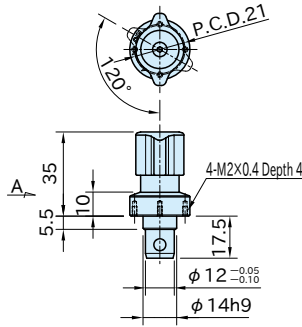


# QCWES

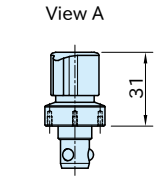
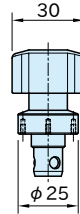
# HEAVY DUTY KNOB-LOCKING PINS



**QCWES1225-16S**  
(ON position)



(OFF position)

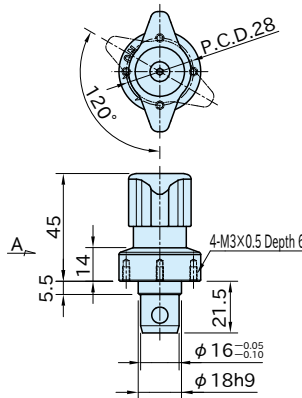


(ON position)

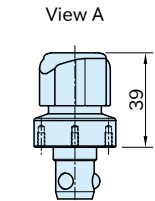
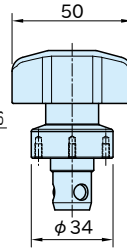
**QCWES1225-16S**



**QCWES1634-20S**  
(OFF position)



(OFF position)



(ON position)

**QCWES1634-20S**

## ★ Key Point

Strong clamping with 1000N / 2000N

| Body                                      | Wedge  | Knob  | Ball   | Spring A                       | Spring B                     |
|---|--|---|--|--------------------------------|------------------------------|
| SCM440 steel<br>Electroless nickel plated | SCM435 steel<br>Electroless nickel plated<br>Quenched and tempered | SCS13 stainless steel<br>(Equivalent to SUS304) | SUS440C stainless steel<br>Quenched and tempered | Equivalent to<br>SWOSC-V steel | SUS304WPB<br>stainless steel |

| Part Number          | Plate Thickness | Clamping Force (N) | Holding Force (N) **) | Weight (g) | Locking Receptacles |
|----------------------|-----------------|--------------------|-----------------------|------------|---------------------|
| <b>QCWES1225-16S</b> | 6~16 *)         | 1000               | 2500                  | 150        | QCWES1225-B         |
| <b>QCWES1634-20S</b> | 6~20 *)         | 2000               | 5000                  | 290        | QCWES1634-B         |

\*) The tolerance should be within  $\pm 0.05$  for 6mm-thick plates.

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

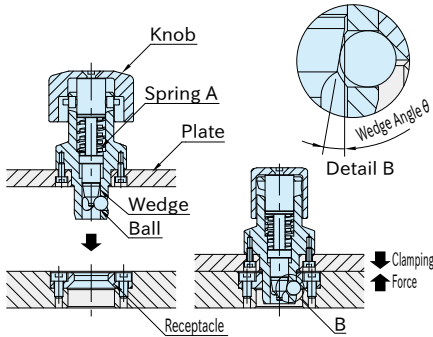
### Supplied With

- **QCWES1225-16S**:  
4 of socket-head cap screws(stainless steel), M2×0.4-5L
- **QCWES1634-20S**:  
4 of socket-head cap screws(stainless steel), M3×0.5-6L

### QCWES-B LOCKING RECEPTACLES

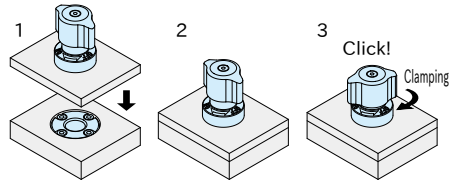


## Feature



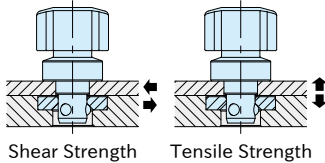
The wedge of the locking pin pushes out the balls against the tapered surface of the receptacle to clamp the two plates.

## 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 clicks when it is clamped. For unclamping, follow back these steps. The knob turns back to the "OFF" mark by spring force.

## Mechanical Strength

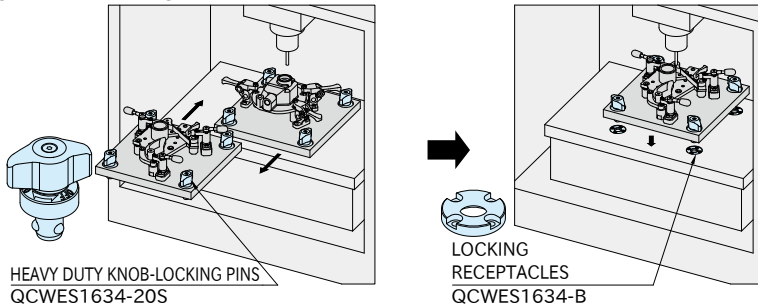


| Part Number   | Heat-resistant Temperature (°C) | Shear Strength (N) | Tensile Strength (N) |
|---------------|---------------------------------|--------------------|----------------------|
| QCWES1225-16S | 180                             | 10000              | 4000                 |
| QCWES1634-20S |                                 | 15000              | 8000                 |

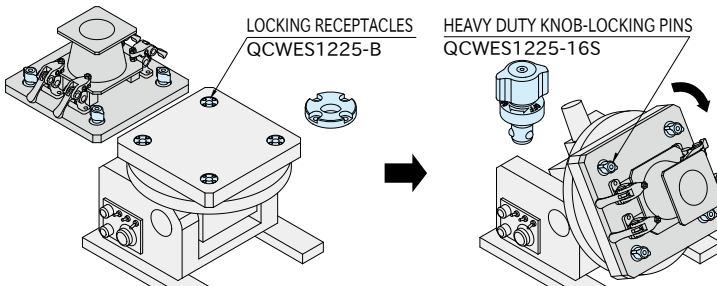
Shear and tensile strength is allowable load (N) and the fastener could break when it receives bigger load.

## Application Example

### Changes of machining fixture



### Changes of welding fixture

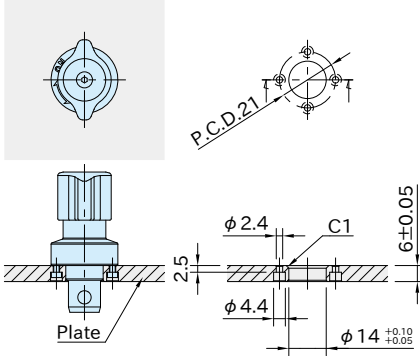


Continuing on Next Page

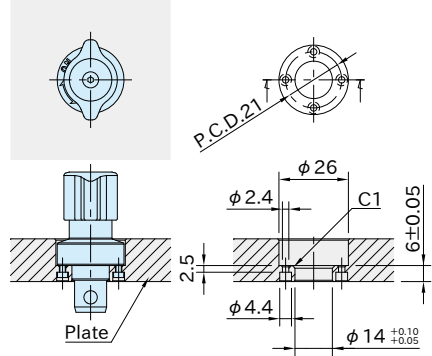
## How To Install

### QCWES1225-16S

For 6mm plate

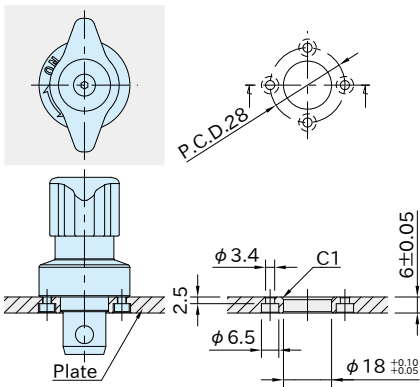


For over 6mm to 16mm plate

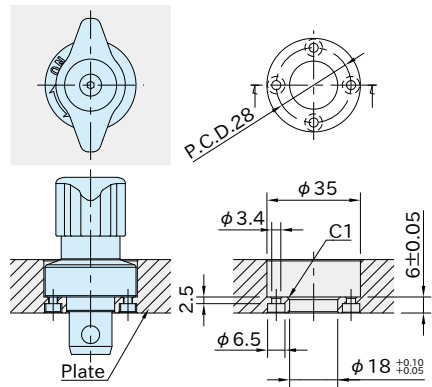


### QCWES1634-20S

For 6mm plate

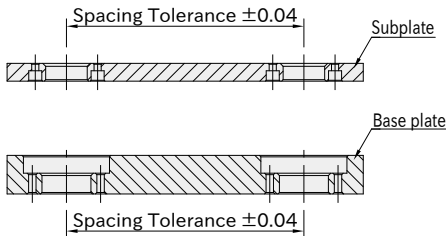


For over 6mm to 20mm plate



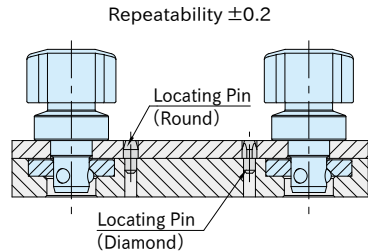
## Accuracy

### ■ Machining Accuracy



Spacing tolerance on both the subplate and the base plate should be  $\pm 0.04$ .

### ■ Repeatability

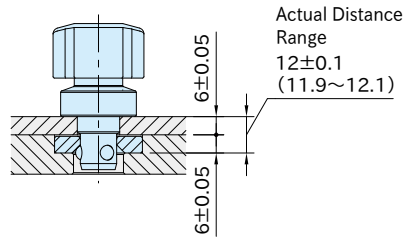
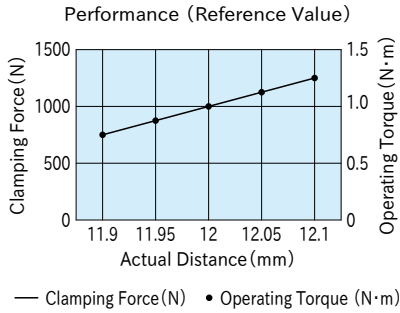


For higher accurate locating, use locating pins.

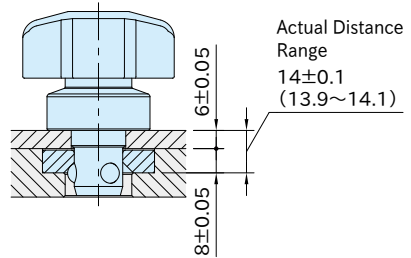
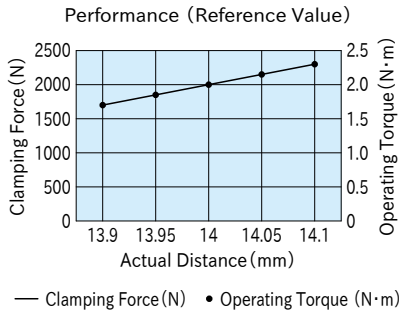
## Performance Curve

### Actual Mounting Distance vs. Clamping Force and Operating Torque

#### QCWES1225-16S



#### QCWES1634-20S



## Reference

"How To Install" of [\[QCWES-B\]](#) Locking Receptacles