

# QCWE

# KNOB-LOCKING PINS



Stainless Steel



**QCWE**



**QCWE-S**



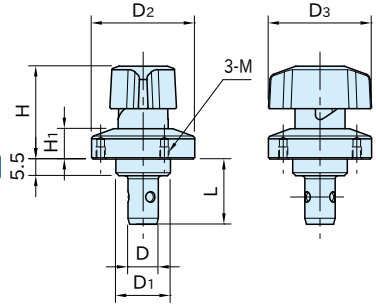
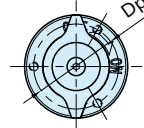
**QCWE-SUS**

(OFF position)



**QCWE**

(ON position)



★Key Point

Clamping can be detected by sensor.

Type	Body	Shank	Knob	Ball	Spring
<b>QCWE</b>	SUS303 stainless steel	S45C steel Electroless nickel plated Quenched and tempered	Polyamide (glass-fiber reinforced) Black	SUS440C stainless steel Quenched and tempered	SUS304WPB stainless steel
<b>QCWE-S</b>			SCS13 stainless steel (Equivalent to SUS304)		
<b>QCWE-SUS</b>		SUS420J2 stainless steel Quenched and tempered			

Size	Proper Plate Thickness	D (-0.05/-0.10)	D <sub>1</sub> (h9)	D <sub>2</sub>	D <sub>3</sub>	L	H	H <sub>1</sub>	M	D <sub>p</sub>	Clamping Force(N)													
<b>QCWE</b>	0625-10	3~10 <sup>*</sup> )	6	14	25	25	19.5	24.5	6.5	M2×0.4 Depth3	21	30												
<b>QCWE-S</b>													1034-14	3~14 <sup>*</sup> )	10	18	34	34	21.5	31	10	M3×0.5 Depth4	28	50
<b>QCWE-SUS</b>																								

<sup>\*</sup>) Spacer **QCASP** is required for thinner plate than 6mm.

Size	Proper Receptacle	Proper Sensor Receptacles
<b>QCWE</b>	QCBU0608-M12 QCBU0608-M12SUS	QCWE0625-M16-S
<b>QCWE-S</b>		
<b>QCWE-SUS</b>	QCBU1012-M16 QCBU1012-M16SUS	QCWE1034-M20-S
<b>QCWE-SUS</b>		

<b>QCWE</b> (Plastic Knob)		<b>QCWE-S</b> (Metal Knob)		<b>QCWE-SUS</b> (Stainless Steel)	
Part Number	Weight (g)	Part Number	Weight (g)	Part Number	Weight (g)
<b>QCWE0625-10</b>	40	<b>QCWE0625-10S</b>	50	<b>QCWE0625-10-SUS</b>	50
<b>QCWE1034-14</b>	95	<b>QCWE1034-14S</b>	120	<b>QCWE1034-14-SUS</b>	120
<b>QCWE1034-20</b>	100	<b>QCWE1034-20S</b>	130	<b>QCWE1034-20-SUS</b>	130

## Supplied With

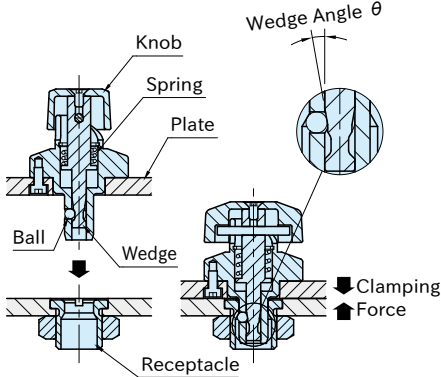
- QCWE | QCWE-S | QCWE-SUS | 0625-10 :  
3 of socket-head cap screws(stainless steel), M2×0.4-5L
- QCWE | QCWE-S | QCWE-SUS | 1034-14, 1034-20 :  
3 of socket-head cap screws(stainless steel), M3×0.5-6L

## QCBU-M

## BALL-LOCK RECEPTACLES

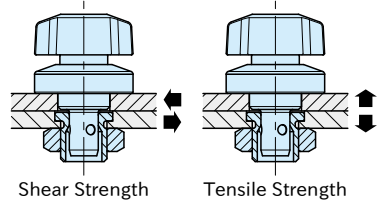


## Feature



The wedge of the locking pin pushes out the ball onto the taper of the receptacle, for clamping of the two plates.

## Technical Information

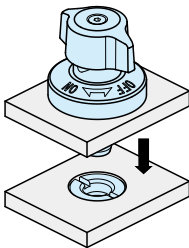


Size		Heatresistant Temperature(°C)	Shear Strength (N)	Tensile Strength (N)
QCWE	0625-10	130	3000	500
	1034-14		9000	1500
	1034-20		9000	1500
QCWE-S QCWE-SUS	0625-10	180	3000	500
	1034-14		9000	1500
	1034-20		9000	1500

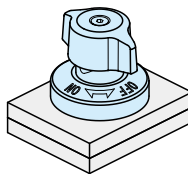
Shear and tensile strength is allowable load and the fastener could break when it receives bigger load.

The ball locking mechanism holds the two plates until the fastener receives bigger tensile load.

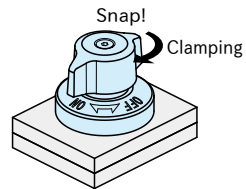
## How To Use



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



2.Insert the Knob-Locking Pin.

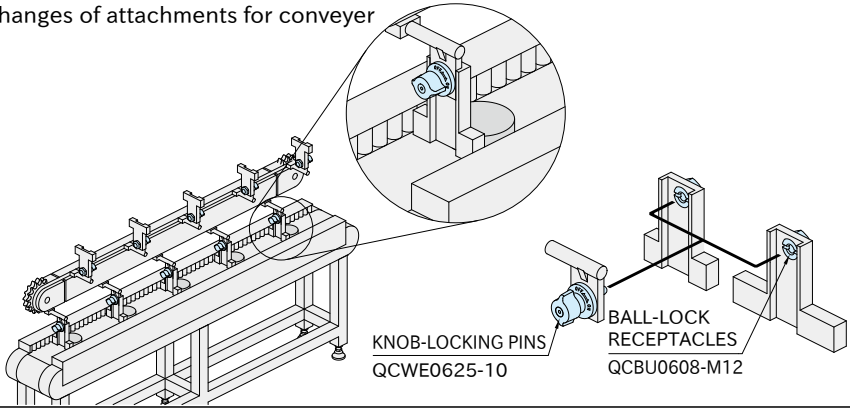


3.Turn the knob to the "ON" mark for clamping.

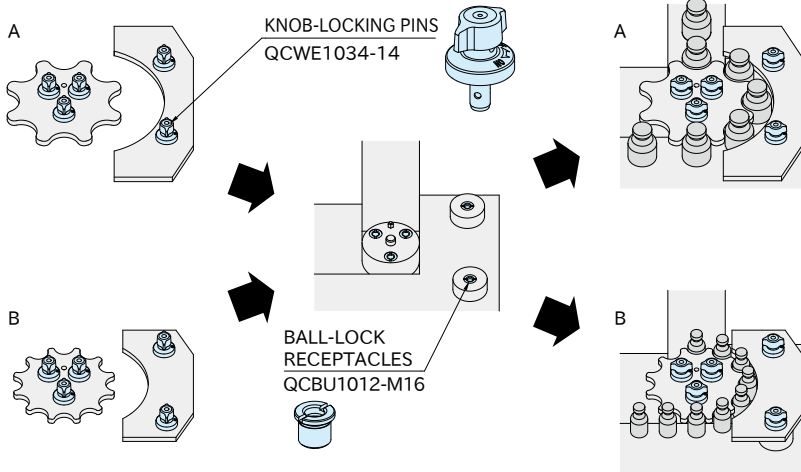
The knob turns lightly by spring force. Note: For unclamping, follow back these steps.

## Application Example

Changes of attachments for conveyer

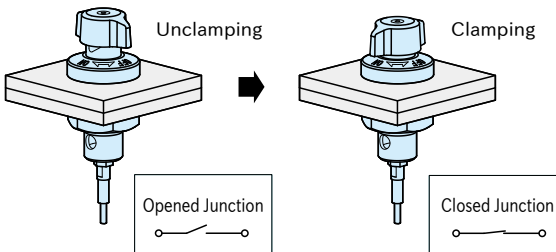


Changes of star wheels and guide plates



Detection by sensor

Detection of clamping condition prevents human error and improper operation of machinery.

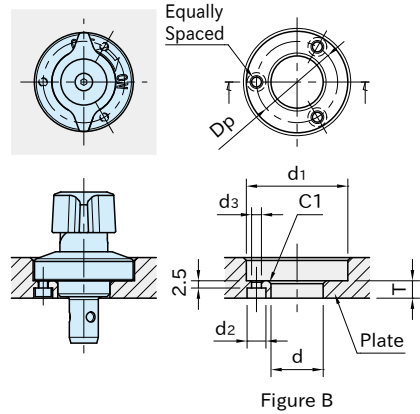
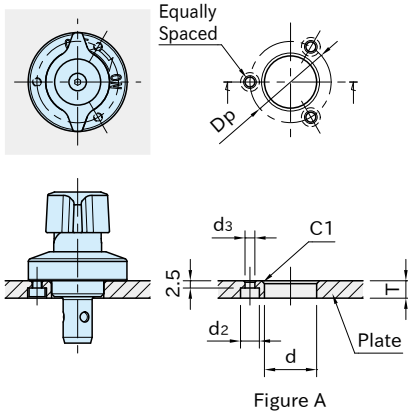


**QCWE-M-S**

**POSITION SENSOR RECEPTACLES**



## How To Install



Size	Proper Plate Thickness	Figure	d ( $+0.10$ / $+0.05$ )	d <sub>1</sub>	T* ( $\pm 0.2$ )	d <sub>2</sub>	d <sub>3</sub>	Dp
<b>QCWE</b> <b>QCWE-S</b> <b>QCWE-SUS</b>	6	3 or more, under 6	Spacer <b>QCASP</b> is required.					
		Over 6, 10 or less	A	14	-	6	4.4	2.4
	6	3 or more, under 6	Spacer <b>QCASP</b> is required.					
		Over 6, 14 or less	B	18	26	6	6.5	3.4
	12	A	35					
	Over 12, 20 or less	B	35		12			

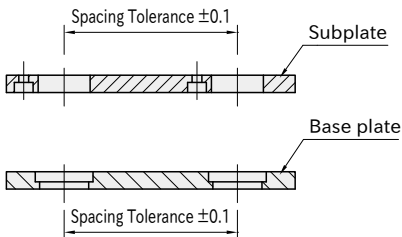
\*) In the use of Position Sensor Receptacles **QCWE-M-S**, tolerance of dimension T should be  $\pm 0.1$  for stable sensor working.

## QCASP SPACERS



## Accuracy

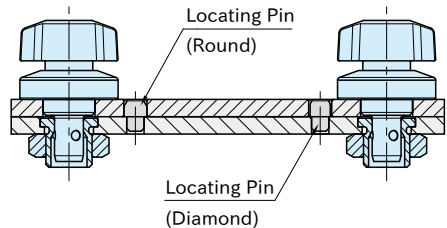
### ■ Machining Accuracy



Spacing tolerance on both the subplate and the base plate should be  $\pm 0.1$ .

### ■ Repeatability

Repeatability  $\pm 0.25$



For higher accurate locating, use locating pins.