

Reach Clamp

# Smart Series Reach Clamp

Model KSR



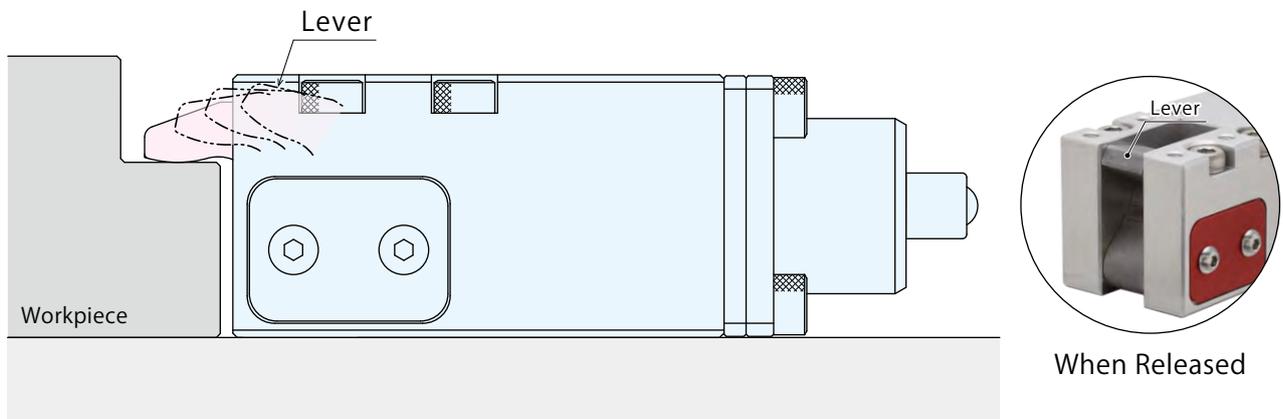
Powered by Third-Party Source: Smart Series

## Spring Clamp and External Force to Release

The lever is fully retracted when released allowing for easy loading/unloading of workpieces.

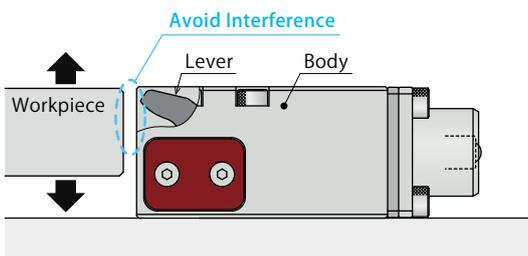
### Features

## Lever Completely Retracted when Released



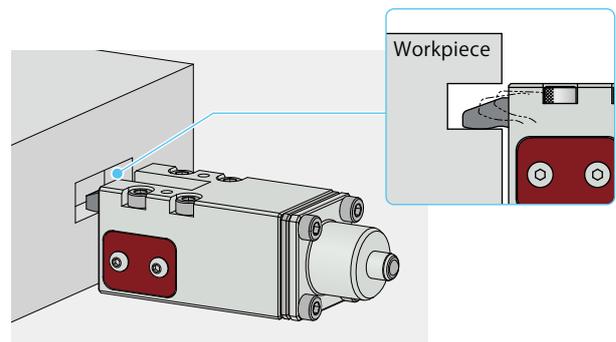
- **Avoid interference with a workpiece**

The lever is retracted inside the body when released to avoid interference with a workpiece when loading and unloading.



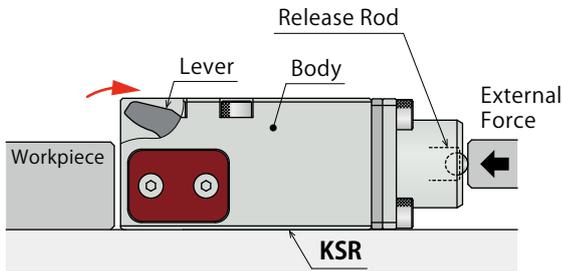
- **Enables to clamp difficult clamping points**

The compact lever-operating range enables to clamp difficult clamping points.



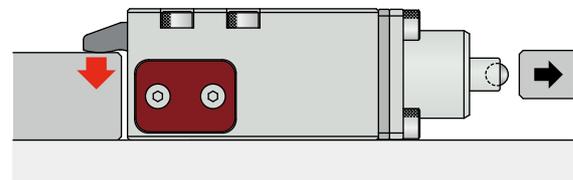
## Action Description

### Released by External Force



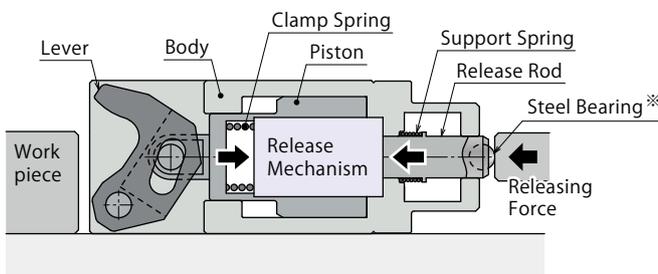
Push the release rod to release.

### Locked by Spring



Workpiece is clamped by spring force.  
Release rod is at a free state.

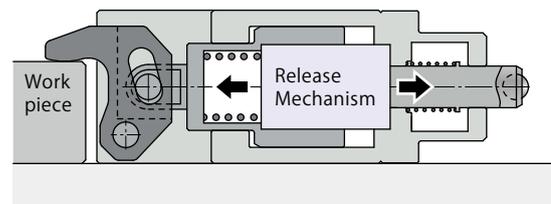
## Internal Structure Drawing



### Released State

Apply force to the release rod to unclamp.  
The piston moves backwards to release.

※ Designed to prevent the steel bearing from falling off the release rod.



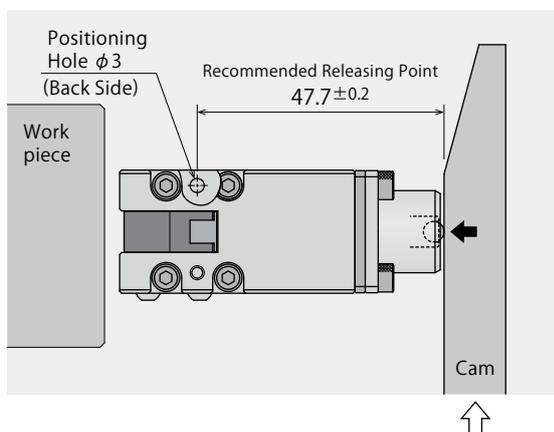
### Locked State

The piston moves forward with the built-in spring force to clamp a workpiece when applied force is reduced to zero.

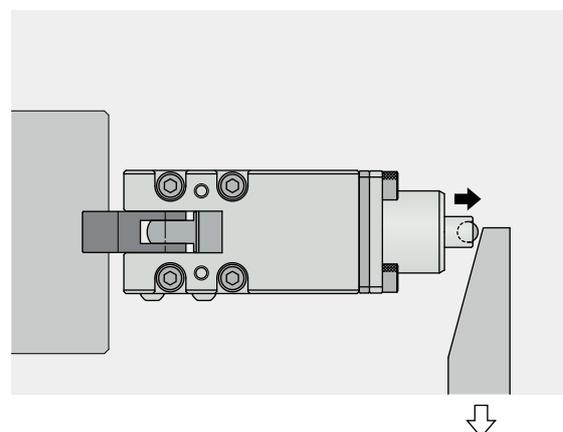
## Application Example

### Operation by sliding cam

#### When Released



#### When Locked



● Model No. Indication

**KSR015 0**

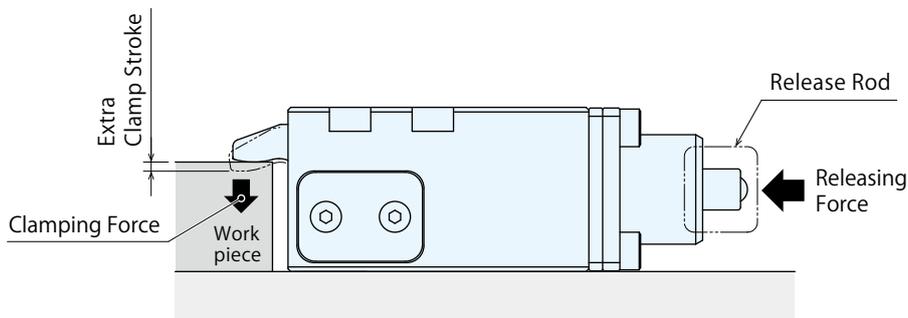
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1 Design No.

0 : Revision Number

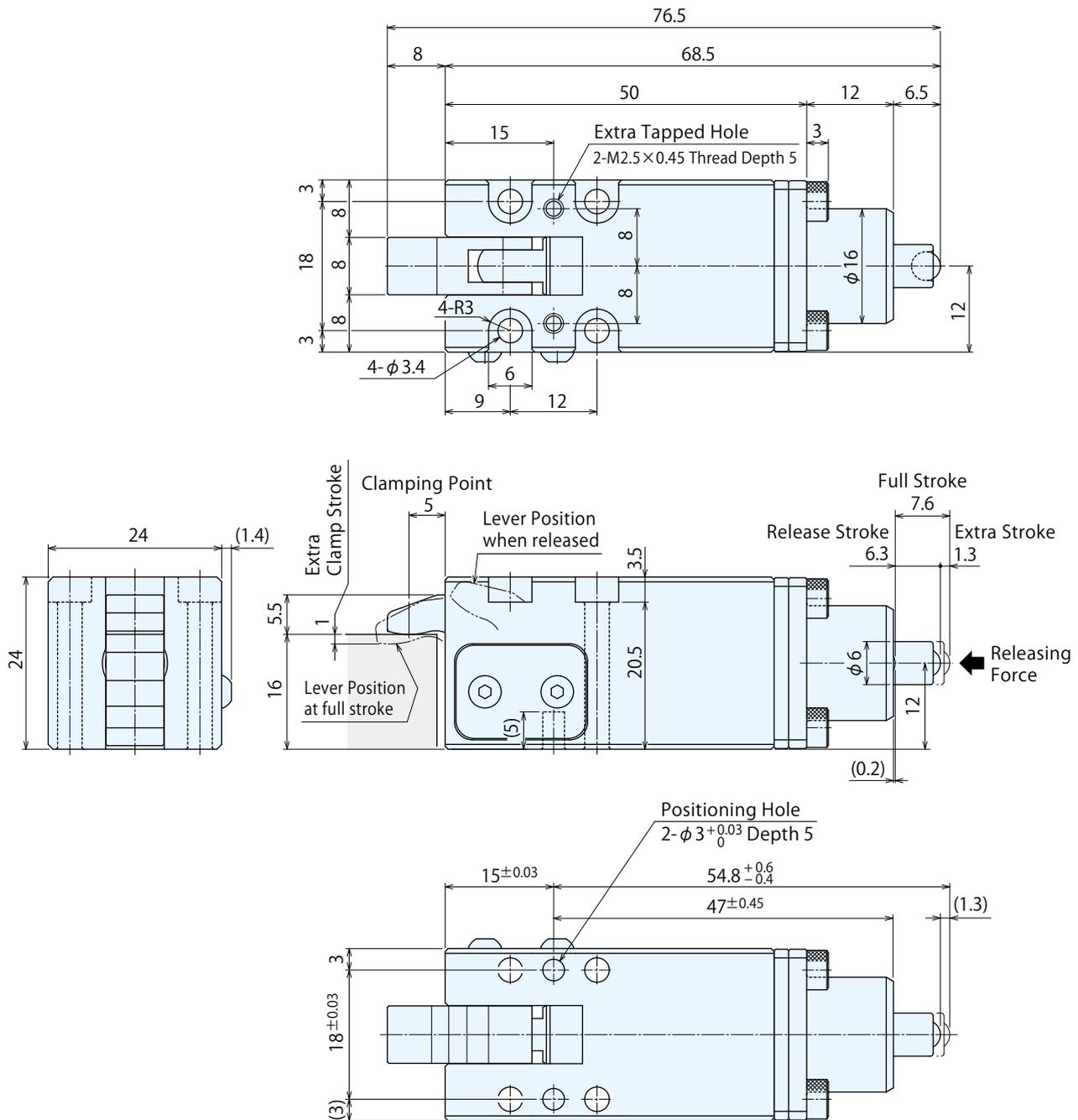
● Specifications

Model No.		<b>KSR0150</b>	
Clamping Force	N	About 13	
Extra Clamp Stroke	mm	1.0	
Releasing Force	Minimum	N	About 50
	Maximum	N	About 100
Release Rod	Full Stroke	mm	7.6
	Release Stroke	mm	6.3
	Extra Stroke	mm	1.3
Operating Temperature	°C	0 ~ 120	
Weight	g	110	



## External Dimensions

※ This drawing shows the locked state of KSR0150.



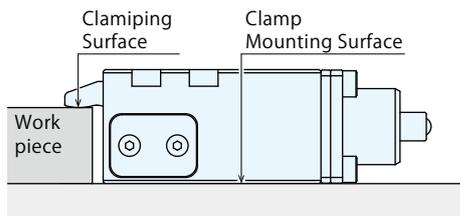
### Notes :

1. Mounting bolts are not provided with the product. Please prepare them separately.
2. This product is locked by spring and released by releasing force.

**Cautions**

● **Notes for Design**

- 1) Check Specifications
  - This product is locked by the built-in spring and released by applying external force.  
Apply force within the range shown in specifications sections (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) Clamp Mounting Surface and Clamping Surface must be Parallel
  - Clamping on a sloped surface causes workpiece misalignment and clamp lever slippage, resulting in failure of proper clamping operation.



- 3) Protective Cover Installation
  - If the moving parts of the clamp may endanger human life, please install a protection cover.  
(Use extra tapped holes (M2.5x0.45 thread) on the clamp top. )
- 4) External Force and Release Mechanism
  - There are variations of the release rod due to product manufacturing. Use shims, etc. to adjust the position of the release rod according to the release mechanism.
- 5) Operating Environment
 

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

● **Installation Notes**

- 1) Installation of the Product
  - When installing the product, use 4 hexagonal socket bolts and tighten them with the torque shown in the list below.  
Also, tighten them evenly to prevent tilting of the product.

Model No.	Mounting Bolt Size	Tightening Torque (N·m)
KSR0150	M3×0.5	1.3
- 2) Trial Operation Method
  - Just after installation, extremely high operating speed may cause serious damage to the clamp.  
Make sure to check the operating speed while trial operation.

● **Notes on Handling**

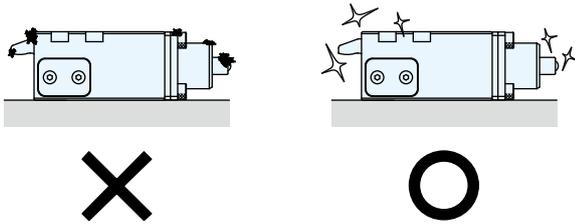
- 1) It should be operated by qualified personnel.
  - Machines and devices should be operated and maintained by qualified personnel.
- 2) Do not operate or remove the product unless the safety protocols are ensured.
  - ① Machines and devices can only be inspected or prepared when it is confirmed that 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