QCWE KNOB-LOCKING PINS

RoHS Stainless Steel

IMAO

Wedge

QCWE

QCWE-S

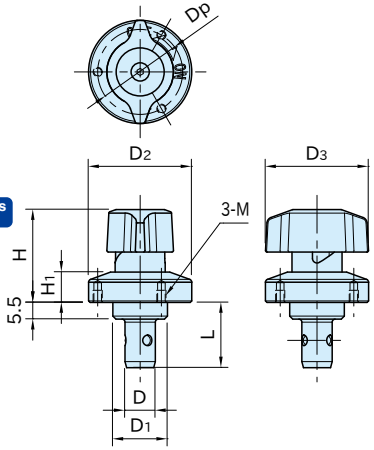
(OFF position)

Stainless Steel

QCWE-SUS

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)	D1 (h9)	D2	D3	L	H	H1	M	Dp	Clamping Force(N)	Holding Force (N) **
QCWE QCWE-S QCWE-SUS	0625-10	3~10 *)	6	14	25	25	19.5	24.5	6.5	M2X0.4 Depth3	21	30	90
	1034-14	3~14 *)	10	18	34	34	21.5	31	10	M3X0.5 Depth4	28	50	150
	1034-20	12~20					27.5						

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

**) The holding force limits the gap between plates within 0.1 mm, even if the fastener receives a tensile force exceeding the clamping force.

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

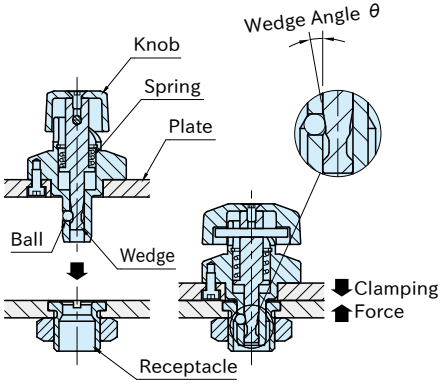
QCWE (Plastic Knob)		QCWE-S (Metal Knob)		QCWE-SUS (Stainless Steel)	
Part Number	Weight (g)	Part Number	Weight (g)	Part Number	Weight (g)
QCWE0625-10	40	QCWE0625-10S	50	QCWE0625-10-SUS	50
QCWE1034-14	95	QCWE1034-14S	120	QCWE1034-14-SUS	120
QCWE1034-20	100	QCWE1034-20S	130	QCWE1034-20-SUS	130

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

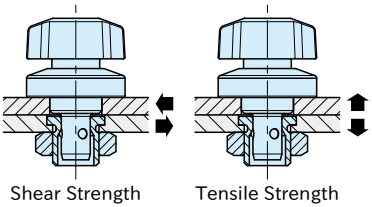
QCBU-M BALL-LOCK RECEPTACLES

Feature



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

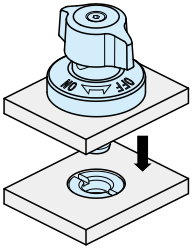
Technical Information



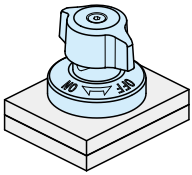
Size		Heatresistant Temperature(℃)	Shear Strength(N)	Tensile Strength(N)
QCWE	0625-10	130	3000	500
	1034-14		9000	1500
	1034-20			
QCWE-S QCWE-SUS	0625-10	180	3000	500
	1034-14		9000	1500
	1034-20			

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

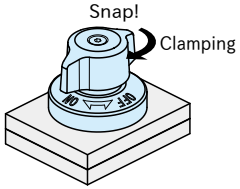
How To Use



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.

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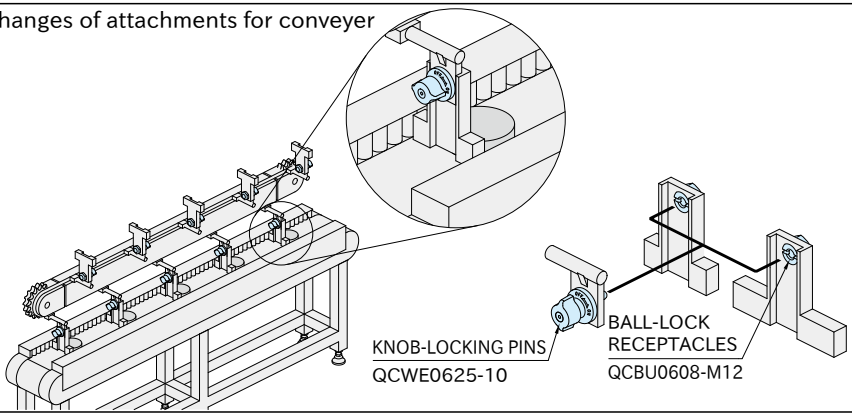
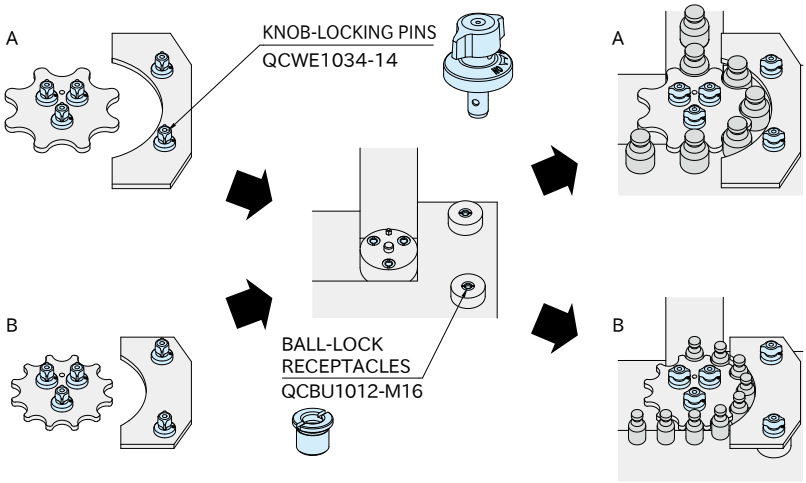
Application Example

Changes of attachments for conveyer

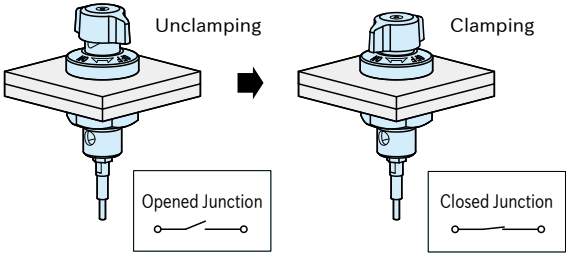


Changes of star wheels and guide plates



Detection by sensor

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



QCWE-M-S

POSITION SENSOR RECEPTACLES

How To Install

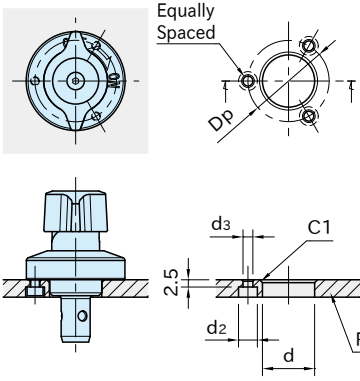


Figure A

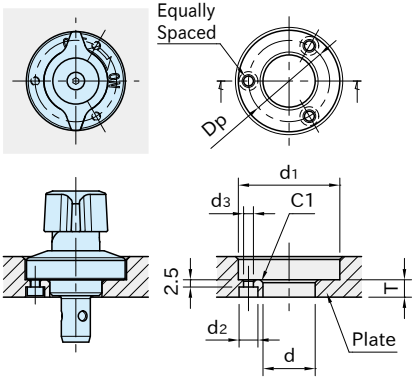


Figure B

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	0625-10	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				
	1034-14	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				
	1034-20	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.

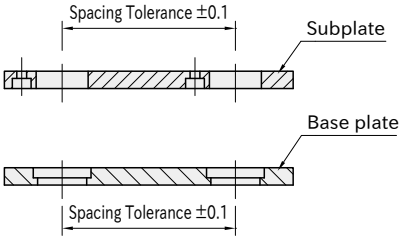
QCASP SPACERS

Reference

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

Accuracy

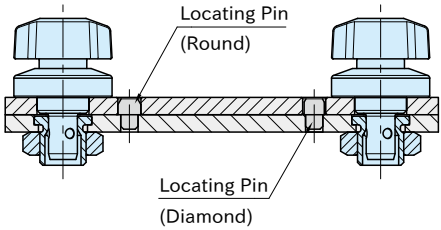
■Machining Accuracy



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.