

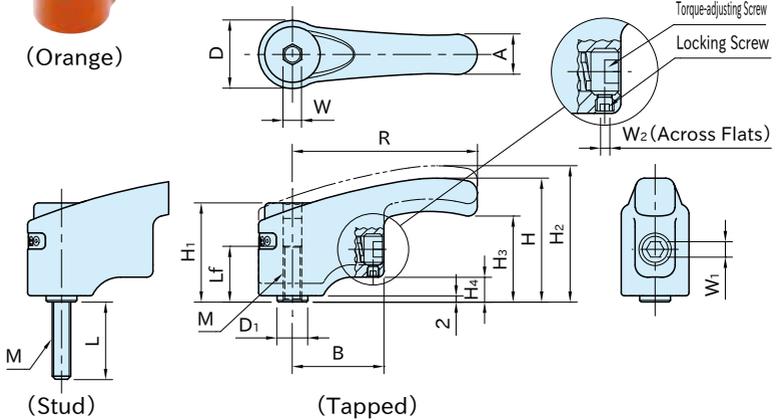


(Black)



(Orange)

Handle	Ratchet	Stud
SCM440 steel Quenched and tempered Painted Black, Orange	SCM415 steel Carburized-hardened Black oxide finished	SCM435 steel Quenched and tempered Black oxide finished



(Stud)

(Tapped)

Type/Size	R	M	H	D	H <sub>1</sub>	H <sub>2</sub>	D <sub>1</sub>	H <sub>3</sub>	H <sub>4</sub>	A	B	W	W <sub>1</sub>	W <sub>2</sub>	Teeth	Torque Range (N·m)	Tightening Force(kN) *
<b>ATCL 6</b>	60	M 6X1	40	22	32	44	10	27.5	8	13	30	6	5	2	12	1~3.5	0.8~2.9
<b>ATCL 8</b>	75	M 8X1.25	48	26	38	52.5	13	33	9	15	37	8	6	2.5		2~5.4	1.3~3.4
<b>ATCL10</b>	90	M10X1.5	57	32	45	62.5	16	39.5	10.5	18	39	10	6	2.5		3~8	1.5~4

\*) Use this tightening force information as an indication. (Tightening Force(kN) = Torque(N·m) / {0.2×d(mm)} d: nominal screw diameter)

### ■ Tapped

Part Number		Lf	Weight (g)
Black	Orange		
<b>ATCL 6-BK</b>	<b>ATCL 6-OG</b>	18	160
<b>ATCL 8-BK</b>	<b>ATCL 8-OG</b>	22	270
<b>ATCL10-BK</b>	<b>ATCL10-OG</b>	25	445

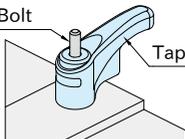
### ■ Stud

Part Number		L	Weight (g)
Black	Orange		
<b>ATCL 6×15-BK</b>	<b>ATCL 6×15-OG</b>	15	167
<b>ATCL 6×20-BK</b>	<b>ATCL 6×20-OG</b>	20	168
<b>ATCL 6×25-BK</b>	<b>ATCL 6×25-OG</b>	25	169
<b>ATCL 6×30-BK</b>	<b>ATCL 6×30-OG</b>	30	170
<b>ATCL 8×20-BK</b>	<b>ATCL 8×20-OG</b>	20	282
<b>ATCL 8×25-BK</b>	<b>ATCL 8×25-OG</b>	25	284
<b>ATCL 8×30-BK</b>	<b>ATCL 8×30-OG</b>	30	286
<b>ATCL 8×40-BK</b>	<b>ATCL 8×40-OG</b>	40	290
<b>ATCL10×20-BK</b>	<b>ATCL10×20-OG</b>	20	464
<b>ATCL10×25-BK</b>	<b>ATCL10×25-OG</b>	25	467
<b>ATCL10×30-BK</b>	<b>ATCL10×30-OG</b>	30	470
<b>ATCL10×40-BK</b>	<b>ATCL10×40-OG</b>	40	475

### Feature

- The handle is adjustable.
- Handle that allows setting a desired tightening torque.
- When the desired torque is reached, the handle clicks to indicate completed tightening.

### Bolt



Tapped type

• Tapped type has a through hole that can be used with bolts.

## How To Use



1. Lift the handle to disengage the teeth from the locking element.



2. Turn the handle to a desired position.



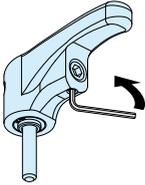
3. When the handle is released, the return spring automatically engages the teeth again for further tightening. The handle can be positioned every 30 degrees.



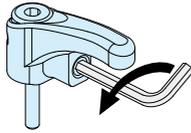
4. Turn the handle to clamp. The handle clicks to indicate completed tightening at desired tightening torque.

## How To Set Torque

The preset torque is roughly its maximum tightening torque.

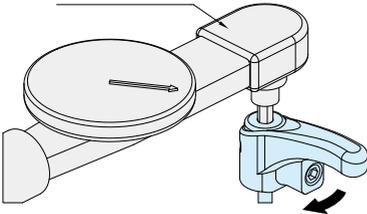


1. Loosen the locking screw by inserting a hex wrench into the underside of the body.



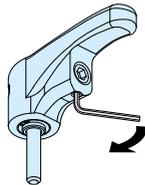
2. Adjust the torque by turning the torque-adjusting screw in the side of the body.

### Torque Wrench



3. Measure the torque with a torque wrench.

- Connect a torque wrench to the Adjustable-Torque Handle.
- Apply a load in the tightening direction, and fine adjust the depth of torque-adjusting screw to reach the desired torque when the handle clicks.



4. When the desired torque is reached, tighten the locking screw.

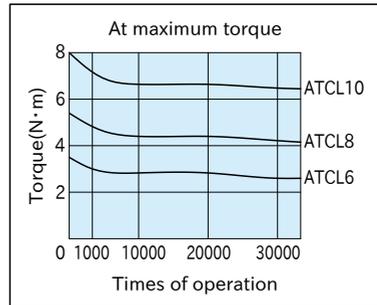
## Related Product

- **CTK** Torque Limiting Knobs
- **CP-TCW** ADJUSTABLE-TORQUE WRENCHES

## Torque Performance

- For initial several thousand operations, the tightening torque decreases. (See the graph below.) Measure the torque regularly, and fine adjust the depth of torque-adjusting screw when needed.
- The tightening torque can vary. (Max.  $\pm 15\%$ ) Not recommended for applications where precise tightening torque is required.

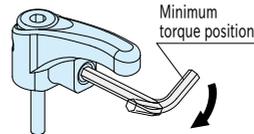
Torque Performance Graph



## Note

Adjust the torque-adjusting screw within the torque range. Do not overtighten or overloosen the screw.

## Guide for Torque Adjusting



Size	Rotation
ATCL 6	3/4
ATCL 8	1
ATCL10	3/4

- To reach approx. the min torque, loosen the torque adjusting screw to the same end surface level of the body, then tighten it until you feel light touch of stop. (Ensure that the torque adjusting screw does not protrude from the body when loosening it.)
- To reach approx. the max torque, rotate the torque adjusting screw depending on the above table from the approx. min torque as instructed previously.