure and power source, and make sure no external force is applied to the product.
  - ③ After stopping the product, do not remove until the temperature drops.
  - ④ Make sure there is no trouble/issue in the bolts and respective parts before restarting a machine or device.
- 3) Do not touch a cylinder or workpiece while it is working.
  - Otherwise, your hands may be injured.



- 4) Do not disassemble or modify.
  - Contains a powerful spring which is dangerous. If the product is taken apart or modified, the warranty will be voided even within the warranty period.

## ● Maintenance and Inspection

- 1) Removal of the Product and Shut-off of Pressure Source
  - Before the product is removed, make sure that safety devices and preventive devices are in place. Shut off the pressure and power source, and make sure no external force is applied to the product.
  - Make sure there is no trouble/issue in the bolts and respective parts before restarting.
- 2) Regularly clean the clamping part.
  - If it is used when the lever and the surface of moving parts are contaminated with dirt, it may lead to malfunctioning.



- 3) Regularly tighten mounting bolts to ensure proper use.
- 4) Make sure there is a smooth action without an irregular noise.
  - Especially when it is restarted after left unused for a long period, make sure it can be operated correctly.
- 5) The product should be stored in the cool and dark place without direct sunshine or moisture.
- 6) Please contact us for overhaul and repair.
  - Contains a powerful spring which is dangerous.

## ● Warranty

- 1) Warranty Period
  - The product warranty period is 18 months from shipment from our factory or 12 months from initial use, whichever is earlier.
- 2) Warranty Scope
  - If the product is damaged or malfunctions during the warranty period due to faulty design, materials or workmanship, we will replace or repair the defective part at our expense. Defects or failures caused by the following are not covered.
    - ① If the stipulated maintenance and inspection are not carried out.
    - ② Failure caused by the use of the non-confirming state at the user's discretion.
    - ③ If it is used or operated in an inappropriate way by the operator. (Including damage caused by the misconduct of the third party.)
    - ④ If the defect is caused by reasons other than our responsibility.
    - ⑤ If repair or modifications are carried out by anyone other than Kosmek, or without our approval and confirmation, it will void warranty.
    - ⑥ Other caused by natural disasters or calamities not attributable to our company.
    - ⑦ Parts or replacement expenses due to parts consumption and deterioration. (Such as rubber, plastic, seal material and some electric components.)

Damages excluding from direct result of a product defect shall be excluded from the warranty