# QCBA / QCBAS   BALL-LOCK CLAMPING RECEPTACLES

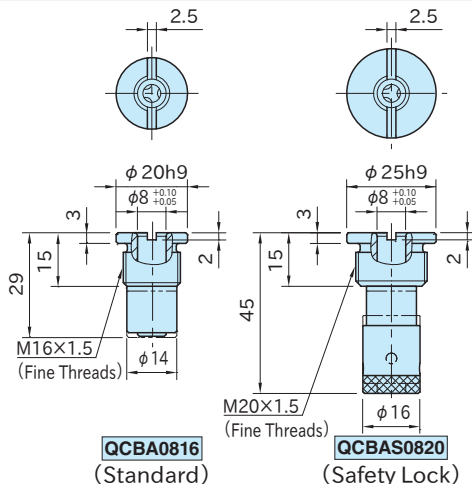RoHS | Electroless Nickel Plated | Heat resistance: 180°C | IMAO

| Type | Body/Collar | Balls | Coiled Spring | Locking Knob |
|---|---|---|---|---|
| QCBA0816 | S45C steel Electroless nickel plated | SUS440C stainless steel Quenched and tempered | SUS304WPB stainless steel | — |
| QCBAS0820 | | | | S45C steel Electroless nickel plated |

**QCBA0816**
（Standard）

**QCBAS0820**
（Safety Lock）

**QCBA0816** （Standard）

| Part Number | Clamping Force (N) | Weight (g) |
|---|---|---|
| QCBA0816A | 7 | 30 |
| QCBA0816B | 15 | 30 |

**QCBAS0820** （Safety Lock）

| Part Number | Clamping Force (N) | Weight (g) |
|---|---|---|
| QCBAS0820A | 7 | 65 |
| QCBAS0820B | 15 | 65 |

#### Related Product

PW Plunger Wrench

2.5

2.5

φ20h9
φ8 +0.10 +0.05
3
15
29
2
M16×1.5 （Fine Threads）
φ14

φ25h9
φ8 +0.10 +0.05
3
15
45
2
M20×1.5 （Fine Threads）
φ16

**QCBA0816** （Standard）

**QCBAS0820** （Safety Lock）

Order Separately  Nut (Stainless Steel)

W    H    M

| Part Number | M (Fine Threads) | H | W | Proper Ball-Lock Clamping Receptacles |
|---|---|---|---|---|
| NDX16-NUT-SUS | M16×1.5 | 8 | 24 | QCBA0816 |
| NDX20-NUT-SUS | M20×1.5 | 10 | 30 | QCBAS0820 |

# QCBA-M   BALL-LOCK CLAMPING PINS

RoHS | Electroless Nickel Plated | Heat resistance: 180°C | IMAO

φ8 -0.2 -0.4
M5×0.8
5
4
23
Across Flats : 6
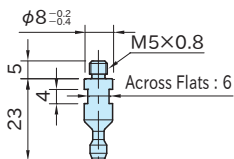
| Body |
|---|
| S45C steel Quenched and tempered Electroless nickel plated |

| Part Number | Weight (g) |
|---|---|
| QCBA0816-M5 | 7 |

## Feature



Clamping Pin

Clamping Force
7N,15N
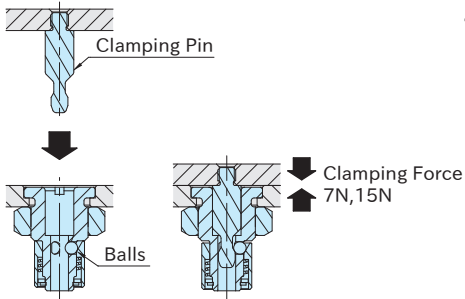
Balls

The 3 balls pull in the clamping pin.

## Technical Information

・Heat resistance 180℃
・Mechanical Strength

Shear Strength 1800N

Tensile Strength 1800N
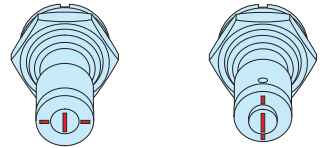(at active safety lock)
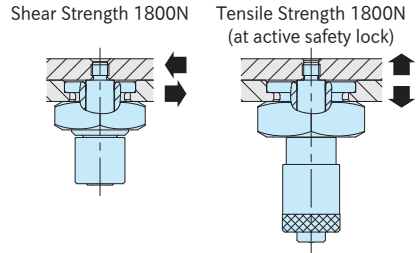


## How To Operate Safety Lock



Push                    Turn
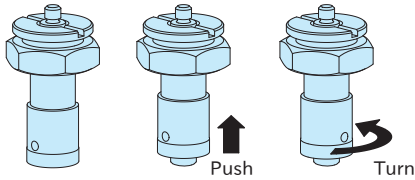
Turn in the arrowhead direction pushing the locking knob.
Note: To release the safety lock, follow the steps back.
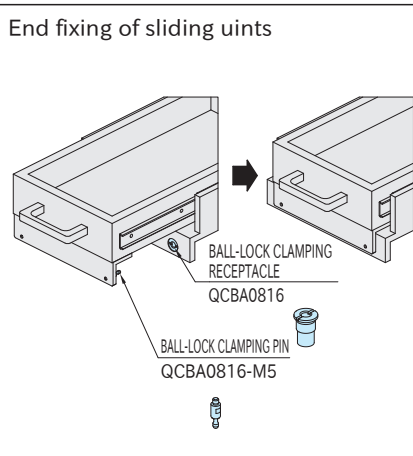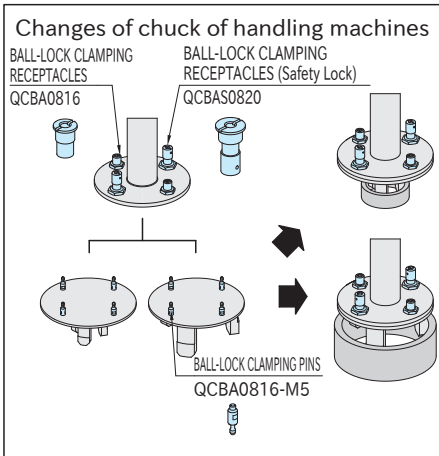
## How To Check Safety Lock
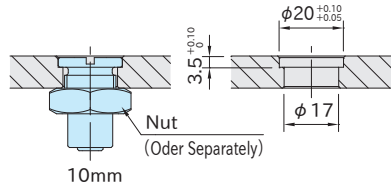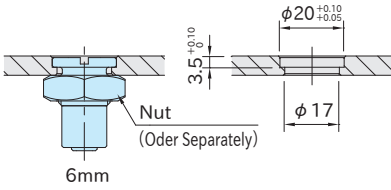


Inactive Mode          Active Mode

When the mark lines on the end of the locking
knob are aligned, the safety lock is active.

## Application Example
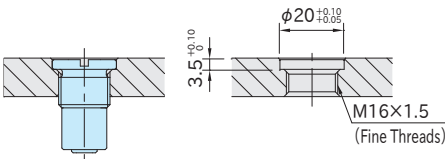
### Changes of chuck of handling machines

BALL-LOCK CLAMPING
RECEPTACLES
QCBA0816

BALL-LOCK CLAMPING
RECEPTACLES (Safety Lock)
QCBAS0820

BALL-LOCK CLAMPING PINS
QCBA0816-M5



### End fixing of sliding uints



BALL-LOCK CLAMPING
RECEPTACLE
QCBA0816

BALL-LOCK CLAMPING PIN
QCBA0816-M5

## How To Install (Standard)

For installation in a subplate of thickness ranging from 6mm to 10mm, use a nut for fastening.

$\phi 20^{+0.10}_{+0.05}$  $3.5^{+0.10}_{0}$  $\phi 17$

Nut
(Oder Separately)

6mm

$\phi 20^{+0.10}_{+0.05}$  $3.5^{+0.10}_{0}$  $\phi 17$

Nut
(Oder Separately)

10mm

For installation in a subplate of thickness over 10mm, use a screw-in method.

$3.5^{+0.10}_{0}$  $\phi 20^{+0.10}_{+0.05}$

M16×1.5
(Fine Threads)

Installation in a subplate

$3.5^{+0.10}_{0}$  $\phi 20^{+0.10}_{+0.05}$  M16×1.5
(Fine Threads)
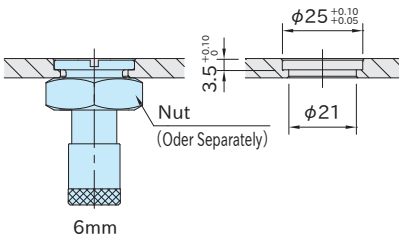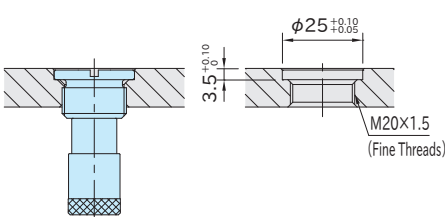
13
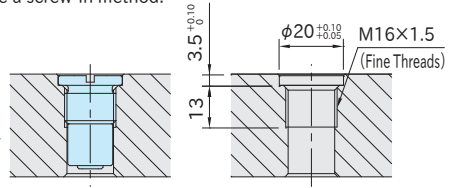
Installation in a block

## How To Install (Safety Lock)

For installation in a subplate of thickness ranging from 6mm to 10mm, use a nut for fastening.

$\phi 25^{+0.10}_{+0.05}$  $3.5^{+0.10}_{0}$  $\phi 21$

Nut
(Oder Separately)

6mm

$\phi 25^{+0.10}_{+0.05}$  $3.5^{+0.10}_{0}$  $\phi 21$

Nut
(Oder Separately)
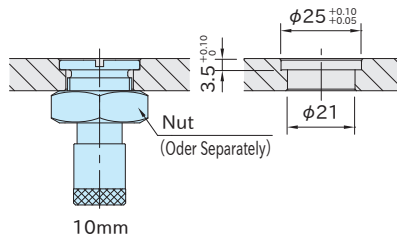
10mm

For installation in a subplate of thickness ranging from 10mm to 32mm, use a screw-in method.

$3.5^{+0.10}_{0}$  $\phi 25^{+0.10}_{+0.05}$

M20×1.5
(Fine Threads)

Installation in a subplate

$3.5^{+0.10}_{0}$  $\phi 25^{+0.10}_{+0.05}$

13

M20×1.5
(Fine Threads)

Installation in a block

Plate thickness should be 6mm or more.

M5×0.8

6mm Plate

M5×0.8 depth 6

Over 6mm Plate
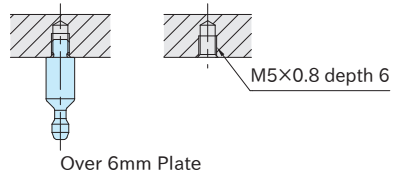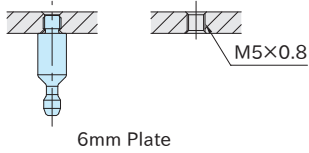
■Machining Accuracy

Spacing Tolerance ±0.1

Subplate

Base plate

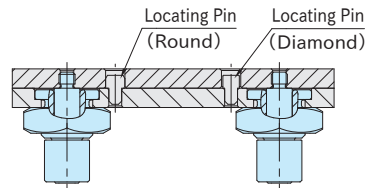Spacing Tolerance ±0.1
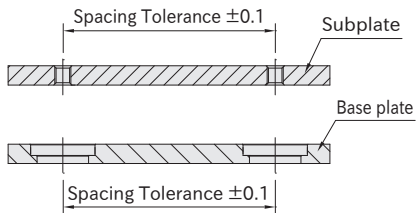
Spacing tolerance on both the subplate and the base plate should be ±0.1.

■Repeatability

Repeatability ±0.25

Locating Pin (Round)

Locating Pin (Diamond)

For higher accurate locating, use locating pins.