

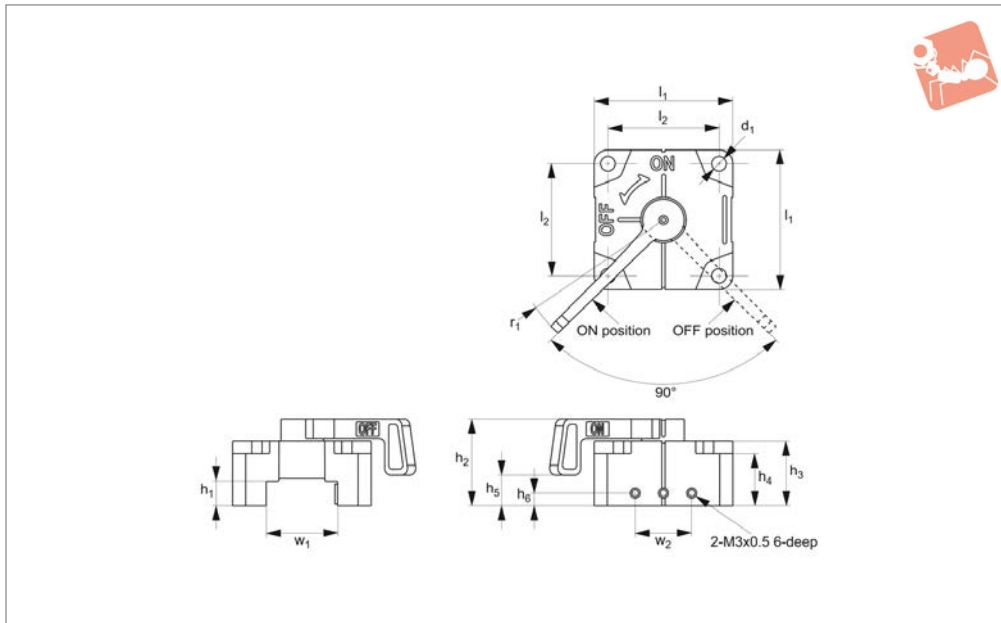


# Sliding Clamps - for Solid Sliding Bar

quarter turn lock - lever handle grip - zinc



One Touch Fasteners



33973

ONE TOUCH FASTENERS

### Material

Body: die-cast zinc, chrome plated.  
 Handle: stainless steel SUS304.  
 Clamping shaft/wedge: stainless steel.  
 Flat spring: phosphor bronze.

### Technical Notes

Sliding clamps are ideal for the quick positioning, locking, releasing and re-positioning of sliding bars in many applications. When additionally used with a scale plate (see part no. 33975, 33976 and 33977), the reading line on the sliding clamp enables quick, easy and accurate alignment.

The sliding clamp is mounted, for greater stability, in a fixed position in an assembly. With the clamp set to its off position the sliding bar (not supplied) can be moved

left or right, with two spring loaded ball plungers provide for free movement of bar. Once in its desired position the sliding bar can be locked in place, through a 90 degree turn of the sliding clamp's handle which engages the clamp's clamping shaft/wedge.

Please see technical diagram below for recommended machining details for your sliding bar (not supplied). Riser plates can be used to provide clearance between sliding bar and mounting surface to improve free running of sliding bar, see part no. 33974.

Temperature resistance upto 90°C.  
 Max. static load upto 800N - please refer to performance graph below.

### Important Notes

Sliding clamps are suited only to straight linear movement of sliding bar (not supplied), and do not tolerate any other applied loads.

Displacement of sliding bar, through repetitive use, will increase if excessive shock or vibration is present. Do not use sliding clamp in vertical applications where vibration is present.

Displacement will also increase with adhesion or immersion of oil or other foreign substances.

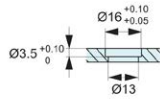
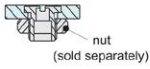
Ensure sliding bar is not bent nor warped as this may cause the sliding bar to slip even when sliding clamp is in its on position.

Order No.	For bar width x height	Handle	d <sub>1</sub>	h <sub>1</sub> +0.02	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	h <sub>6</sub>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub> +0.05 - 0.0	w <sub>2</sub>	r <sub>1</sub>	Static load N max.	Weight g
33973.W2122	12x12	Stainless	4,5	12	29	22	18,5	11	6,0	40	32	12	20	46,0	500	150
33973.W2166	16x16	Stainless	4,5	16	33	26	22,5	15	8,0	40	32	16	20	46,0	500	160
33973.W2250	25x 9	Stainless	5,5	9	31	23	18,5	11	4,5	50	40	25	20	55,5	800	250
33973.W2252	25x12	Stainless	5,5	12	34	26	21,5	14	6,0	50	40	25	20	55,5	800	250
33973.W2322	32x12	Stainless	5,5	12	34	26	21,5	14	6,0	50	40	32	20	55,5	800	320
33973.W2326	32x16	Stainless	5,5	16	38	30	25,5	18	8,0	50	40	32	20	55,5	800	270



installation dimensions for magnetic hold locating bush

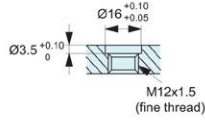
for installation in a plate of thickness ranging from 6mm to 10mm, use a nut for fastening



for installation in a plate of thickness over 10mm, use a screw-in method

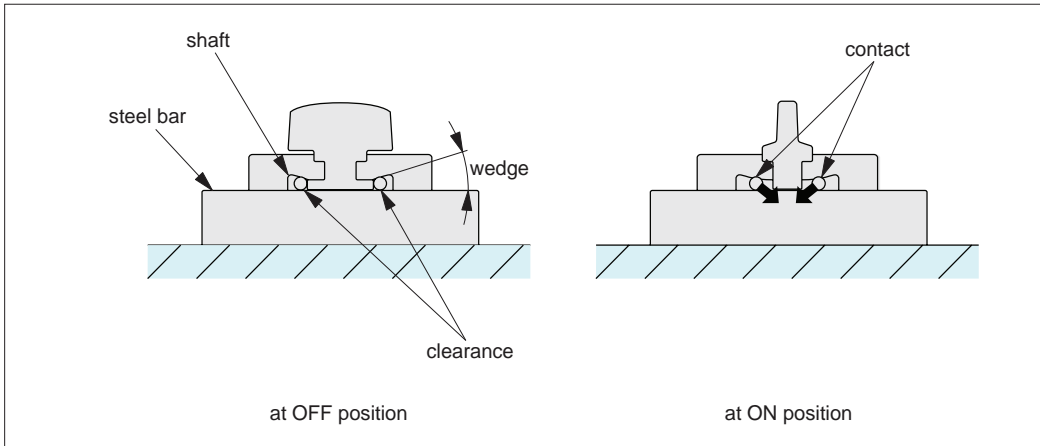


for use of 2pcs or more, the spacing tolerance should be  $\pm 0.1$





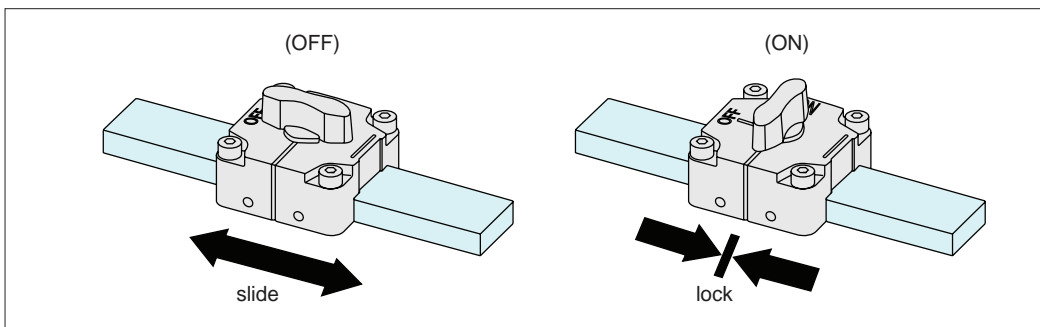
### Operating Principle



You can slide the steel bar when the knob is at the "OFF" position since there is clearance between the steel bar and the shafts.

The steel bar is locked when the knob is at the "ON" position since the shafts are pushed by the wedge.

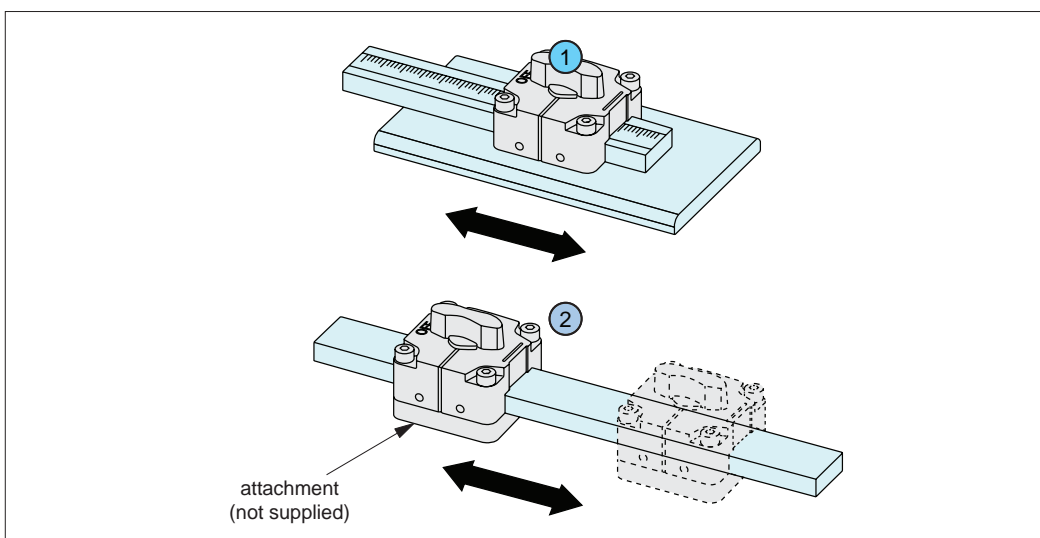
### Operating Instructions



The steel bar can slide to right and left at the "OFF" position.

The steel bar is locked at the "ON" position.

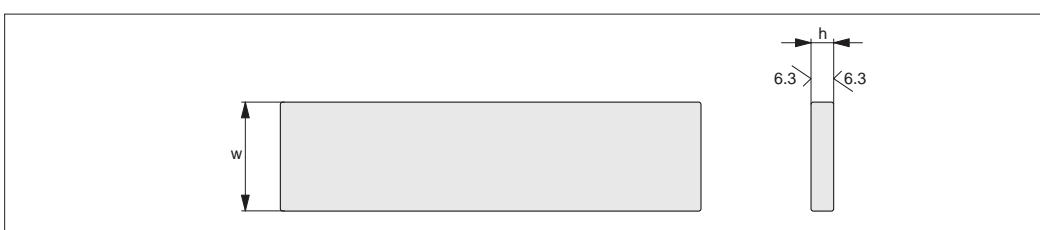
Note: The knob clicks at the "ON" and "OFF" positions, and this enables the operators to lock/unlock securely.



### How to use

Please refer to notes for safe use (see last page of guide).

- 1 Slide the steel bar.
- 2 Slide the sliding locks for square bar.



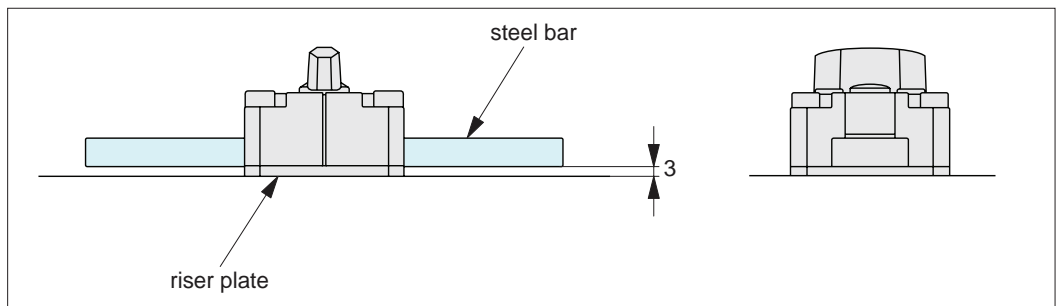
### How to use steel bar materials

Usable Materials: Flat bar (JIS h14 grade) made of SS400, S45C or SUS304 etc.



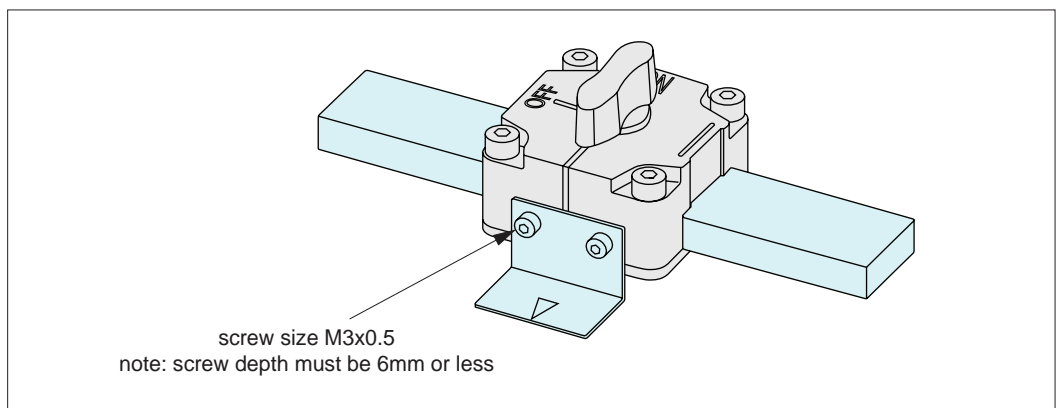
**How to Use Riser Plate**

Riser plates (to be ordered separately) can lift the steel bar to create a clearance between the steel bar and the base.



**How to Use Tapped Holes on Side Surface**

Can be used with attachments such as pointer plates and brackets.



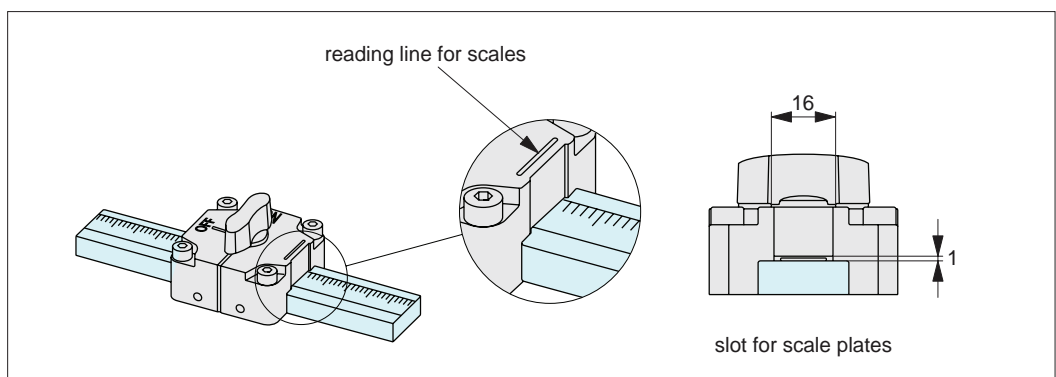
**How to Use Scale Plate**

Scale plate can be put on the steel bar.

Note: Fit scale plate inside the slot in the figure below. Putting scale plate outside the slot cause interference between scale plate and sliding lock.

Scale plate is separately available.

See ranges 33975, 33976 and 33977.





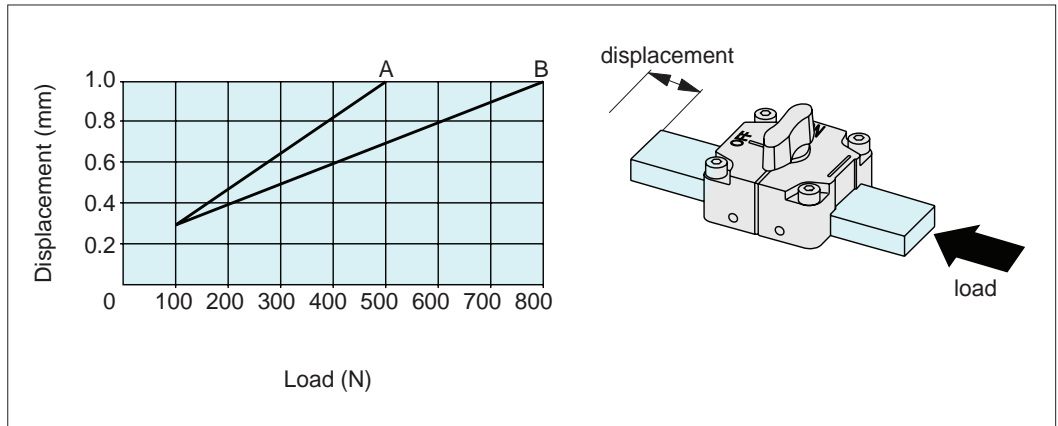
## Performance Curve

### Displacement of Steel Bar by Axial Load (static load from single direction)

A: For bar width x heights; 12x12mm and 16x16mm.

B: For bar width x heights; 25x9, 25x12, 32x12, 32x16.

Note: This data is for a flat bar made of SUS304 stainless steel, SS400 steel and S45C steel. Using an aluminium flat bar, the surface will be scratched or dented by applied load.



## Notes

- Ensure that the knob is at the "OFF" position when mounting. Mounting of sliding locks at the "ON" position may cause damage.
- The displacement will increase with excess shock or vibration. Do not use this product vertically in environments where excess vibration is present.
- The displacement can increase with adhesion or contamination by oil or foreign substances.
- If the steel plate slips or chatters by the load applied to the steel plate, prepare guides or supports as needed. (See figure 1 and 2 below)
- Excess displacement or misalignment may be caused if there is a clearance between the steel bar and the base when the sliding locks at "ON" position. (See figure 3 below) Ensure that the steel plate and the base are not bent or warped.

