QCWEA RETRACTABLE KNOB-LOCKING PINS

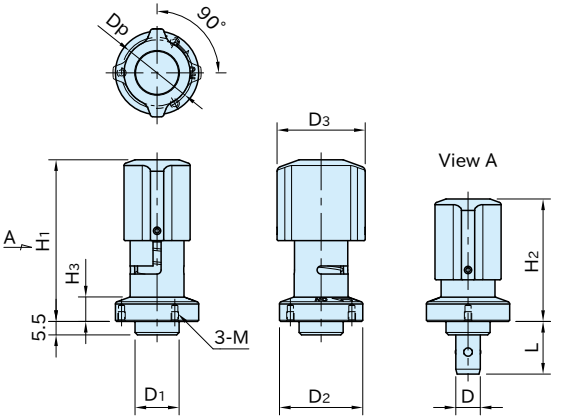
RoHS Stainless Steel

IMAO

Wedge

QCWEA1034-14-SUS
(OFF position)

QCWEA0625-10-SUS
(ON position)



(OFF position)

(ON position)

★Key Point

Retractable shank type with sensor detection of clamping condition.

Body, Shaft	Wedge	Knob	Ball	Spring
SUS303 stainless steel	SUS420J2 stainless steel Quenched and tempered	SCS13 stainless steel (Equivalent to SUS304)	SUS440C stainless steel Quenched and tempered	SUS304WPB stainless steel

Part Number	Plate Thickness	D $(^{-0.05}_{-0.10})$	D_1 (h9)	D_2	D_3	L	H_1	H_2	H_3	M	Dp	Clamping Force(N)	Holding Force (N) **)	Weight (g)
QCWEA0625-10-SUS	3~10 *)	6	14	25	28	19.5	58	43.5	6.5	M2X0.4 Depth3	21	30	90	114
QCWEA1034-14-SUS	3~14 *)	10	18	34	36	21.5	66	50	10	M3X0.5 Depth4	28	50	150	232

*) Spacer QCASP is required for plate thinner than 6mm.
**) Exceeding the holding force creates a gap of greater than 0.1mm between plates.

Part Number	Sensor Receptacles	Receptacles
QCWEA0625-10-SUS	QCWE0625-M16-S, QCWE0625-M16-SL	QCBU0608-M12, QCBU0608-M12SUS
QCWEA1034-14-SUS	QCWE1034-M20-S, QCWE1034-M20-SL	QCBU1012-M16, QCBU1012-M16SUS

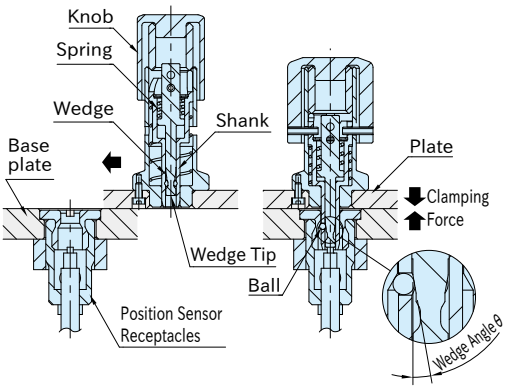
Supplied With

·QCWEA0625-10-SUS:
3 of socket-head cap screws(stainless steel), M2×0.4-5L
·QCWEA1034-14-SUS:
3 of socket-head cap screws(stainless steel), M3×0.5-6L

QCWE-M-S POSITION SENSOR RECEPTACLES

QCBU-M BALL-LOCK RECEPTACLES

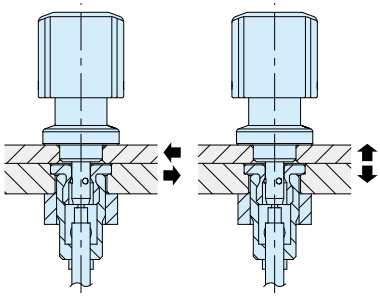
Feature



The shank retracts at the unclamping position to enable operations without interference with the base plate.

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

Mechanical Strength

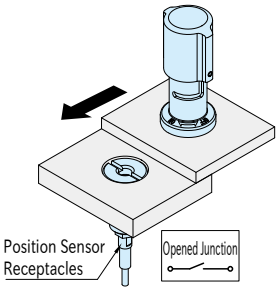


Shear Strength　　Tensile Strength

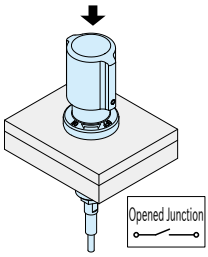
Part Number	Heatresistant Temperature(℃)	Shear Strength (N)	Tensile Strength (N)
QCWEA0625-10-SUS	180	3000	500
QCWEA1034-14-SUS		9000	1500

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

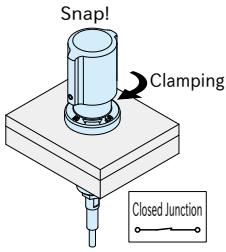
How To Use



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



2. Insert Retractable Knob-locking Pin pressing the knob.

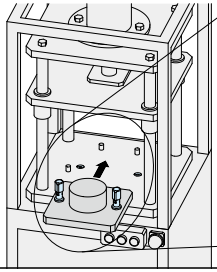


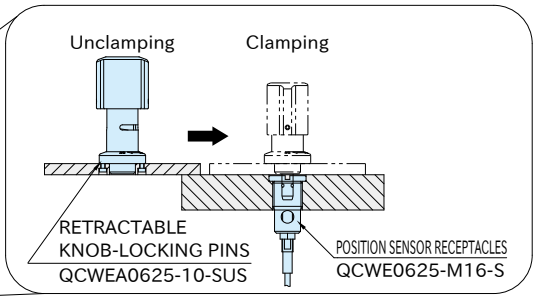
3. Turn the knob to the "ON" mark for clamping.The knob turns lightly by spring force. The tip of the wedge protrudes when clamped, providing reliable contact sensing. Note: Turning the knob to the "OFF" position automatically returns the shaft to the unclamped position by spring force.

Application Example

Changes of fixture plates

Sensor detection of fixture plate clamping





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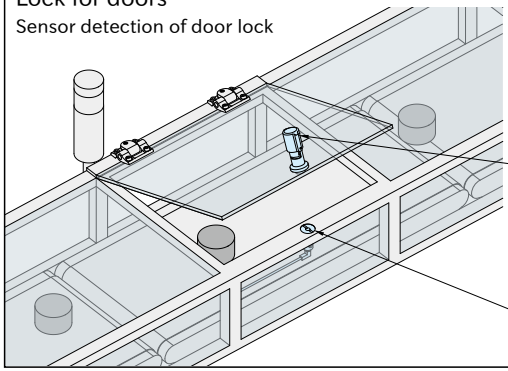
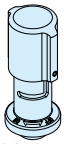
Application Example

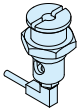
Lock for doors

Sensor detection of door lock



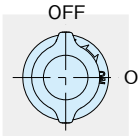


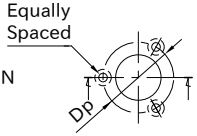
RETRACTABLE KNOB-LOCKING PINS
QCWEA0625-10-SUS

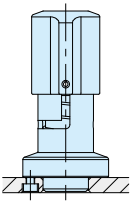


POSITION SENSOR RECEPTACLES
QCWE0625-M16-SL

How To Install







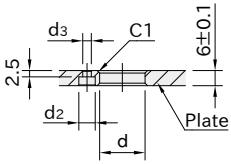
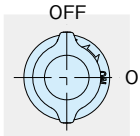
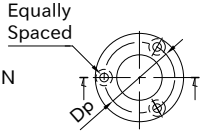
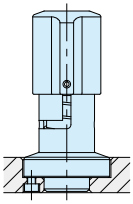


Figure A







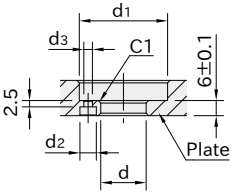
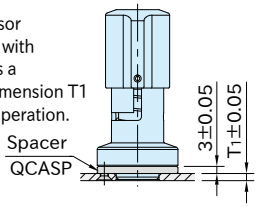


Figure B

Part Number	Plate Thickness	Figure	d (+0.10 +0.05)	d1	d2	d3	Dp
QCWEA0625-10-SUS	3 or more, under 6	Spacer QCASP is required. *)					
	6	A	14	–	4.4	2.4	21
	Over 6, 10 or less	B		26			
QCWEA1034-14-SUS	3 or more, under 6	Spacer QCASP is required. *)					
	6	A	18	–	6.5	3.4	28
	Over 6, 14 or less	B		35			

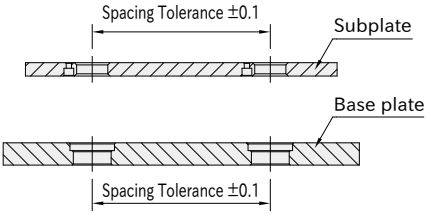
*) Combining Position Sensor Receptacles QCWE-M-S with Spacers QCASP requires a tolerance of ±0.05 for dimension T1 to ensure stable sensor operation.



QCASP SPACERS

Accuracy

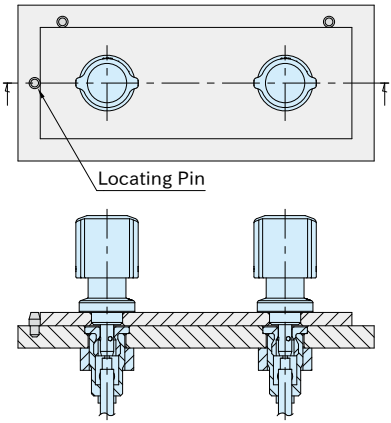
■Machining Accuracy



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

■Repeatability

Repeatability ±0.25



For higher accurate locating, use locating components.

Reference

・"How To Install" of QCWE-M-S Position Sensor Receptacles and QCBU-M Ball-Lock Receptacles
・Spacer QCASP is required for 3mm or more, under 6mm plate thickness.