

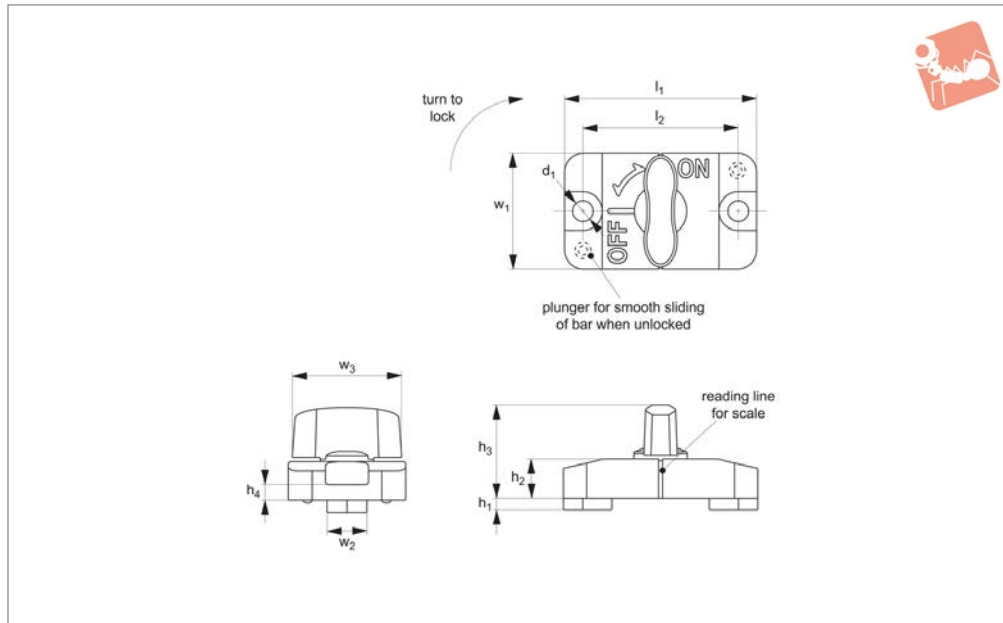


# Sliding Clamps - for Slotted Hole

quarter turn lock - t-handle grip - zinc



One Touch Fasteners



33970

ONE TOUCH FASTENERS

### Material

Body: die-cast zinc, chrome plated.  
 Grip: polyamide plastic (black or orange), or stainless steel SUS304.  
 Clamping shaft/wedge: stainless steel.  
 Ball plunger: polyacetal.

### 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. 33971.

Temperature resistance up to 90°C.  
 Max. static load up to 500N - 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 slot width	Handle	Slot depth min.	d <sub>1</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	Weight g
33970.W0103	10	Plastic, Orange	3	5.5	3	10	24	4.5	80
33970.W0106	10	Plastic, Orange	6	5.5	6	10	24	4.5	80
33970.W1103	10	Plastic, Black	3	5.5	3	10	24	4.5	80
33970.W1106	10	Plastic, Black	6	5.5	6	10	24	4.5	80
33970.W2103	10	Stainless	3	5.5	3	10	24	4.5	95
33970.W2106	10	Stainless	6	5.5	6	10	24	4.5	95

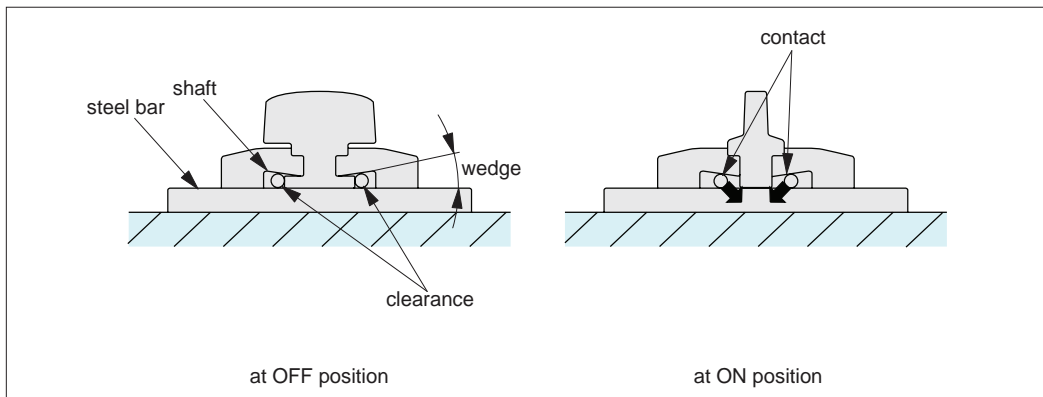
Order No.	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub>	w <sub>2</sub> 0 -0.05	w <sub>3</sub>	Static load N max.
33970.W0103	50	40	30	10	28	500
33970.W0106	50	40	30	10	28	500
33970.W1103	50	40	30	10	28	500
33970.W1106	50	40	30	10	28	500



Order No.	$l_1$	$l_2$	$w_1$	$w_2$ 0 -0.05	$w_3$	Static load N max.
<b>33970.W2103</b>	50	40	30	10	28	500
<b>33970.W2106</b>	50	40	30	10	28	500



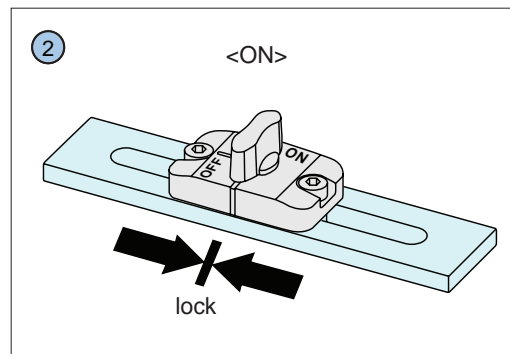
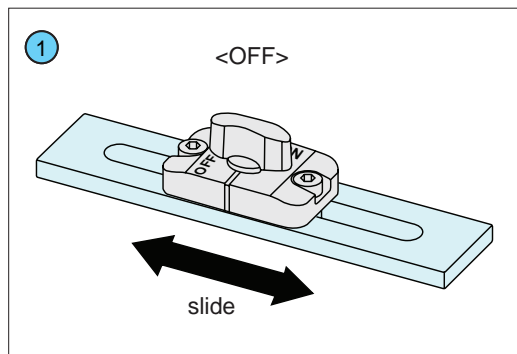
### Operating Principle



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.

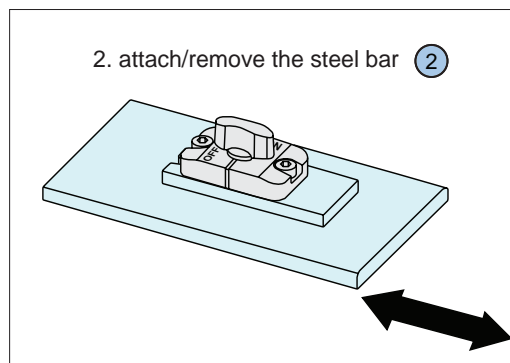
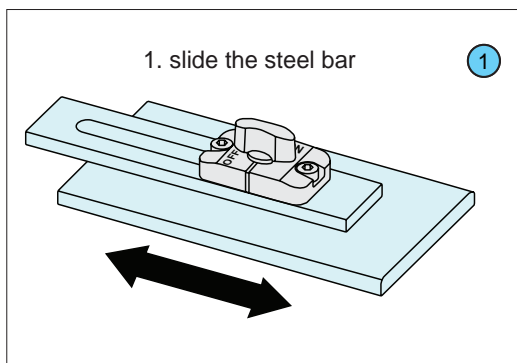
### Operating Instructions



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

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

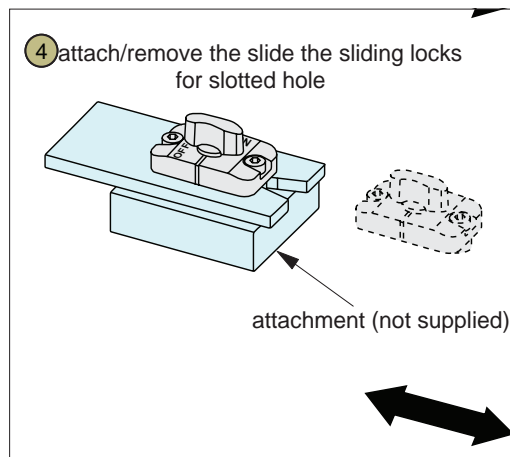
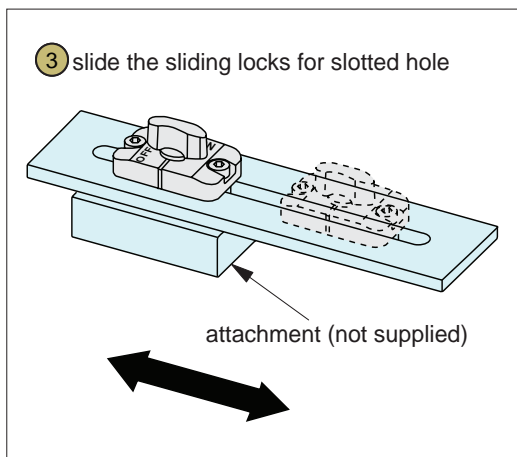
Note: The knob clicks at the "ON" and "OFF" positions, and this gives the operator confirmation it has locked/unlocked securely.



### How to Use

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

- 1 Slide the steel bar.
- 2 Attach/remove the steel bar.
- 3 Slide the sliding locks for slotted hole.
- 4 Attach/remove the sliding locks for slotted hole.



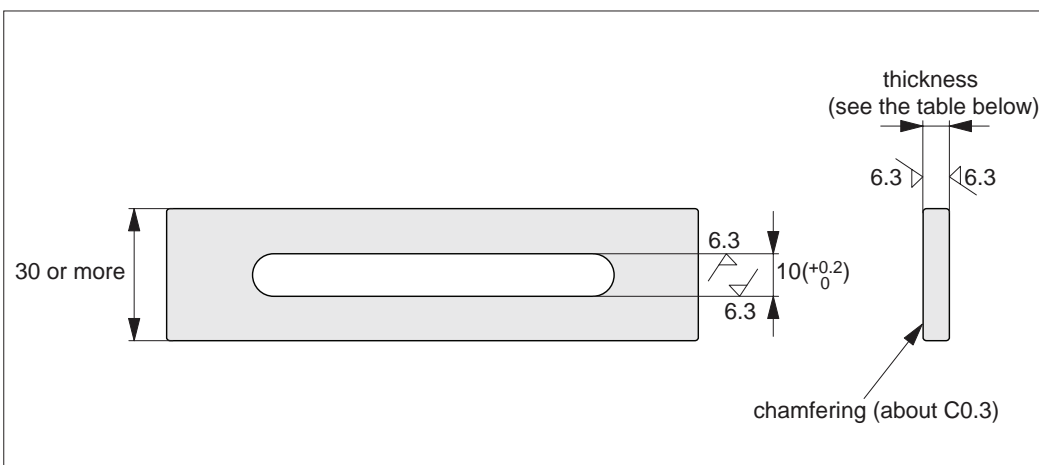


### How to Use Steel Bar Materials

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

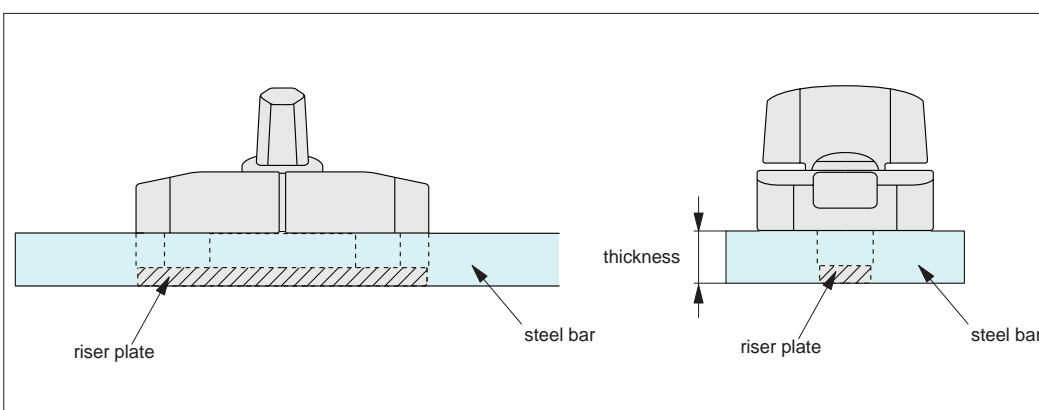
Machining of slotted hole: Recommended tolerance of the slotted hole to prevent chattering is shown left.

For more accurate sliding, machine the slotted hole to fit the dimension of 10mm (-0.05 to 0) on the bottom of sliding locks. Remove the burr around the slotted hole to ensure locking.



### How to Use Riser Plate

Can be used for various steel thicknesses by attaching the riser plates (ordered separately, see 33971).

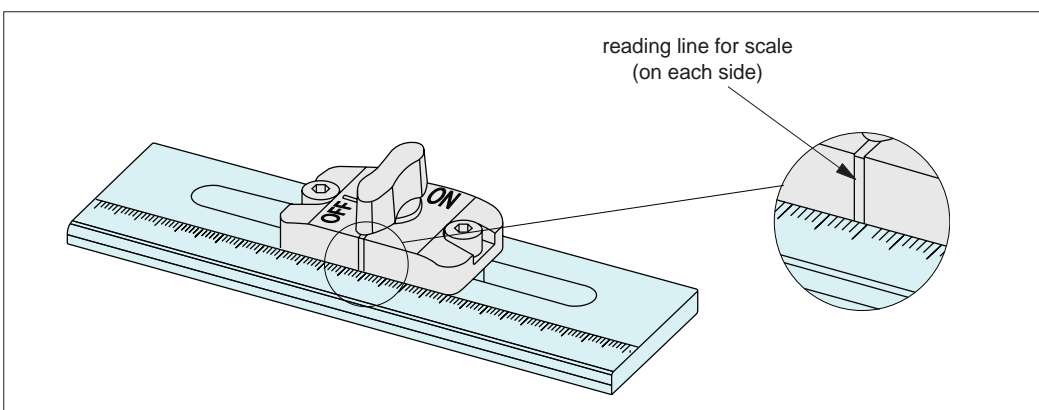


### How to Use Scale Plate

You can read the scale with the line on the body of the sliding lock.

Scale plate is separately available.

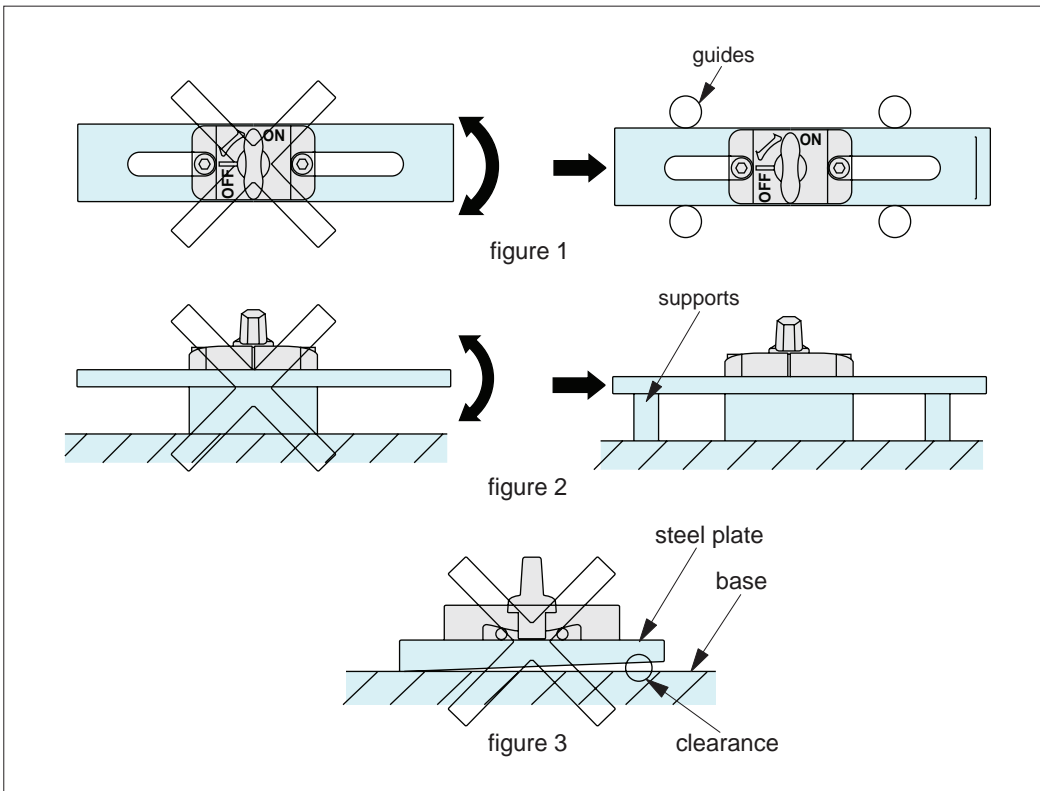
See ranges 33975, 33976 and 33977.



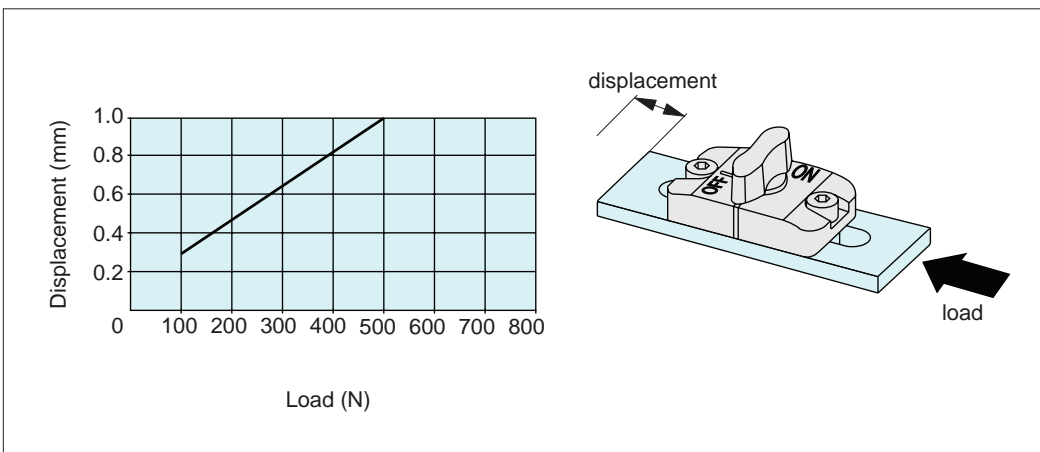


### Notes

- 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 the "ON" position. (See figure 3 below) Ensure that the steel plate and the base are not bent or warped.



### Performance Curve

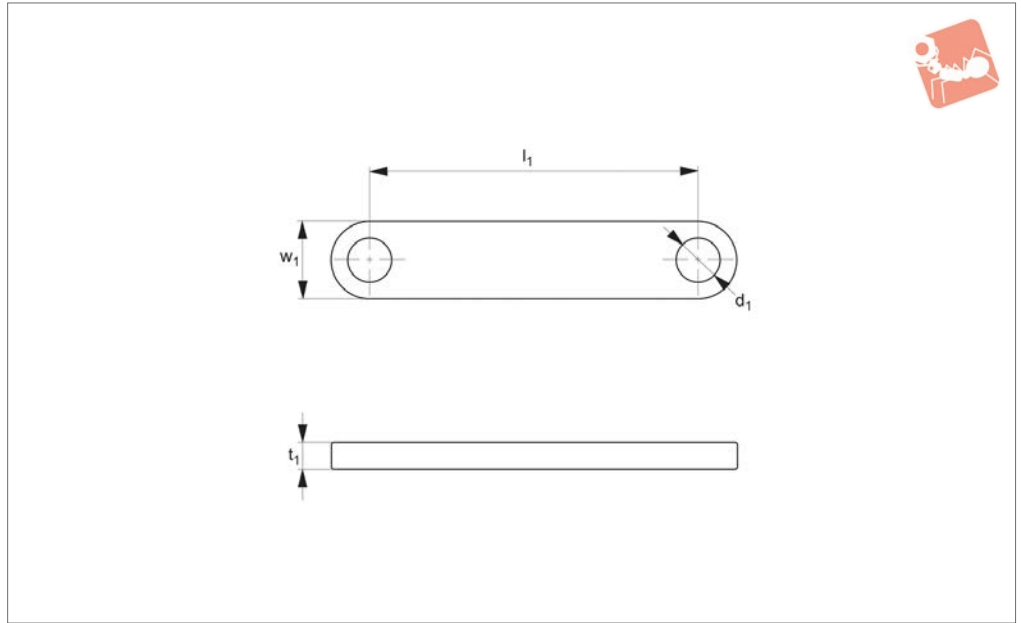


### The Displacement of Steel Bar by Axial Load (static load from single direction)

Note: The 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 dent by applied load.



**33971**



**Material**

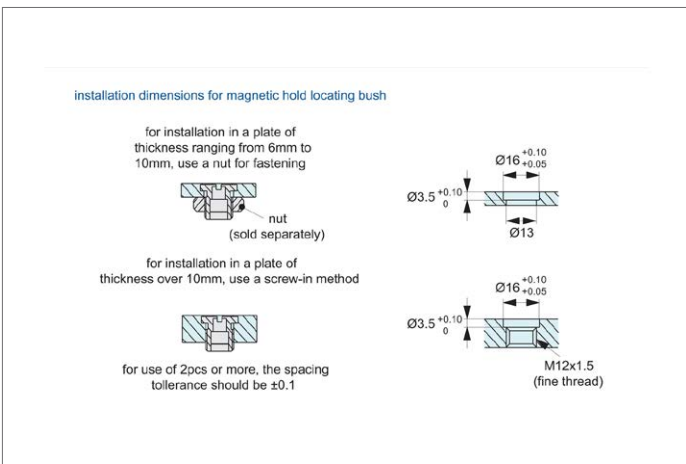
Body: 304 stainless steel.

of riser plate to clamp enables clamps use for sliding bars of varying thickness.

**Technical Notes**

For use with sliding clamp 33970, addition

Order No.	d <sub>1</sub>	l <sub>1</sub>	w <sub>1</sub>	t <sub>1</sub>	Weight g
33971.W0002	5.5	40	9.5	2	6
33971.W0003	5.5	40	9.5	3	10



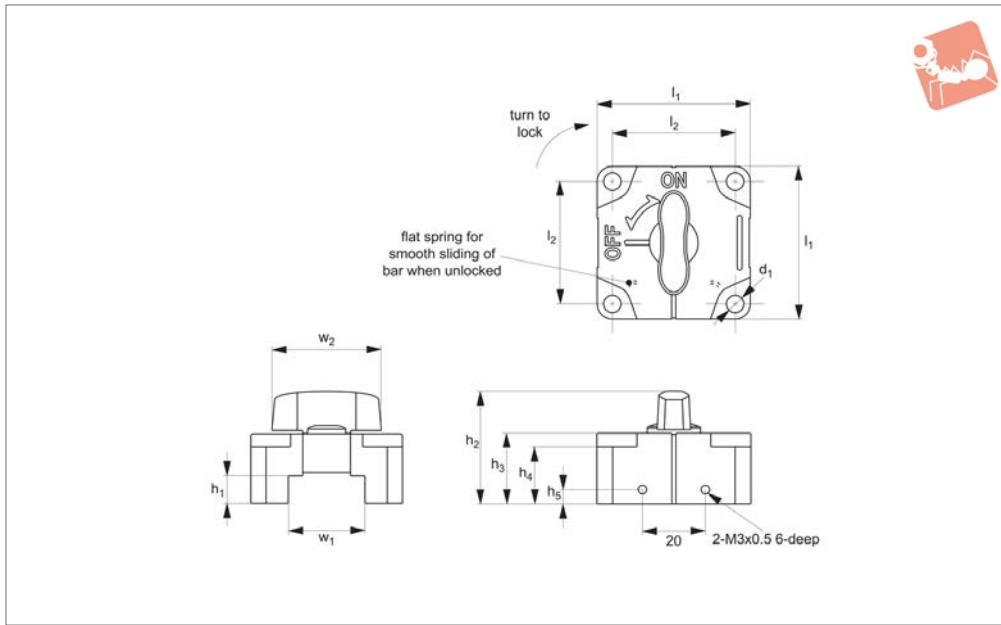


# Sliding Clamps - for Solid Sliding Bar

quarter turn lock - t-handle grip - zinc



One Touch Fasteners



33972

ONE TOUCH FASTENERS

### Material

Body: die-cast zinc, chrome plated.  
 Grip: polyamide plastic (black or orange), or 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 up to 90°C.  
 Max. static load up to 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>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub> +0.05	w <sub>2</sub> -0.0	Weight g
33972.W0122	12x12	Plastic, orange	4.5	12	36	22	18.5	6.0	40	32	12	28	130
33972.W0166	16x16	Plastic, orange	4.5	16	40	26	22.5	8.0	40	32	16	28	150
33972.W0250	25x 9	Plastic, orange	5.5	9	37	23	18.5	4.5	50	40	25	35	220
33972.W0252	25x12	Plastic, orange	5.5	12	40	26	21.5	6.0	50	40	25	35	240
33972.W0322	32x12	Plastic, orange	5.5	12	40	26	21.5	6.0	50	40	32	35	220
33972.W0326	32x16	Plastic, orange	5.5	16	44	30	25.5	8.0	50	40	32	35	240
33972.W1122	12x12	Plastic, black	4.5	12	36	22	18.5	6.0	40	32	12	28	130
33972.W1166	16x16	Plastic, black	4.5	16	40	26	22.5	8.0	40	32	16	28	150
33972.W1250	25x 9	Plastic, black	5.5	9	37	23	18.5	4.5	50	40	25	35	220
33972.W1252	25x12	Plastic, black	5.5	12	40	26	21.5	6.0	50	40	25	35	240
33972.W1322	32x12	Plastic, black	5.5	12	40	26	21.5	6.0	50	40	32	35	220
33972.W1326	32x16	Plastic, black	5.5	16	44	30	25.5	8.0	50	40	32	35	240
33972.W2122	12x12	Stainless	4.5	12	36	22	18.5	6.0	40	32	12	28	145
33972.W2166	16x16	Stainless	4.5	16	40	26	22.5	8.0	40	32	16	28	165
33972.W2250	25x 9	Stainless	5.5	9	37	23	18.5	4.5	50	40	25	35	245

# One Touch Fasteners



## Sliding Clamps - for Solid Sliding Bar

quarter turn lock - t-handle grip - zinc



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>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub> +0.05 -0.0	w <sub>2</sub>	Weight g
<b>33972.W2252</b>	25x12	Stainless	5.5	12	40	26	21.5	6.0	50	40	25	35	265
<b>33972.W2322</b>	32x12	Stainless	5.5	12	40	26	21.5	6.0	50	40	32	35	245
<b>33972.W2326</b>	32x16	Stainless	5.5	16	44	30	25.5	8.0	50	40	32	35	265

ONE TOUCH FASTENERS



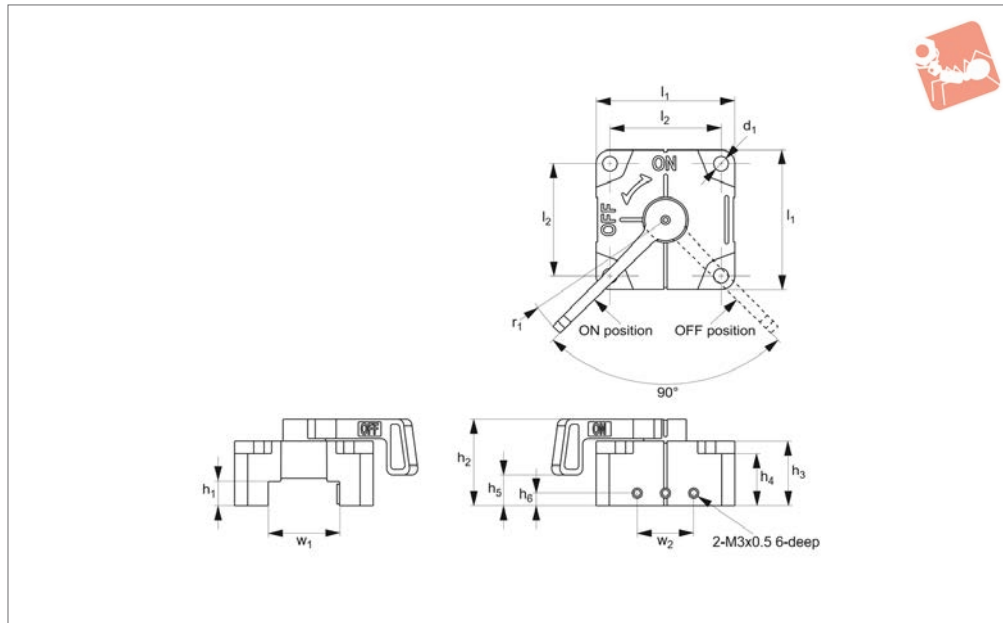


# Sliding Clamps - for Solid Sliding Bar

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.

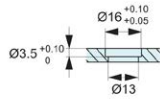
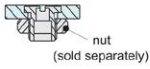
Ensure sliding bar is not bent nor warped as this may cause the sliding bar to slip even when sliding clamp is in its on position.

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

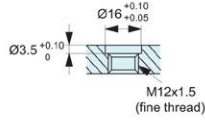
for installation in a plate of thickness ranging from 6mm to 10mm, use a nut for fastening



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

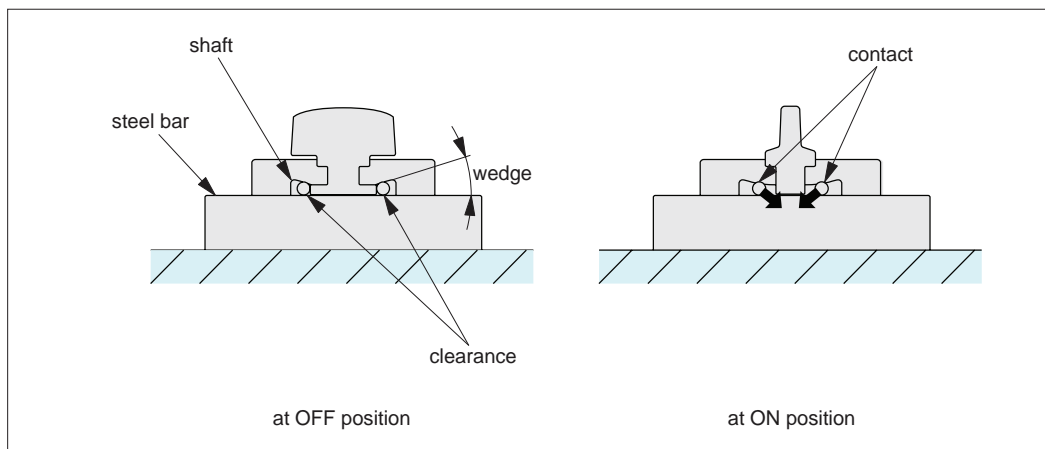


for use of 2pcs or more, the spacing tolerance should be  $\pm 0.1$





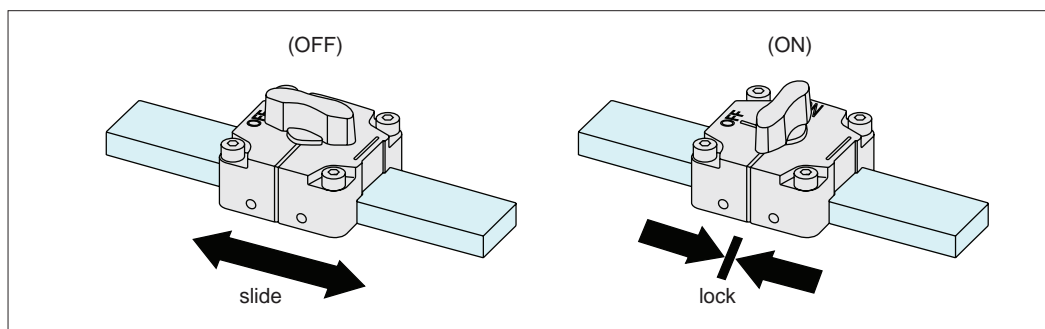
### Operating Principle



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.

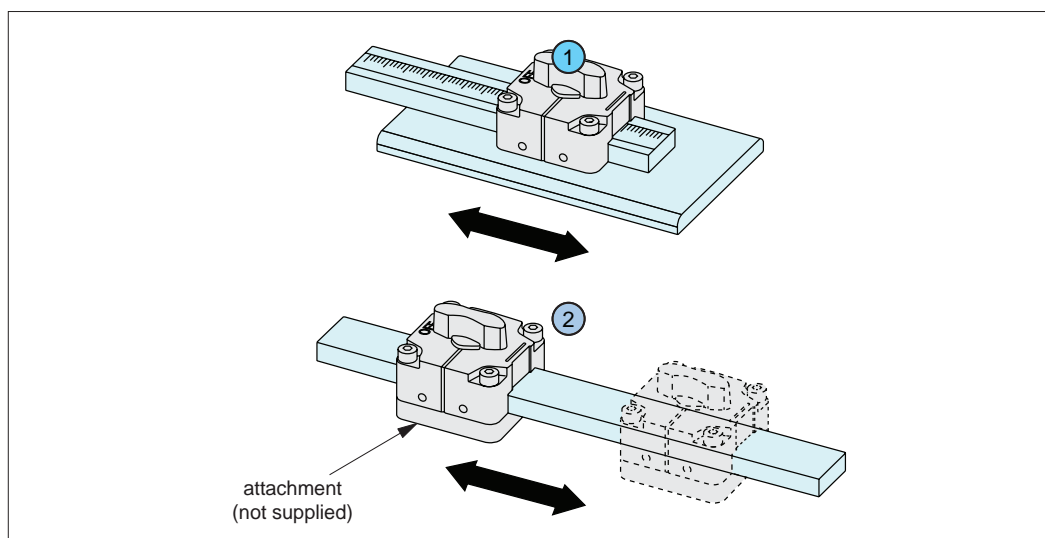
### Operating Instructions



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

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

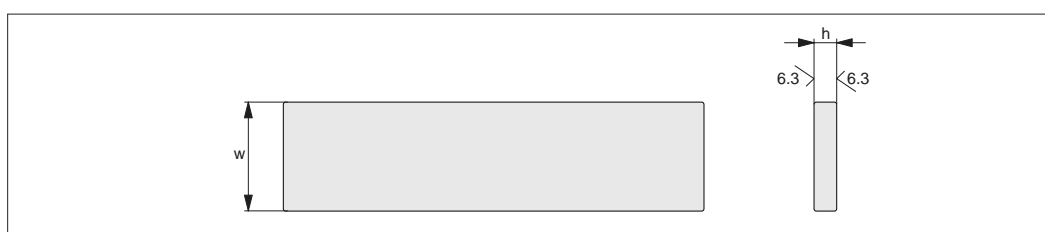
Note: The knob clicks at the "ON" and "OFF" positions, and this enables the operators to lock/unlock securely.



### 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.



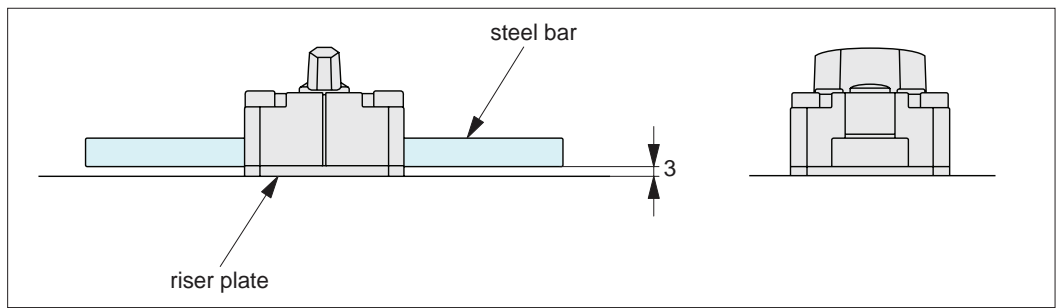
### How to use steel bar materials

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



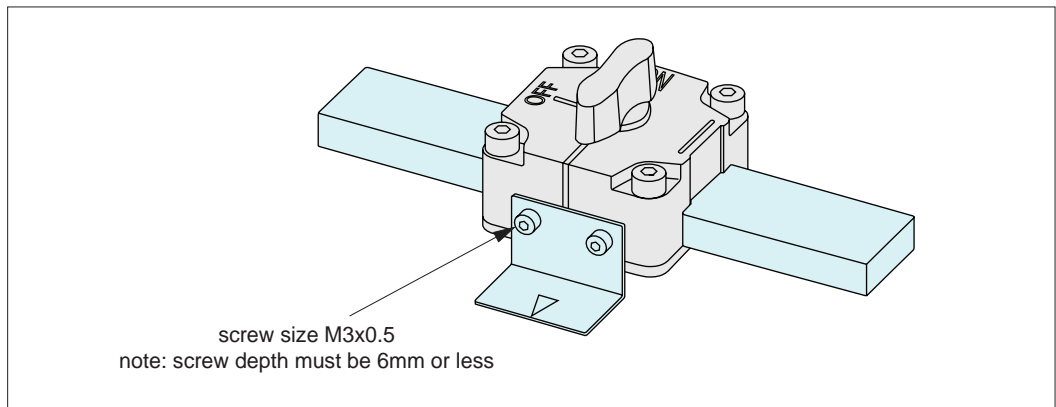
**How to Use Riser Plate**

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.



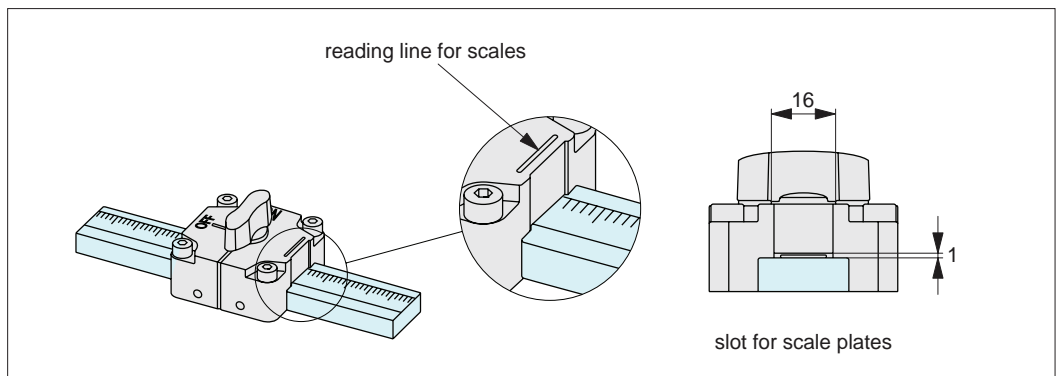
**How to Use Scale Plate**

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.

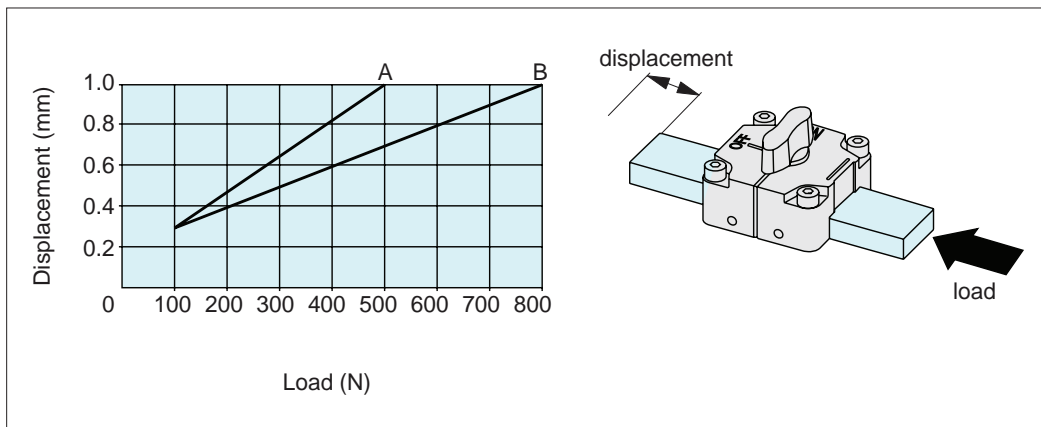
Scale plate is separately available.

See ranges 33975, 33976 and 33977.





### Performance Curve



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

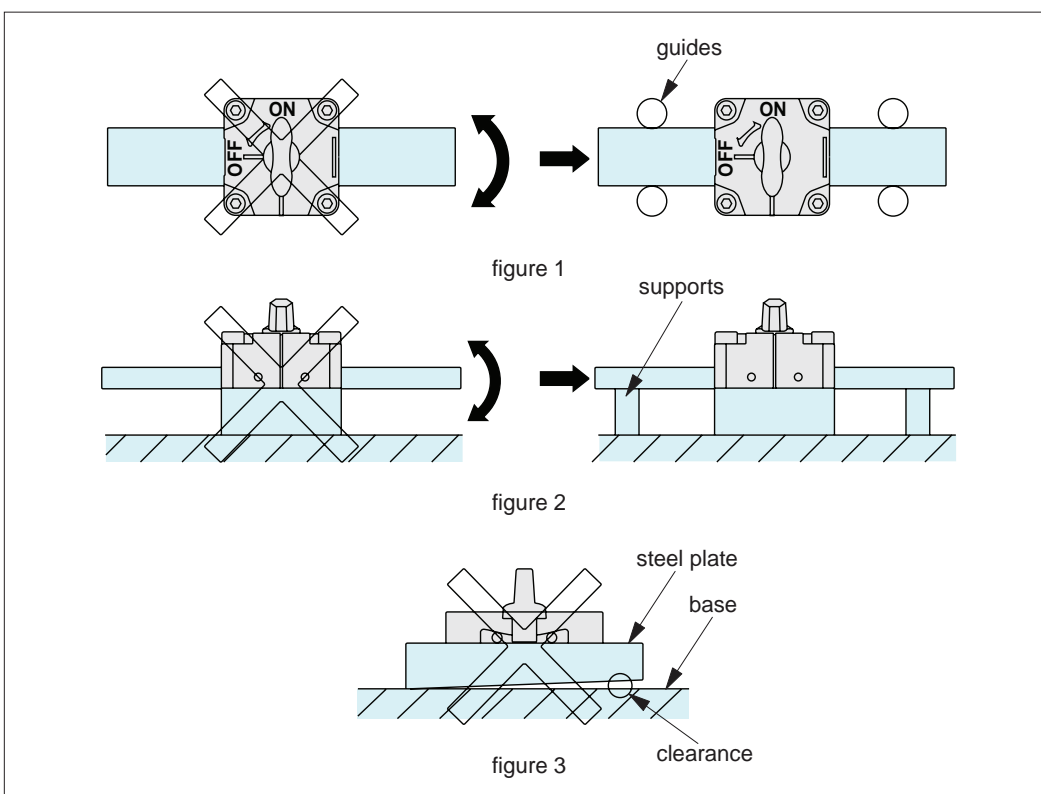
A: For bar width x heights; 12x12mm and 16x16mm.

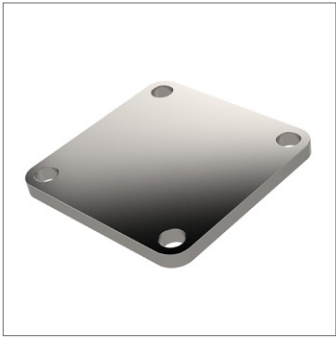
B: For bar width x heights; 25x9, 25x12, 32x12, 32x16.

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.

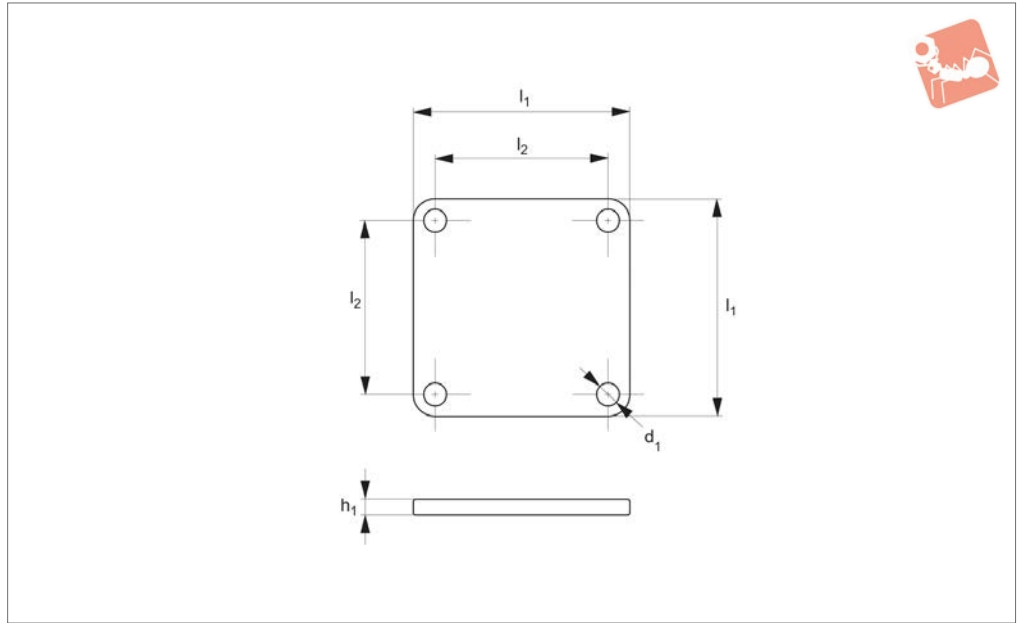
### Notes

- 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.





**33974**



**Material**

Body: stainless steel, SUS 304

**Technical Notes**

To be used with sliding clamps part no.  
33972 and 33973

Order No.	$d_1$	$h_1$	$l_1$	$l_2$	Weight g
33974.W4032	4.5	3	40	32	35
33974.W5040	5.5	3	50	40	55

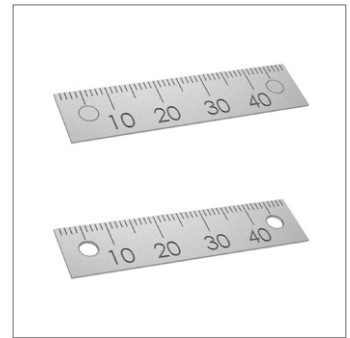
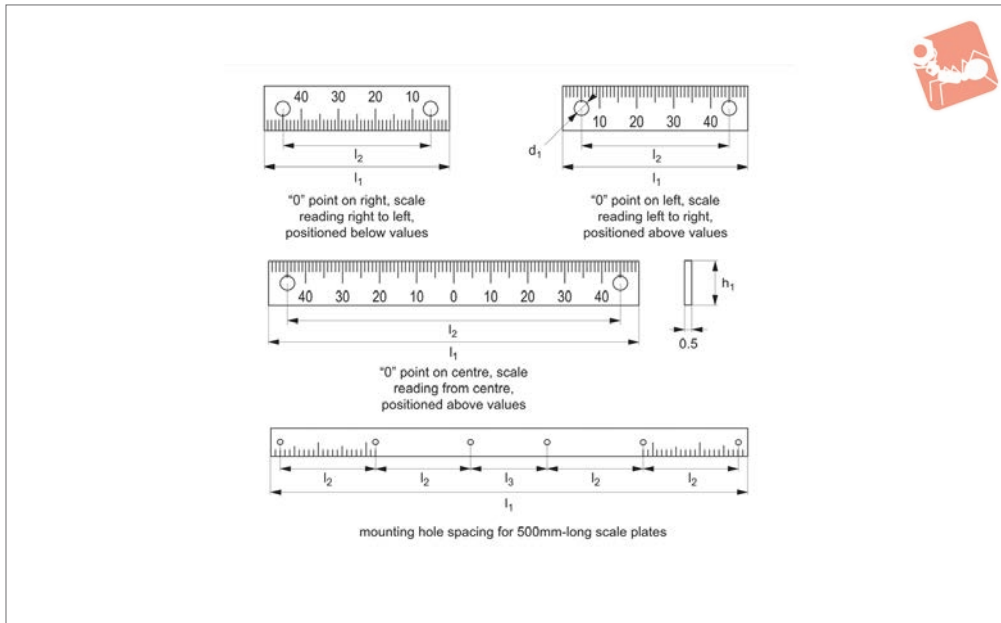


# Scale Plates - Single Scale

for sliding clamps 33970, 33972, 33973



One Touch Fasteners



33975

ONE TOUCH FASTENERS

### Material

Aluminium, with etched graduation/ markings.

### Technical Notes

For use with sliding clamps 33970, 33972 and 33973. Markings are for indicative purposes, and are not intended for precise

measurement.

Adhesive mounting type: ensure receiving surface is clean and dirt free (features outline of screw hole location, not drilled).

Screw mounting type: holes drilled to

3,5mm dia.

When selecting scale plate consider;

- direction scale reads (left to right, right to left or from centre).
- position of scale relative to number valves (above, below or both).

Order No.	Mounting type	Number of mounting holes	Direction of measurement	Scale position	$d_1$ (marked drilled)	$h_1$	$l_1$	$l_2$	$l_3$	Weight g
33975.W1005	Adhesive	2	Left	Top	(3,5)	12	50	40		0,8
33975.W1010	Adhesive	2	Left	Top	(3,5)	12	100	90		1,6
33975.W1015	Adhesive	3	Left	Top	(3,5)	12	150	70		2,4
33975.W1020	Adhesive	3	Left	Top	(3,5)	12	200	95		3,2
33975.W1030	Adhesive	2	Right	Top	(3,5)	12	50	40		0,8
33975.W1035	Adhesive	2	Right	Top	(3,5)	12	100	90		1,6
33975.W1040	Adhesive	3	Right	Top	(3,5)	12	150	70		2,4
33975.W1045	Adhesive	3	Right	Top	(3,5)	12	200	95		3,2
33975.W1055	Adhesive	2	Centre	Top	(3,5)	12	100	90		1,6
33975.W1060	Adhesive	3	Centre	Top	(3,5)	12	200	95		3,2
33975.W2005	Adhesive	2	Left	Bottom	(3,5)	12	50	40		0,8
33975.W2010	Adhesive	2	Left	Bottom	(3,5)	12	100	90		1,6
33975.W2015	Adhesive	3	Left	Bottom	(3,5)	12	150	70		2,4
33975.W2020	Adhesive	3	Left	Bottom	(3,5)	12	200	95		3,2
33975.W2030	Adhesive	2	Right	Bottom	(3,5)	12	50	40		0,8
33975.W2035	Adhesive	2	Right	Bottom	(3,5)	12	100	90		1,6
33975.W2040	Adhesive	3	Right	Bottom	(3,5)	12	150	70		2,4
33975.W2045	Adhesive	3	Right	Bottom	(3,5)	12	200	95		3,2
33975.W2055	Adhesive	2	Centre	Bottom	(3,5)	12	100	90		1,6
33975.W2060	Adhesive	3	Centre	Bottom	(3,5)	12	200	95		3,2
33975.W5005	Screw Mount	2	Left	Top	3,5	12	50	40		0,8
33975.W5010	Screw Mount	2	Left	Top	3,5	12	100	90		1,6
33975.W5015	Screw Mount	3	Left	Top	3,5	12	150	70		2,4
33975.W5020	Screw Mount	3	Left	Top	3,5	12	200	95		3,2
33975.W5025	Screw Mount	6	Left	Top	3,5	12	500	100	90	8,0
33975.W5030	Screw Mount	2	Right	Top	3,5	12	50	40		0,8
33975.W5035	Screw Mount	2	Right	Top	3,5	12	100	90		1,6
33975.W5040	Screw Mount	3	Right	Top	3,5	12	150	70		2,4
33975.W5045	Screw Mount	3	Right	Top	3,5	12	200	95		3,2
33975.W5050	Screw Mount	6	Right	Top	3,5	12	500	100	90	8,0



Order No.	Mounting type	Number of mounting holes	Direction of measurement	Scale position	d <sub>1</sub> (marked) drilled	h <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	Weight g
<b>33975.W5055</b>	Screw Mount	2	Centre	Top	3,5	12	100	90		1,6
<b>33975.W5060</b>	Screw Mount	3	Centre	Top	3,5	12	200	95		3,2
<b>33975.W5065</b>	Screw Mount	6	Centre	Top	3,5	12	500	100	90	8,0
<b>33975.W6005</b>	Screw Mount	2	Left	Bottom	3,5	12	50	40		0,8
<b>33975.W6010</b>	Screw Mount	2	Left	Bottom	3,5	12	100	90		1,6
<b>33975.W6015</b>	Screw Mount	3	Left	Bottom	3,5	12	150	70		2,4
<b>33975.W6020</b>	Screw Mount	3	Left	Bottom	3,5	12	200	95		3,2
<b>33975.W6025</b>	Screw Mount	6	Left	Bottom	3,5	12	500	100	90	8,0
<b>33975.W6030</b>	Screw Mount	2	Right	Bottom	3,5	12	50	40		0,8
<b>33975.W6035</b>	Screw Mount	2	Right	Bottom	3,5	12	100	90		1,6
<b>33975.W6040</b>	Screw Mount	3	Right	Bottom	3,5	12	150	70		2,4
<b>33975.W6045</b>	Screw Mount	3	Right	Bottom	3,5	12	200	95		3,2
<b>33975.W6050</b>	Screw Mount	6	Right	Bottom	3,5	12	500	100	90	8,0
<b>33975.W6055</b>	Screw Mount	2	Centre	Bottom	3,5	12	100	90		1,6
<b>33975.W6060</b>	Screw Mount	3	Centre	Bottom	3,5	12	200	95		3,2
<b>33975.W6065</b>	Screw Mount	6	Centre	Bottom	3,5	12	500	100	90	8,0



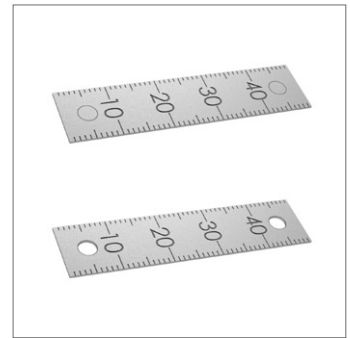
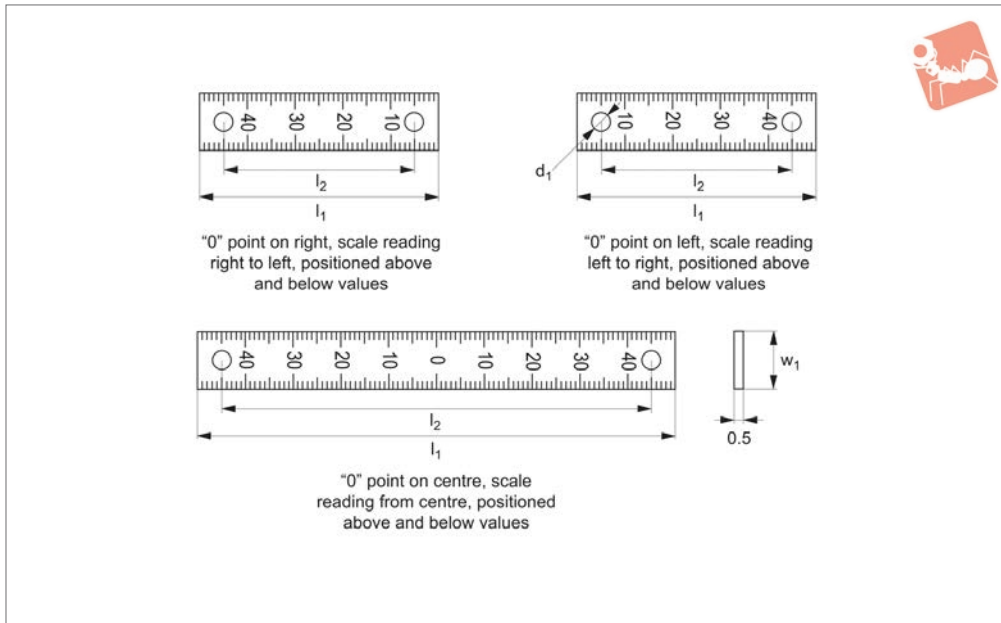


# Scale Plates - Double Scale

for sliding clamps 33970, 33972, 33973



One Touch Fasteners



33976

ONE TOUCH FASTENERS

### Material

Aluminium, with etched graduation/ markings.

### Technical Notes

For use with sliding clamps 33970, 33972 and 33973. Markings are for indicative purposes, and are not intended for precise

measurement.

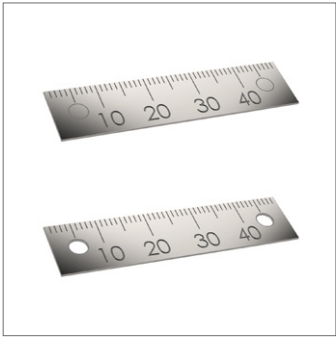
Adhesive mounting type: ensure receiving surface is clean and dirt free (features outline of screw hole location, not drilled).

Screw mounting type: holes drilled to

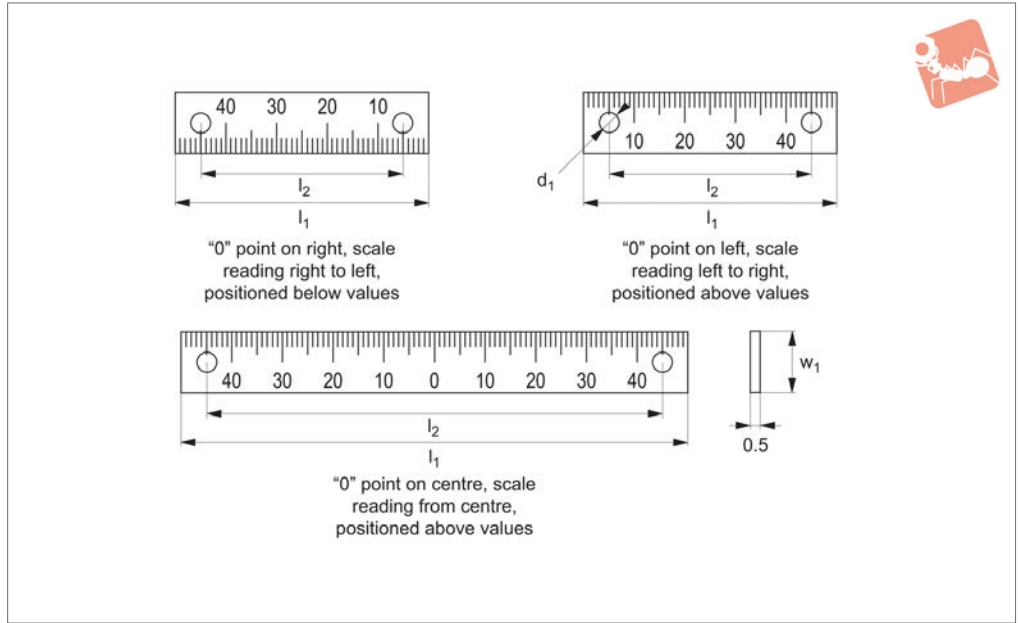
3,5mm dia.

When selecting scale plate consider;  
 - direction scale reads (left to right, right to left or from centre).  
 - position of scale relative to number valves (above, below or both).

Order No.	Mounting type	Number of mounting holes	Location of „0“ point	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub>	Weight g
33976.W1005	Adhesive	2	Left	-	50	40	15	1
33976.W1010	Adhesive	2	Left	-	100	90	15	2
33976.W1015	Adhesive	2	Right	-	50	40	15	1
33976.W1020	Adhesive	2	Right	-	100	90	15	2
33976.W1025	Adhesive	2	Centre	-	100	90	15	2
33976.W5005	Screw Mount	2	Left	3.5	50	40	15	1
33976.W5010	Screw Mount	2	Left	3.5	100	90	15	2
33976.W5015	Screw Mount	2	Right	3.5	50	40	15	1
33976.W5020	Screw Mount	2	Right	3.5	100	90	15	2
33976.W5025	Screw Mount	2	Centre	3.5	100	90	15	2



## 33977



### Material

Stainless steel, with etched graduation/ markings.

### Technical Notes

For use with sliding clamps 33970, 33972 and 33973. Markings are for indicative purposes, and are not intended for precise

measurement.

Adhesive mounting type: ensure receiving surface is clean and dirt free (features outline of screw hole location, not drilled).

Screw mounting type: holes drilled to

3,5mm dia.

When selecting scale plate consider;  
 - direction scale reads (left to right, right to left or from centre).  
 - position of scale relative to number valves (above, below or both).

Order No.	Mounting type	Number of mounting holes	Location of „0“ point	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub>	Weight g
33977.W1005	Adhesive	2	Top	-	50	40	12	2.4
33977.W1010	Adhesive	2	Top	-	100	90	12	4.7
33977.W1015	Adhesive	2	Top	-	50	40	12	2.4
33977.W1020	Adhesive	2	Top	-	100	90	12	4.7
33977.W1025	Adhesive	2	Top	-	100	90	12	4.7
33977.W5005	Screw-Mount	2	Top	3.5	50	40	12	2.4
33977.W5010	Screw-Mount	2	Top	3.5	100	90	12	4.7
33977.W5015	Screw-Mount	2	Top	3.5	50	40	12	2.4
33977.W5020	Screw-Mount	2	Top	3.5	100	90	12	4.7
33977.W5025	Screw-Mount	2	Top	3.5	100	90	12	4.7

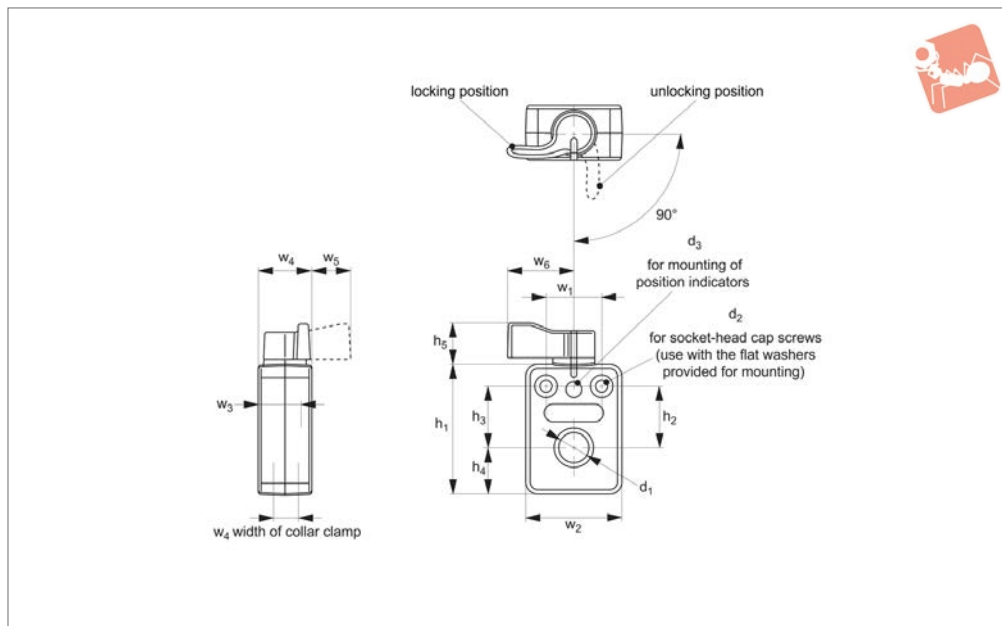


# Sliding Clamps - for Solid Round Bar

quarter turn lock- l-handle grip - polyamide



## One Touch Fasteners



### 33980

ONE TOUCH FASTENERS

#### Material

Housing: Polyamide (glass-fibre reinforced)

Boss: Polyamide (glass-fibre reinforced)

Base: Polyamide (glass-fibre reinforced)

Insert: Stainless steel

#### Technical Notes

It has teeth inside and it engages at every 7.2° (=360°/ 50).

33981 pulls the spindle by the inner spring with 70N force to prevent chattering of the spindle. Note: The spindle should be fully inserted into the knob for 25mm.

Order No.	Handle	d <sub>1</sub> for shaft dia. tol. h7	d <sub>2</sub>	d <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	Weight g
33980.W1308	Orange	8	M 4	6	48.5	23.5	22	17	50
33980.W1310	Orange	10	M 4	6	48.5	23.5	22	17	50
33980.W1312	Orange	12	M 4	6	48.5	23.5	22	17	50
33980.W1314	Orange	14	M 4	6	48.5	23.5	22	17	50
33980.W1512	Orange	12	M 5	6	69.0	17.0	30	26	100
33980.W1515	Orange	15	M 5	6	69.0	17.0	30	26	100
33980.W1516	Orange	16	M 5	6	69.0	17.0	30	26	100
33980.W1520	Orange	20	M 5	6	69.0	17.0	30	26	100
33980.W2308	Black	8	M 4	6	48.5	23.5	22	17	50
33980.W2310	Black	10	M 4	6	48.5	23.5	22	17	50
33980.W2312	Black	12	M 4	6	48.5	23.5	22	17	21
33980.W2314	Black	14	M 4	6	48.5	23.5	22	17	21
33980.W2512	Black	12	M 5	6	69.0	17.0	30	26	100
33980.W2515	Black	15	M 5	6	69.0	17.0	30	26	100
33980.W2516	Black	16	M 5	6	69.0	17.0	30	26	100
33980.W2520	Black	20	M 5	6	69.0	17.0	30	26	34

Order No.	h <sub>5</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>	w <sub>5</sub>	w <sub>6</sub>	Allowable holding torque	
								Nm max.	Nm max.
33980.W1308	15.5	21	36	14.0	20	15	25	3	400
33980.W1310	15.5	21	36	14.0	20	15	25	3	400
33980.W1312	15.5	21	36	14.0	20	15	25	4	400
33980.W1314	15.5	21	36	14.0	20	15	25	4	400
33980.W1512	15.5	34	51	12.5	20	15	25	5	500
33980.W1515	15.5	34	51	12.5	20	15	25	5	500
33980.W1516	15.5	34	51	12.5	20	15	25	6	500
33980.W1520	15.5	34	51	12.5	20	15	25	6	500
33980.W2308	15.5	21	36	14.0	20	15	25	3	400
33980.W2310	15.5	21	36	14.0	20	15	25	3	400
33980.W2312	15.5	21	36	14.0	20	15	25	4	400
33980.W2314	15.5	21	36	14.0	20	15	25	4	400
33980.W2512	15.5	34	51	12.5	20	15	25	5	500

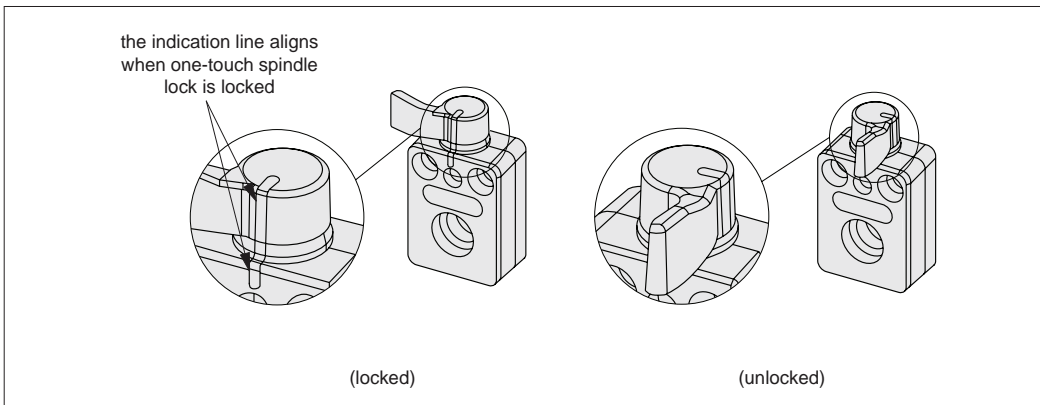


Order No.	h <sub>5</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>	w <sub>5</sub>	w <sub>6</sub>	Allowable holding torque Nm max.	Allowable sliding torque Nm max.
<b>33980.W2515</b>	15.5	34	51	12.5	20	15	25	5	500
<b>33980.W2516</b>	15.5	34	51	12.5	20	15	25	6	500
<b>33980.W2520</b>	15.5	34	51	12.5	20	15	25	6	500

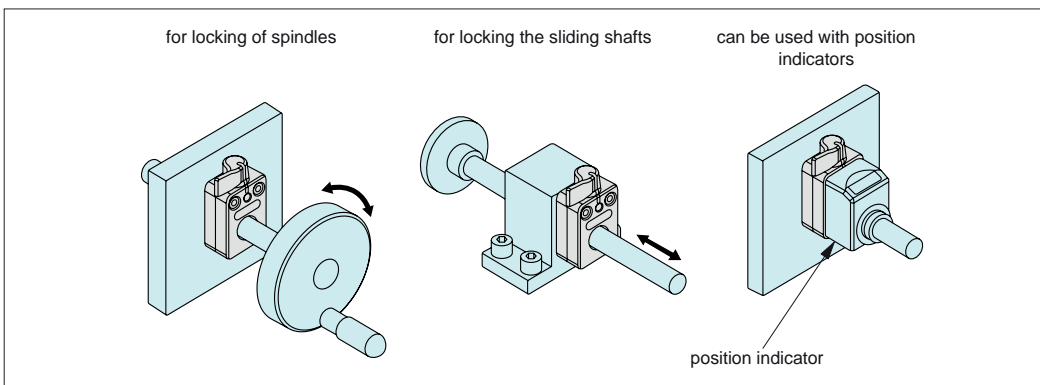


### Operating Principle

- One-touch spindle locks enable quick and secure locking of shafts with one click of the knob.
- When one-touch spindle lock is operated, the knob clicks and the shaft is locked with a steady force. This provides reliable locking of shafts.
- The knob position and the indication line clearly indicate lock/unlock position.



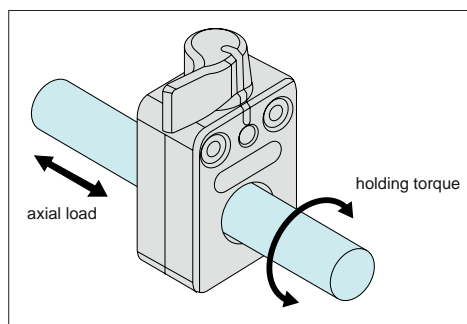
### Operating Instructions



Note: To mount position indicators to one-touch spindle locks, use the rubber cushion supplied with position indicators.

### Load Ratings

For shaft $\varnothing h_7$	$d_2$	Max. holding torque Nm	Max. axial load N
8	M4	3	400
10	M4	3	400
12	M4	4	400
14	M4	4	400
12	M5	5	500
15	M5	5	500
16	M5	6	500
20	M5	6	500



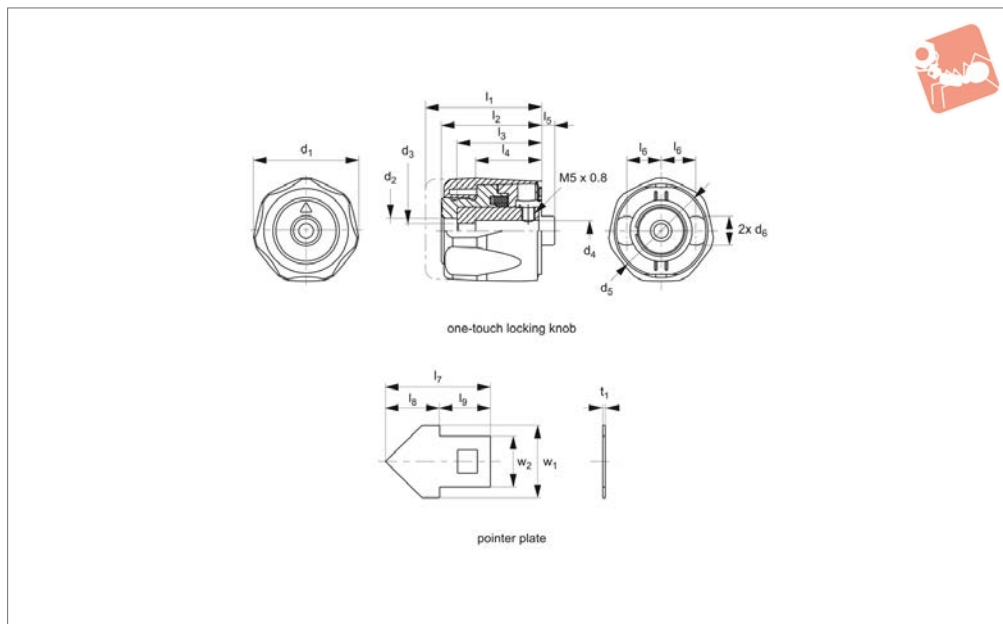
One-touch spindle locks can fix both revolving and sliding shafts.

### Notes

- This product cannot be used as bearings or guides for shafts.
- Shafts may slip in environments where shocks or vibrations are present.
- The allowable holding torque and the allowable sliding load may decrease with adhesion of particles or immersion in oil.



## 33981



### Material

Grip: reinforced polyamide, black or orange.  
 Central boss: reinforced polyamide, blue.  
 Base indicator: reinforced polyamide, red.  
 Pointer palte: stainless steel A2.  
 Supplied with screws.

### Technical Notes

One-touch locking knob enables one-touch locking and unlocking of spindle. One-Touch locking knob has an audible click to indicate locking and unlocking. Additionally the high visibility red colour of the base indicator is exposed to signify

when knob is unlocked (when locked the red indicator is concealed).

### Important Notes

\* Safety factor of 5.  
 Pointer plate sold separately.

Order No.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub> -0.2	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	Weight g
33981.W4008	40	9.5	5.5	8	34	11	44	38	32	25	5	95
33981.W4010	40	9.5	5.5	10	34	11	44	38	32	25	5	90
33981.W4108	40	9.5	5.5	8	34	11	44	38	32	25	5	95
33981.W4110	40	9.5	5.5	10	34	11	44	38	32	25	5	90
33981.W0040	40	9.5	5.5	-	34	11	44	38	32	25	5	21

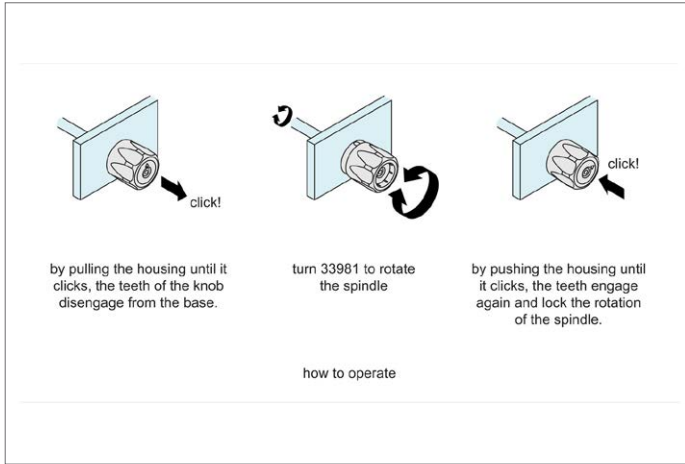
Order No.	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>	l <sub>9</sub>	w <sub>1</sub>	w <sub>2</sub>	t <sub>1</sub>	Type	Locking teeth	Spindle depth	Holding force kgf	Moment Mz in lock position Nm max.
33981.W4008	13	14.5	7.5	7	10	7	0.3	Black Knob	50 (7,2°)	25	70	28
33981.W4010	13	14.5	7.5	7	10	7	0.3	Black Knob	50 (7,2°)	25	70	28
33981.W4108	13	14.5	7.5	7	10	7	0.3	Orange Knob	50 (7,2°)	25	70	28
33981.W4110	13	14.5	7.5	7	10	7	0.3	Orange Knob	50 (7,2°)	25	70	28
33981.W0040	13	14.5	7.5	7	10	7	0.3	Pointer Plate	50 (7,2°)	25	70	28



# One-Touch Locking Knobs with safety indicator



# One Touch Fasteners

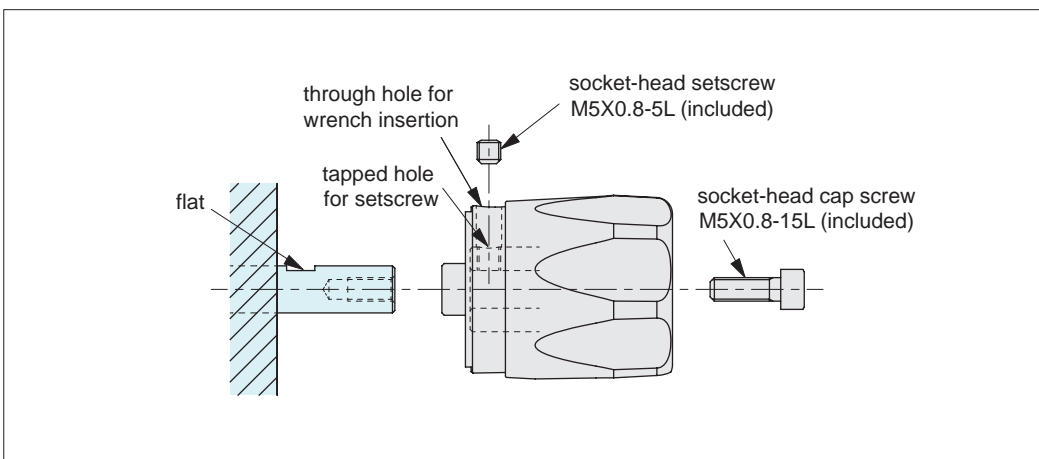


ONE TOUCH FASTENERS



### How to Install

1. Pull the housing and align the through hole on the base and the tapped hole on the insert.
2. Align the flat and tapped hole on the insert and then mount the spindle.
3. Fix 33981 temporarily using M5X0.8-15L socket-head cap screw included.
4. Fix 33981 to the spindle temporarily using setscrew included.
5. Tighten M5X0.8-15L socket-head cap screw fully.
6. Tighten the setscrew fully.

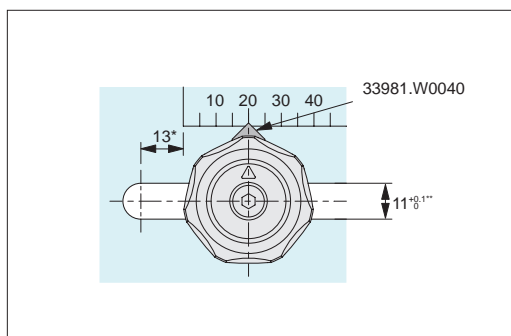
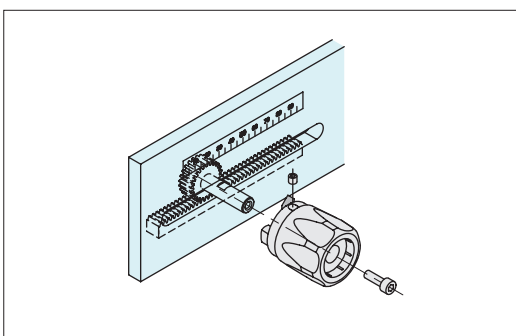


### Mounting Hole Dimensions

#### Rack and Pinion Application

\*Prepare clearance of 13mm or more from the end of the required spindle stroke.

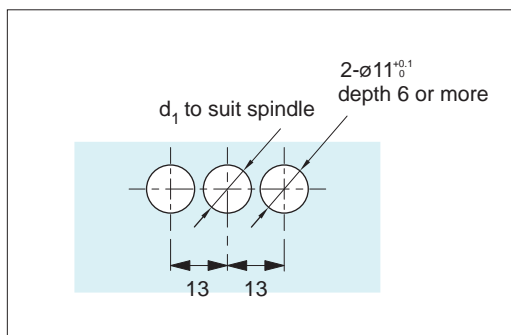
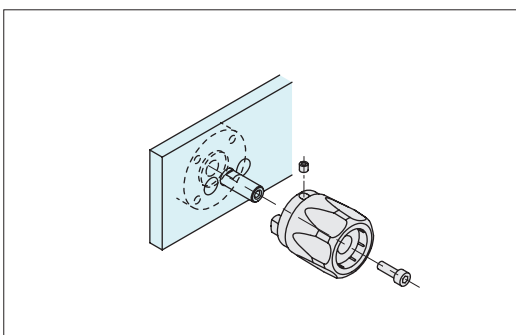
\*\*Recommended surface roughness is 1.6 for the inner surface of the slotted hole.



#### Lead Screw Application

$d_1$  to suit spindle

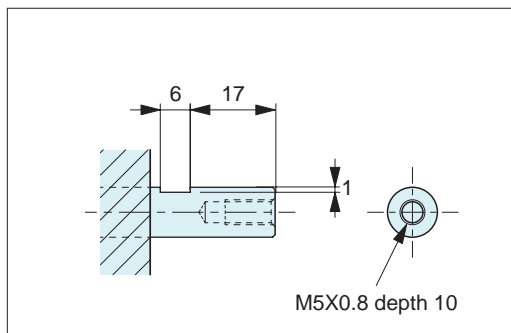
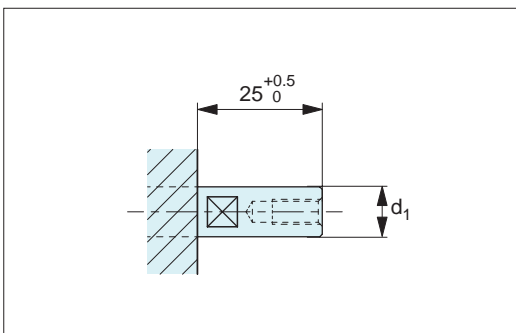
Size	$d_1$
33981.W4008 / W4108	9
33981.W4010 / W4110	11



### Mounting Spindle Dimension

Spindle size

Size	$d_1$ (g6)
33981.W4008 / W4108	8
33981.W4010 / W4110	10







### Operation

click!

click!

click!

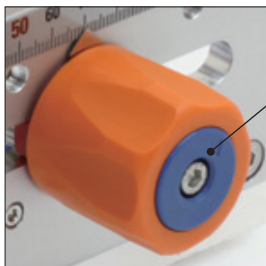
by pulling the housing until it clicks, the teeth of the knob disengage from the base.

turn 33981 to rotate the spindle

by pushing the housing until it clicks, the teeth engage again and lock the rotation of the spindle.

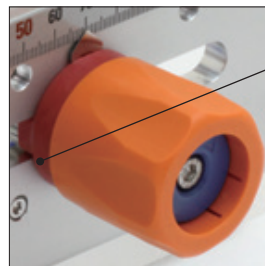
how to operate

### Clear Safety Indicator of Locked / Unlocked Position



#### Locked

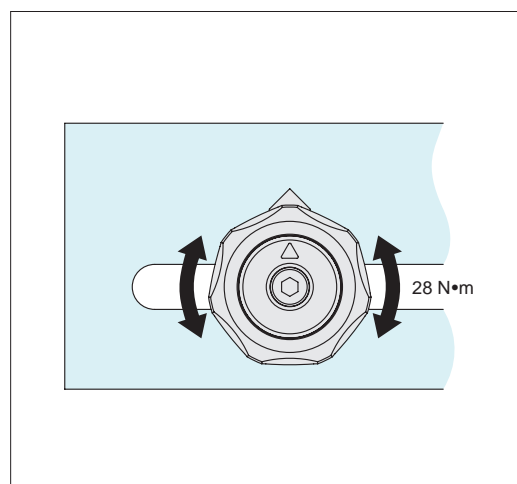
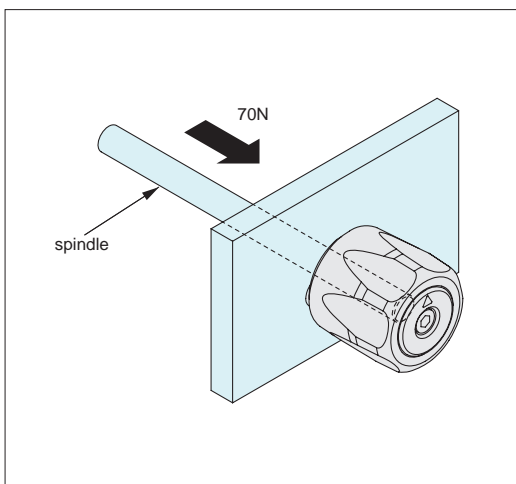
Blue indicates safety to operate machine.



#### Unlocked

Red indicates caution to operate machine.

### Holding Forces



One-Touch Locking Knob has 50 teeth and engages at every 7.2°. It pulls the spindle via the inner spring with 70N force to prevent chattering of spindle, with a max allowable moment at locking position of 28N•m (with 5 fold safety).