

# QCBU / QCBUS BUTTON-LOCKING PINS



Stainless Steel

Heat resistance: 180°C



★Key Point  
Secure clamping with wedge



**QCBU**  
(Standard)



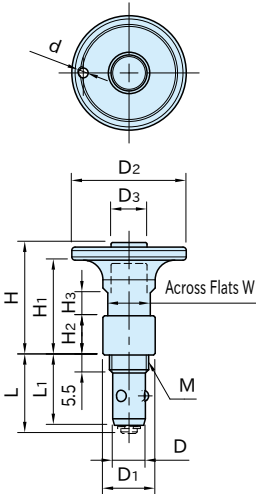
**QCBU-SUS**  
(Stainless Steel)



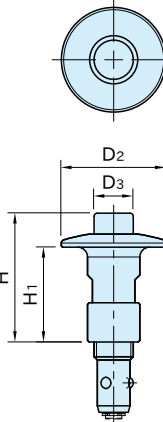
**QCBUS**  
(Cylindrical)



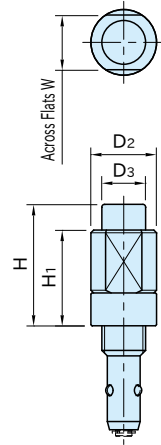
**QCBUS-SUS**  
(Cylindrical, Stainless Steel)



**QCBU**



**QCBU-SUS**



**QCBUS**

**QCBUS-SUS**

Part Number	Body	Button	Ball	Coiled Spring	Snap Ring	O-Ring
<b>QCBU</b>	<b>0608-10</b> SUM22 steel	S45C steel	Electroless nickel plated	SUS440C stainless steel	SUS304WPB stainless steel	FKM fluororubber
<b>QCBUS</b>	<b>1012-16</b> Electroless nickel plated					—
<b>QCBU-SUS</b>	<b>0608-10</b> SUS303	SUS420J2 stainless steel	Quenched and tempered	Quenched and tempered	Stainless steel	FKM fluororubber
<b>QCBUS-SUS</b>	<b>1012-16</b> stainless steel					—

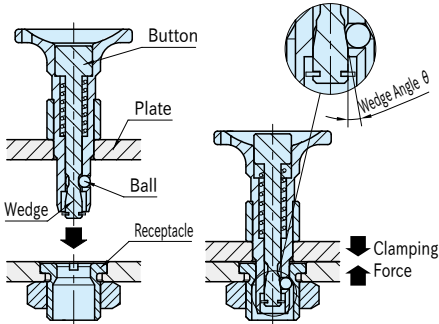
Part Number	Proper Plate Thickness	D ( $-0.05$ $-0.10$ )	M	D <sub>1</sub>	L	L <sub>1</sub>	H <sub>2</sub>	W	Clamping Force(N)	Holding Force (N) *	Proper Receptacles	
<b>QCBU</b>	0608-10	6~10	6	M 8×1.25	12	21	19	6	10	30	90	QCBU0608-M12
<b>QCBUS</b>												QCBU0608-M12SUS
<b>QCBU-SUS</b>	1012-16	6~16	10	M12×1.5 (Fine Thread)	16	23.5	21.5	12	13	50	150	QCBU1012-M16
<b>QCBUS-SUS</b>												QCBU1012-M16SUS

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

QCBU (Standard)								QCBU-SUS (Stainless Steel)						
Part Number	D <sub>2</sub>	D <sub>3</sub>	H	H <sub>1</sub>	H <sub>3</sub>	d	Weight (g)	Part Number	D <sub>2</sub>	D <sub>3</sub>	H	H <sub>1</sub>	H <sub>3</sub>	Weight (g)
QCBU0608-10	25	8	22	18	5.5	—	30	QCBU0608-10-SUS	23	8	26	18	5.5	30
QCBU1012-16	35	11	34.5	29	7	3	75	QCBU1012-16-SUS	32	12	39.5	29	7	75

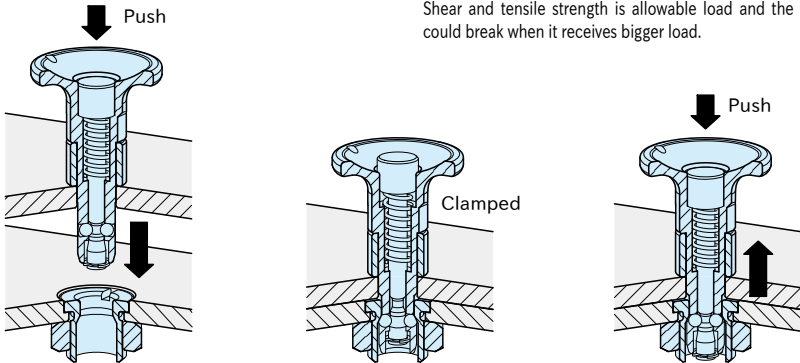
QCBUS (Cylindrical)							QCBUS-SUS (Cylindrical, Stainless Steel)						
Part Number	D <sub>2</sub>	D <sub>3</sub>	H	H <sub>1</sub>	H <sub>3</sub>	Weight (g)	Part Number	D <sub>2</sub>	D <sub>3</sub>	H	H <sub>1</sub>	H <sub>3</sub>	Weight (g)
QCBUS0608-10	12	8	22	17.5	11.5	30	QCBUS0608-10SUS	12	8	22	17.5	11.5	30
QCBUS1012-16	16	11	34.5	28	16	50	QCBUS1012-16SUS	16	11	34.5	28	16	50

### 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



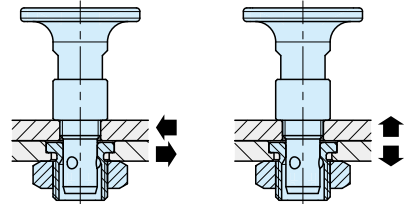
1. Insert the pin pressing the button.
2. When the button is released, plates are clamped.
3. For removal, pull out the pin pressing the button.

### QCBU-M

### BALL-LOCK RECEPTACLES



### Mechanical Strength



Part Number	Heatresistant Temperature (°C)	Shear Strength (N)	Tensile Strength (N)
QCBU QCBUS QCBU-SUS QCBUS-SUS	180	3000	500
1012-16		9000	1500

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

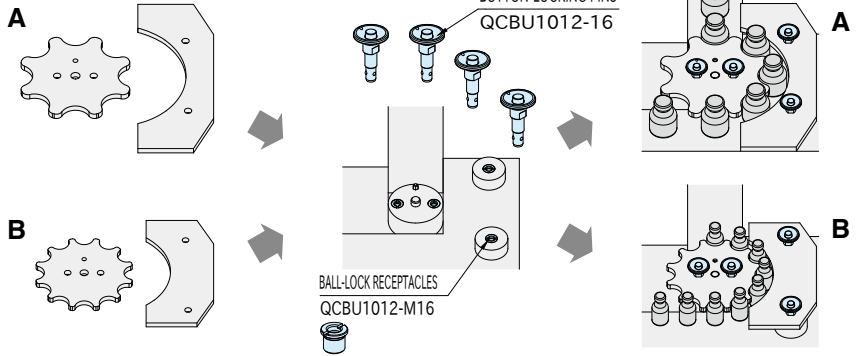
### Note

For cylindrical types, prepare handles or knobs separately to facilitate the operation. Use of cylindrical type requires handles or knobs separately to operate the product properly.

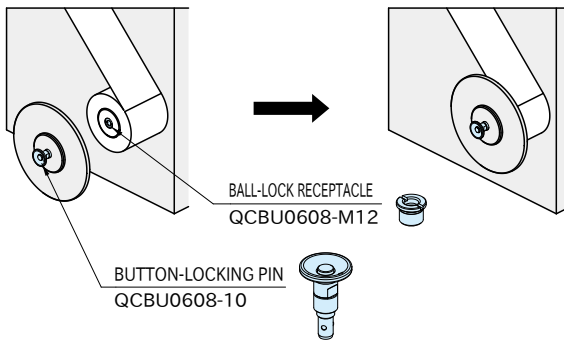
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## Application Example

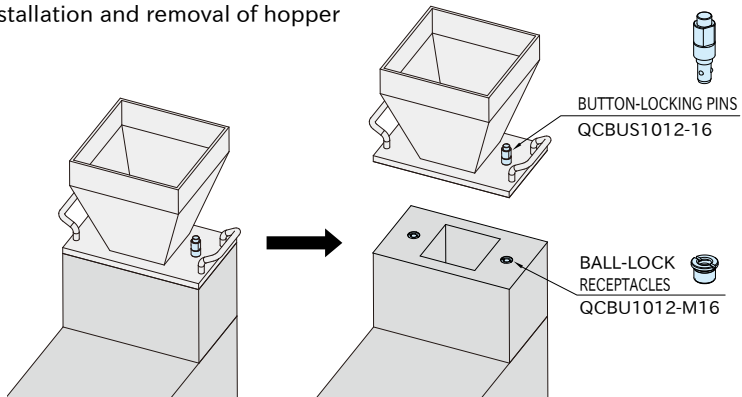
### Changes of star wheels and guide plates



### Installation and removal of stopper plate for rolls

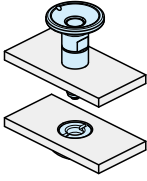


### Installation and removal of hopper



## How To Install

### Fixed Installation



Part Number		Proper Plate Thickness	Figure	M	d <sub>2</sub>
QCBU	0608-10	6	A	M 8×1.25	—
		Over 6, 10 or less	B		13
QCBUS	1012-16	6	A	M12×1.5 (Fine Thread)	—
		Over 6, 16 or less	B		17

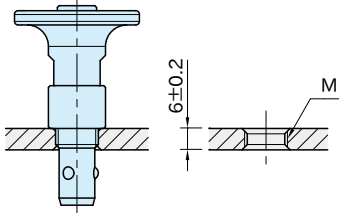


Figure A

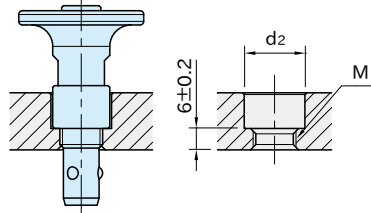
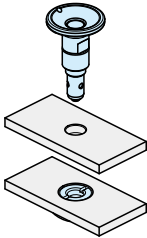


Figure B

### Unfixed Installation (Except QCBUS QCBUS-SUS type)



Part Number		Proper Plate Thickness	Figure	d <sub>1</sub> ( <sup>+0.1</sup> / <sub>0</sub> )	d <sub>2</sub>
QCBU	0608-10	6	C	8	—
		Over 6, 10 or less	D		13
QCBUS-SUS	1012-16	6	C	12	—
		Over 6, 16 or less	D		17

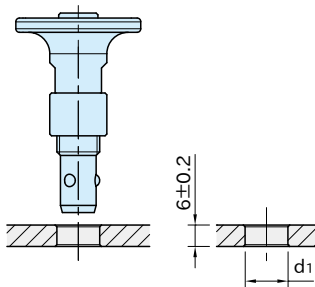


Figure C

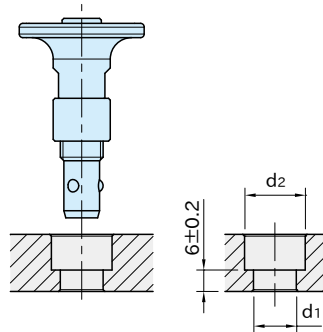
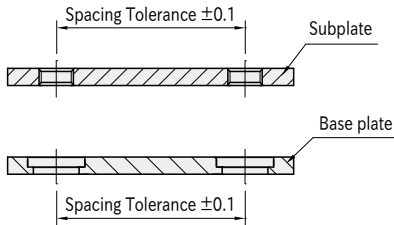


Figure D

## Accuracy

### ■ Machining Accuracy



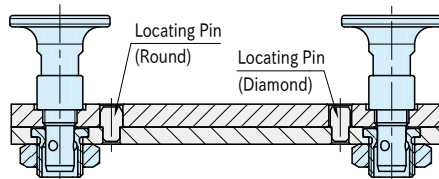
Spacing tolerance on both the subplate and the base plate should be  $\pm 0.1$ .

### Reference

"How To Install" of [QCBU-M](#) Ball-Lock Receptacle

### ■ Repeatability

Repeatability is  $\pm 0.25$  for both fixed and unfixed installations.



For higher accurate locating, use locating pins.