

# QCWE

# KNOB-LOCKING PINS



Stainless Steel

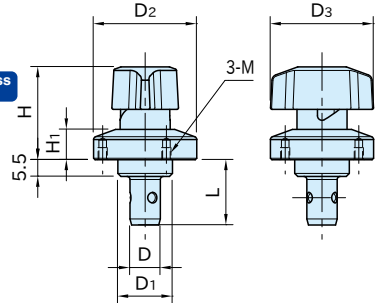
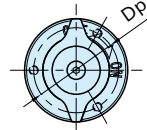


QCWE

QCWE-S  
(OFF position)

QCWE-SUS

Stainless Steel



QCWE

(ON position)

## ★Key Point

Clamping can be detected by sensor.

Type	Body	Shank	Knob	Ball	Spring
QCWE	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
QCWE-S			SCS13 stainless steel (Equivalent to SUS304)		
QCWE-SUS		SUS420J2 stainless steel Quenched and tempered			

Size		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)	Holding Force (N)**
QCWE	0625-10	3~10*)	6	14	25	25	19.5	24.5	6.5	M2X0.4 Depth3	21	30	90
QCWE-S	1034-14	3~14*)	10	18	34	34	21.5	31	10	M3X0.5 Depth4	28	50	150
QCWE-SUS							27.5						
	1034-20	12~20											

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

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

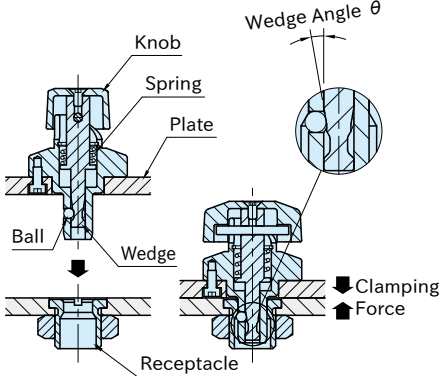
Size		Receptacles	Sensor Receptacles
QCWE	0625-10	QCBU0608-M12	QCWE0625-M16-S
QCWE-S		QCBU0608-M12SUS	QCWE0625-M16-SL
QCWE-SUS	1034-14	QCBU1012-M16	QCWE1034-M20-S
	1034-20	QCBU1012-M16SUS	QCWE1034-M20-SL

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

## Supplied With

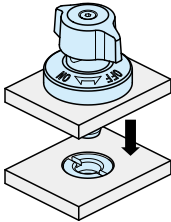
- **QCWE** **QCWE-S** **QCWE-SUS** 0625-10:  
3 of socket-head cap screws(stainless steel), M2X0.4-5L
- **QCWE** **QCWE-S** **QCWE-SUS** 1034-14, 1034-20 :  
3 of socket-head cap screws(stainless steel), M3X0.5-6L

## Feature

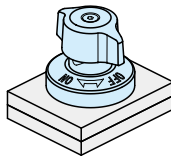


The wedge of the locking pin pushes out the balls against the tapered surface of the receptacle to clamp the two plates.

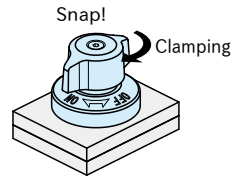
## How To Use



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



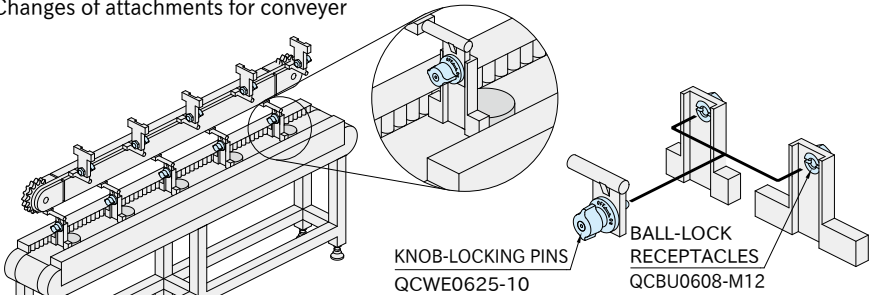
2.Insert the Knob-Locking Pin.



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 conveyor

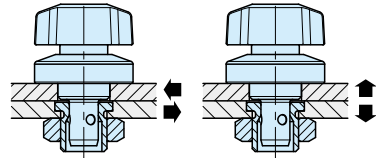


## QCBU-M

## BALL-LOCK RECEPTACLES



## Mechanical Strength



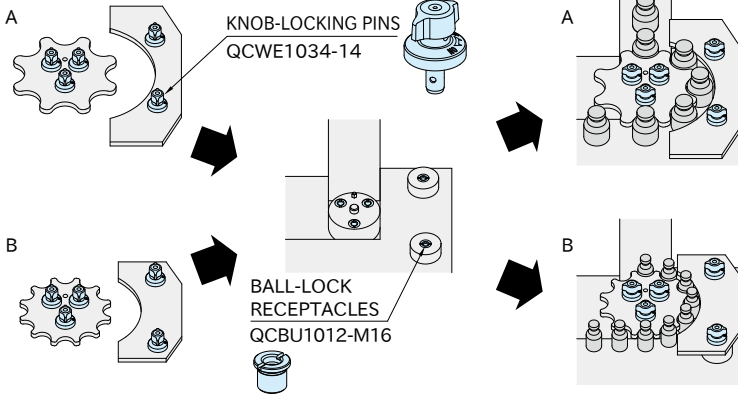
Shear Strength

Tensile Strength

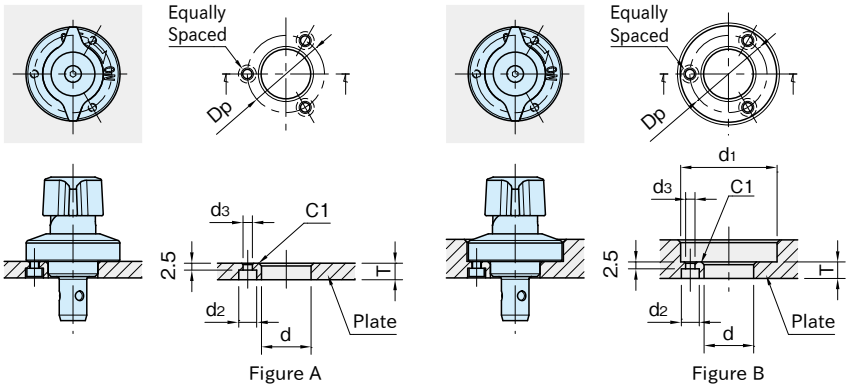
	Size	Heatresistant Temperature(C)	Shear Strength (N)	Tensile Strength (N)
<b>QCWE</b>	<b>0625-10</b>	130	3000	500
	<b>1034-14</b>		9000	1500
	<b>1034-20</b>			
<b>QCWE-S</b> <b>QCWE-SUS</b>	<b>0625-10</b>	180	3000	500
	<b>1034-14</b>		9000	1500
	<b>1034-20</b>			

## Application Example

### Changes of star wheels and guide plates



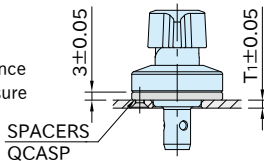
## How To Install



Size	Plate Thickness	Figure	$d$ ( $+0.10$ / $+0.05$ )	$d_1$	$T^*$ ( $\pm 0.2$ )	$d_2$	$d_3$	$D_p$
QCWE QCWE-S QCWE-SUS	3 or more, under 6	Spacer <b>QCASP</b> is required.**)						
	6	A	14	—	6	4.4	2.4	21
	Over 6, 10 or less	B		26				
3 or more, under 6	Spacer <b>QCASP</b> is required.**)							
1034-14	6	A	18	—	6	6.5	3.4	28
	Over 6, 14 or less	B		35				
	12	A		—				
1034-20	Over 12, 20 or less	B	35	—	12			

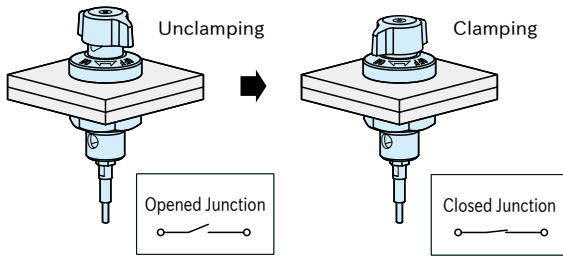
\*) Using Position Sensor Receptacles **QCWE-M-S** requires a tolerance of  $\pm 0.1$  for dimension  $T$  to ensure stable sensor operation.

\*\*) Combining Position Sensor Receptacles **QCWE-M-S** with Spacers **QCASP** requires a tolerance of  $\pm 0.05$  for dimension  $T_1$  to ensure stable sensor operation.



## Detection by sensor

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



## QCWE-M-S

### POSITION SENSOR RECEPTACLES

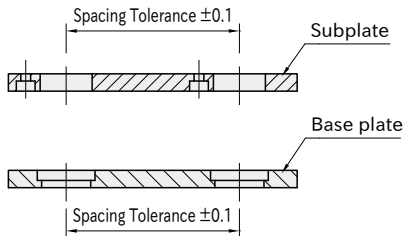


## Reference

- "How To Install" of [\[QCBU-M\]](#) Ball-Lock Receptacle
- "How To Install" of [\[QCWE-M-S\]](#) Position Sensor Receptacles
- Spacer [\[QCASP\]](#) is required for 3mm or more, under 6mm plate thickness.

## Accuracy

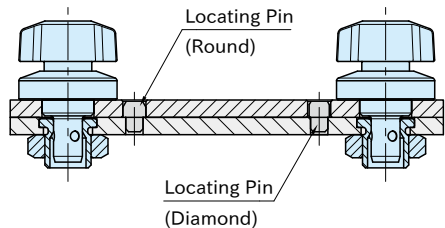
### ■ Machining Accuracy



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.