

QCTH / QCTHL / QCTHH QUARTER-TURN CLAMPS

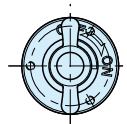
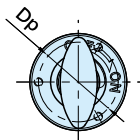
RHS Stainless Steel

IMAO

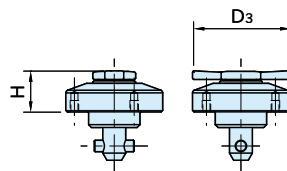
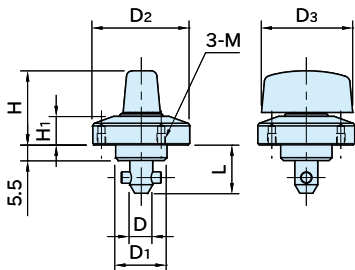
★Key Point
Easy-to-read ON/OFF position



QCTH
(Plastic Knob)



QCTH-S
(Metal Knob)



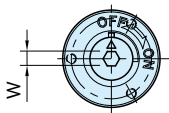
QCTH (Plastic Knob) **QCTH-S** (Metal Knob) **QCTH-SUS** (Stainless Steel)

QCTHL-S
(Low-height Knob)

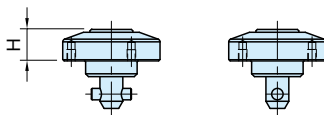


QCTH-SUS
(Stainless Steel)

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



QCTHH
(Hex. Socket Head)

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

Size		Proper Plate Thickness	D ($\begin{smallmatrix} -0.04 \\ -0.08 \end{smallmatrix}$)	D ₁ (h9)	D ₂	L	H ₁	M	D _p	Clamping Force (N)	Holding Force (N) (**)	Proper Cam Receptacles	
QCTH	0525-10	3~10 (*)	5	14	25	15.5	6.5	M2×0.4 Depth 3	21	60	60		QCTH0525-N, QCTH0525-B QCTH0525-N-SUS, QCTH0525-B-SUS
QCTH-S													
QCTHL-S	0834-14	3~14 (*)	8	18	34	17	10	M3×0.5 Depth 4	28	90	90		
QCTH-SUS													
QCTHH	0834-20	12~20				23						QCTH0834-N, QCTH0834-B QCTH0834-N-SUS, QCTH0834-B-SUS	

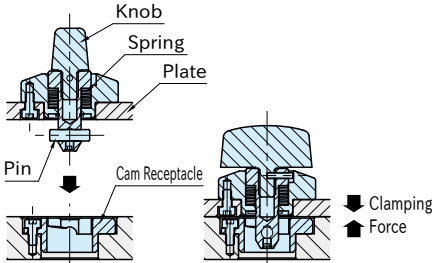
*) Spacer **QCASP** is required for thinner plate than 6mm.

**) Exceeding the holding force creates a gap of greater than 0.1mm between plates.

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

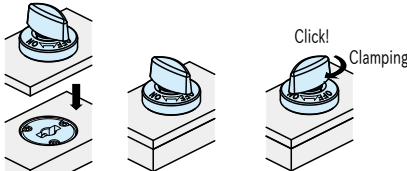
QCTH-SUS (Stainless Steel)			QCTHH (Hex. Socket Head)				
Part Number	D ₃	H	Weight (g)	Part Number	H	W	Weight (g)
QCTH0525-10-SUS	20	19	40	QCTHH0525-10	8	4	30
QCTH0834-14-SUS	32	25.5	130	QCTHH0834-14	11	5	105
QCTH0834-20-SUS			135	QCTHH0834-20			110

Feature



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

How To Use

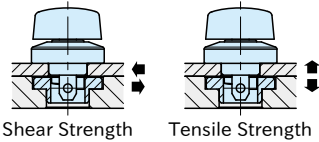


1. Ensure that the knob is positioned at the "OFF" mark.

2. Insert the Quarter-Turn Clamp.

3. Turn the knob to the "ON" mark for clamping. The knob clicks when it is clamped/unclamped. Note: For unclamping, follow back these steps.

Mechanical Strength



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

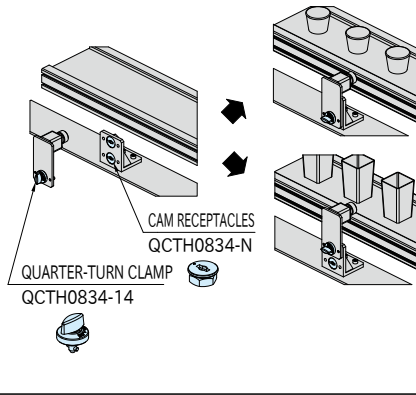
Shear and tensile strength is allowable load and the fastener could break when it receives bigger load.

QCTH-N / QCTH-B CAM RECEPTACLES

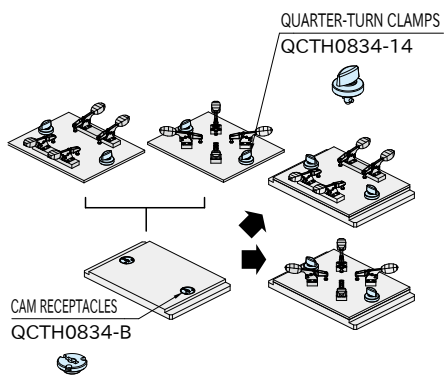


Application Example

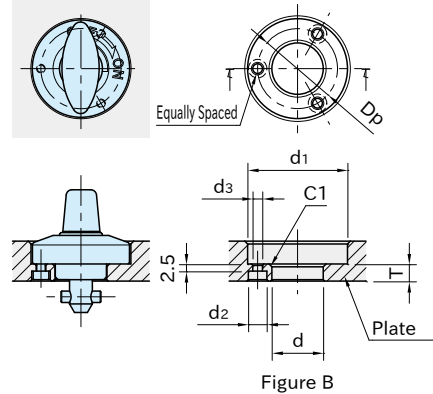
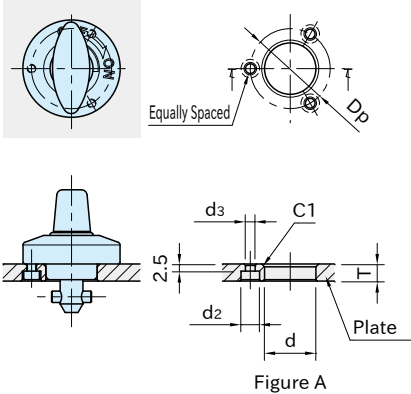
Changes of camera positions



Changes of fixture plates



How To Install



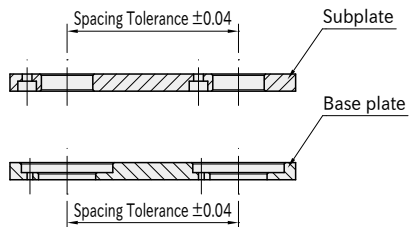
Part Number	Proper Plate Thickness	Figure	d (+0.10) (+0.05)	d_1	T (± 0.2)	d_2	d_3	D_p
QCTH QCTH-S QCTHL-S QCTH-SUS QCTHH	3 or more, under 6		Spacer QCASP is required.					
	6	A	14	—	6	4.4	2.4	21
	Over 6, 10 or less	B		26				
QCTH QCTH-S QCTHL-S QCTH-SUS QCTHH	3 or more, under 6		Spacer QCASP is required.					
	6	A	18	—	6	6.5	3.4	28
	Over 6, 14 or less	B		35				
QCTH QCTH-S QCTHL-S QCTH-SUS QCTHH	12	A		—	12			
	Over 12, 20 or less	B		35				

QCASP SPACERS



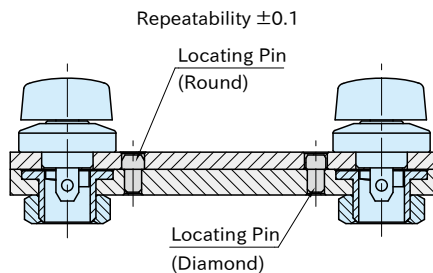
Accuracy

■ Machining Accuracy



Spacing tolerance on both the subplate and the base plate should be ± 0.04 .

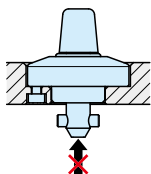
■ Repeatability



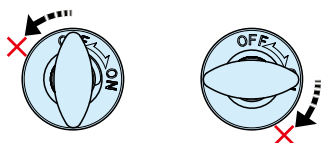
For higher accurate locating, use locating pins.

⚠ Caution

- Note the following cautions using [QCTH](#)
[QCTH-S](#) [QCTHL-S](#) [QCTH-SUS](#) [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
- Spacer [QCASP](#) is required for 3mm or more, under 6mm plate thickness.