

# QCTH / QCTHL / QCTHH QUARTER-TURN CLAMPS



Stainless Steel

IMAO

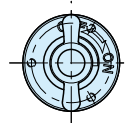
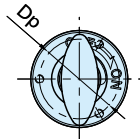
## ★Key Point

Easy-to-read ON/OFF position



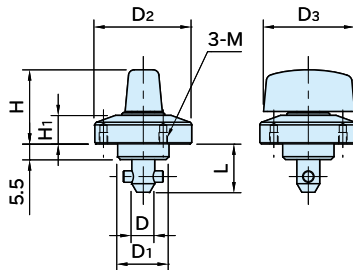
**QCTH**

(Plastic Knob)



**QCTH-S**

(Metal Knob)



**QCTH**

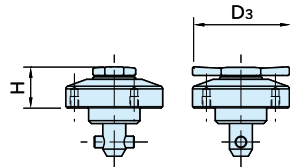
(Plastic Knob)

**QCTH-S**

(Metal Knob)

**QCTH-SUS**

(Stainless Steel)



**QCTHL-S**

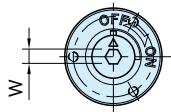
(Low-height Knob)



Stainless Steel

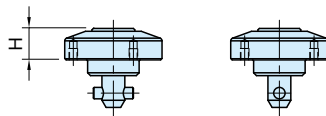
**QCTH-SUS**

(Stainless Steel)



**QCTHL-S**

(Low-height Knob)



**QCTHH**

(Hex. Socket Head)

## Supplied With

• **QCTH** **QCTH-S** **QCTHL-S** **QCTH-SUS**  
**QCTHH** 0525-10:

3 of socket-head cap screws (stainless steel), M2×0.4-5L

• **QCTH** **QCTH-S** **QCTHL-S** **QCTH-SUS**  
**QCTHH** 0834-14, 0834-20:

3 of socket-head cap screws (stainless steel), M3×0.5-6L

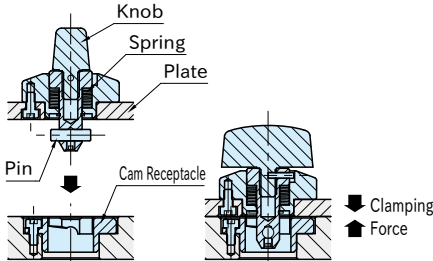
Type	Body	Shank	Pin	Knob	Spring	
<b>QCTH</b>	SUS303 stainless steel	S45C steel Electroless nickel plated	SUS304 stainless steel	Polyamide (glass-fiber reinforced) Black	Equivalent to SWOSC-V steel	
<b>QCTH-S</b>				SCS13 stainless steel (Equivalent to SUS304)		
<b>QCTHL-S</b>		SUS303 stainless steel		—		SUS304 stainless steel
<b>QCTHH</b>						
<b>QCTH-SUS</b>		SUS303 stainless steel		SCS13 stainless steel (Equivalent to SUS304)	SUS304 stainless steel	

Size		Proper Plate Thickness	D (-0.04 +0.08)	D <sub>1</sub> (h9)	D <sub>2</sub>	L	H <sub>1</sub>	M	D <sub>p</sub>	Clamping Force (N)	Proper Cam Receptacles
<b>QCTH</b>	<b>0525-10</b>	6~10	5	14	25	15.5	6.5	M2×0.4 Depth 3	21	60	QCTH0525-N, QCTH0525-B QCTH0525-N-SUS, QCTH0525-B-SUS
<b>QCTH-S</b>											
<b>QCTH-SUS</b>	<b>0834-14</b>	6~14	8	18	34	17 23	10	M3×0.5 Depth 4	28	90	QCTH0834-N, QCTH0834-B QCTH0834-N-SUS, QCTH0834-B-SUS
<b>QCTHH</b>	<b>0834-20</b>	12~20									

<b>QCTH</b> (Plastic Knob)				<b>QCTH-S</b> (Metal Knob)				<b>QCTHL-S</b> (Low-height Knob)			
Part Number	D <sub>3</sub>	H	Weight (g)	Part Number	D <sub>3</sub>	H	Weight (g)	Part Number	D <sub>3</sub>	H	Weight (g)
<b>QCTH0525-10</b>	20	19	35	<b>QCTH0525-10S</b>	20	19	40	<b>QCTHL0525-10S</b>	25	11.5	35
<b>QCTH0834-14</b>	32	26	105	<b>QCTH0834-14S</b>	32	25.5	130	<b>QCTHL0834-14S</b>	34	15.5	80
<b>QCTH0834-20</b>			110	<b>QCTH0834-20S</b>			135	<b>QCTHL0834-20S</b>			85

<b>QCTH-SUS</b> (Stainless Steel)				<b>QCTHH</b> (Hex. Socket Head)			
Part Number	D <sub>3</sub>	H	Weight (g)	Part Number	H	W	Weight (g)
<b>QCTH0525-10-SUS</b>	20	19	40	<b>QCTHH0525-10</b>	8	4	30
<b>QCTH0834-14-SUS</b>	32	25.5	130	<b>QCTHH0834-14</b>	11	5	105
<b>QCTH0834-20-SUS</b>			135	<b>QCTHH0834-20</b>			110

## Feature

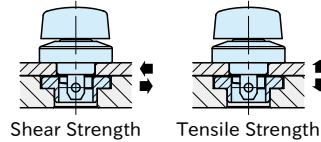


When the pin contacts the cam in the Cam Receptacle, the spring gets compressed to press down the plate.

## How To Use

- Ensure that the knob is positioned at the "OFF" mark.
- Insert the Quarter-Turn Clamp.
- Turn the knob to the "ON" mark for clamping. The knob clicks when it is clamped/unclamped. Note: For unclamping, follow back these steps.

## Technical information



Part Number		Heatresistant Temperature(°C)	Shear Strength (N)	Tensile Strength (N)
<b>QCTH</b>	<b>0525-10</b>	130	1800	1200
	<b>0834-14</b>		3200	2600
	<b>0834-20</b>			
<b>QCTH-S</b>	<b>0525-10</b>	180	1800	1200
<b>QCTHL-S</b>	<b>0834-14</b>		3200	2600
<b>QCTH-SUS</b>	<b>0834-14</b>			
<b>QCTHH</b>	<b>0834-20</b>			

Shear and tensile strength is allowable load and the fastener breaks when it receives this load.

When the two plates receive tensile load that is bigger than the fastener's clamping force, there is a gap between the plates.

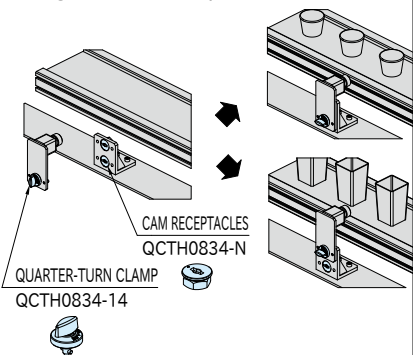
## QCTH-N / QCTH-B CAM RECEPTACLES



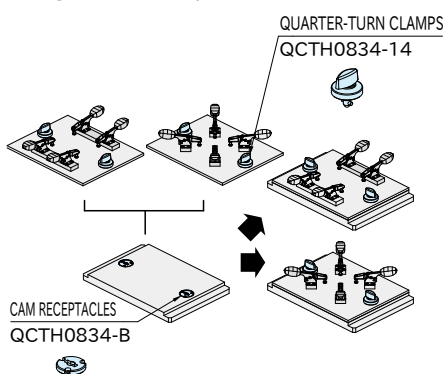
Continuing on Next Page

## Application Example

### Changes of camera positions



### Changes of fixture plates



## How To Install

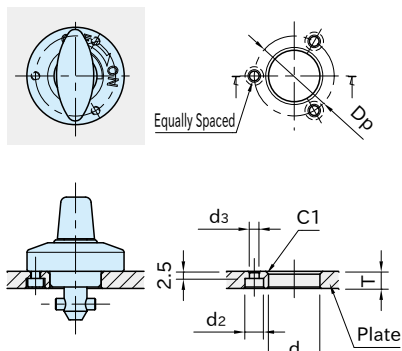


Figure A

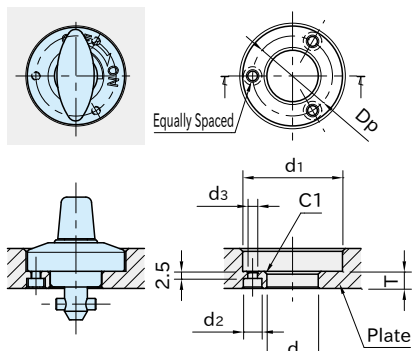
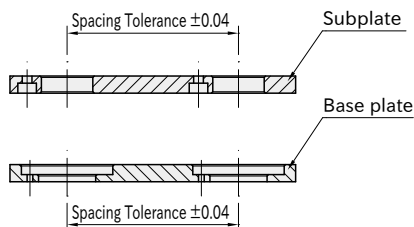


Figure B

Part Number		Proper Plate Thickness	Figure	d (+0.10 +0.05)	d1	T (±0.2)	d2	d3	Dp
QCTH	0525-10	6	A	14	—	6	4.4	2.4	21
		Over 6, 10 or less	B		26				
QCTH-S	0834-14	6	A	18	—	12	6.5	3.4	28
		Over 6, 14 or less	B		35				
QCTHL-S	0834-20	12	A	18	—	12	6.5	3.4	28
		Over 12, 20 or less	B		35				

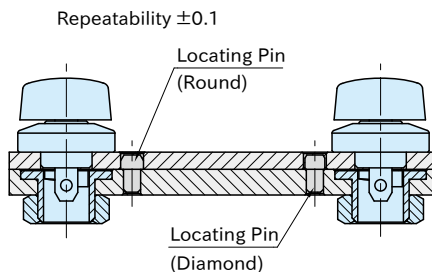
## Accuracy

### ■ Machining Accuracy



Spacing tolerance on both the subplate and the base plate should be  $\pm 0.04$ .

### ■ Repeatability

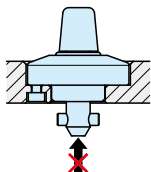


For higher accurate locating, use locating pins.

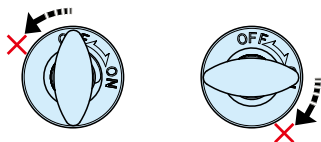
### ⚠ Caution

Note the following cautions using [QCTH](#) [QCTH-S](#) [QCTH-SUS](#) [QCTHL-S](#) [QCTHH](#) 0525-10

- Any force over 600N or more on the tip of the shaft from any direction can damage the pin.



- The knob operating torque is 0.4 N·m. Note that the excessive operating torque over 2 N·m can damage the pin.



### Reference

"How To Install" of [QCTH-N](#) [QCTH-B](#) [QCTH-N-SUS](#) [QCTH-B-SUS](#) Cam Receptacles