

QCWE

KNOB-LOCKING PINS



Stainless Steel

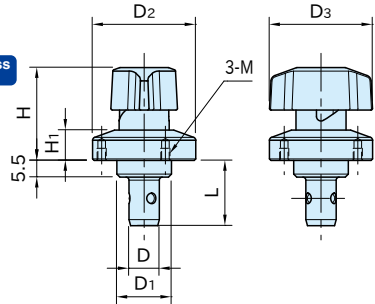
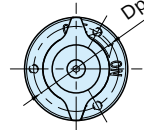


QCWE

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		Proper Plate Thickness	D (-0.05 -0.10)	D ₁ (h9)	D ₂	D ₃	L	H	H ₁	M	D _p	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 thinner plate than 6mm.

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

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

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

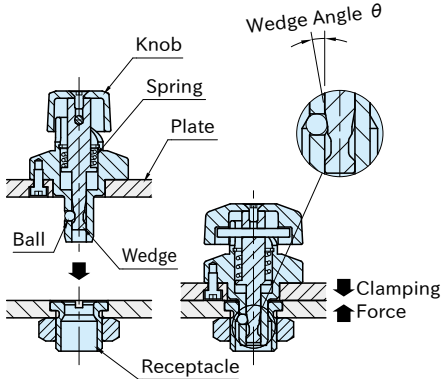
- QCWE | QCWE-S | QCWE-SUS 0625-10 :
3 of socket-head cap screws(stainless steel), M2×0.4-5L
- QCWE | QCWE-S | QCWE-SUS 1034-14, 1034-20 :
3 of socket-head cap screws(stainless steel), M3×0.5-6L

QCBU-M

BALL-LOCK RECEPTACLES

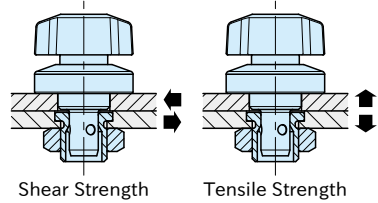


Feature



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

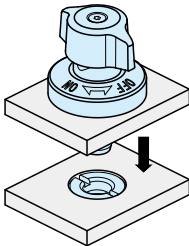
Mechanical Strength



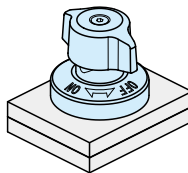
Size		Heatresistant Temperature(°C)	Shear Strength (N)	Tensile Strength (N)
QCWE	0625-10	130	3000	500
	1034-14		9000	1500
	1034-20			
QCWE-S QCWE-SUS	0625-10	180	3000	500
	1034-14		9000	1500
	1034-20			

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

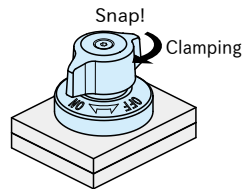
How To Use



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



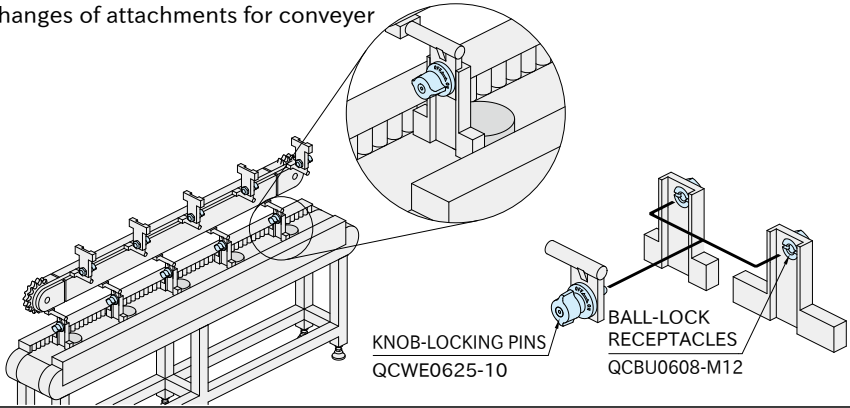
2.Insert the Knob-Locking Pin.



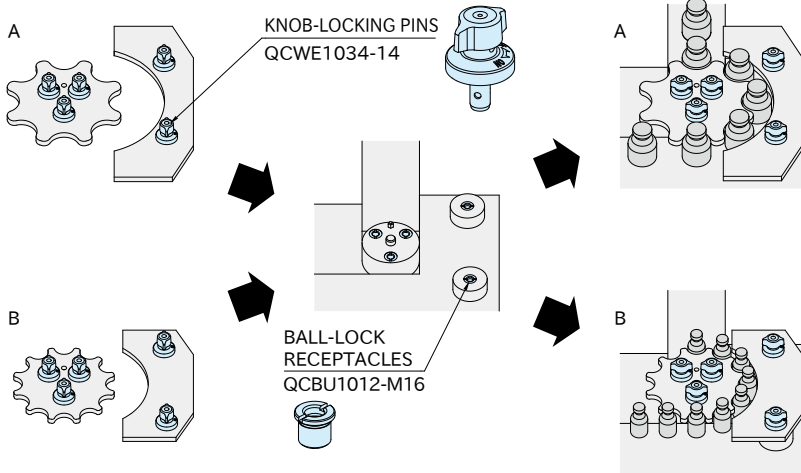
3.Turn the knob to the "ON" mark for clamping.
The knob turns lightly by spring force.
Note: For unclamping, follow back these steps.

Application Example

Changes of attachments for conveyer

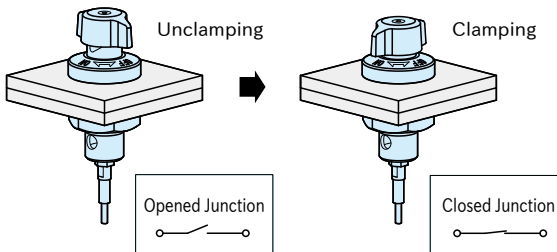


Changes of star wheels and guide plates



Detection by sensor

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



QCWE-M-S

POSITION SENSOR RECEPTACLES



How To Install

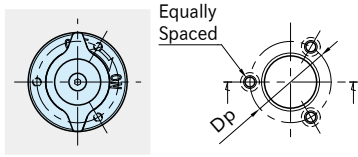


Figure A

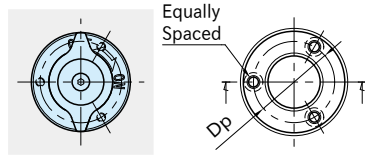


Figure B

Size	Proper Plate Thickness	Figure	d ($+0.10$ / $+0.05$)	d ₁	T* (± 0.2)	d ₂	d ₃	Dp
QCWE QCWE-S QCWE-SUS	625-10	3 or more, under 6	Spacer QCASP is required.					
		6	A	14	-	6	4.4	2.4
	Over 6, 10 or less	B	26					
625-14	3 or more, under 6	Spacer QCASP is required.						
		6	A	18	-	6	6.5	3.4
	Over 6, 14 or less	B	35					
	12	A	-		12			
Over 12, 20 or less	B	35						

*) In the use of Position Sensor Receptacles [QCWE-M-S](#), tolerance of dimension T should be ± 0.1 for stable sensor working.

QCASP SPACERS

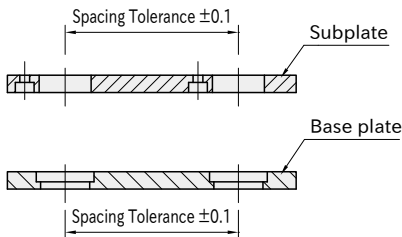


Reference

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

Accuracy

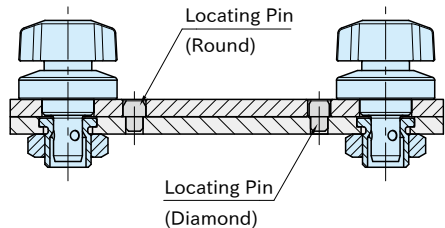
■ Machining Accuracy



Spacing tolerance on both the subplate and the base plate should be ± 0.1 .

■ Repeatability

Repeatability ± 0.25



For higher accurate locating, use locating pins.