## QCTHSA RETRACTABLE HEAVY DUTY QUARTER-TURN CLAMPS

**Key Point**
No interference by retractable shank

<table>
<thead>
<tr>
<th>Type</th>
<th>Body</th>
<th>Shank</th>
<th>Pin</th>
<th>Knob</th>
<th>Spring A</th>
<th>Spring B</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCTHSA</td>
<td>SUS303 stainless steel</td>
<td>SKS3 steel</td>
<td>SUS420J2 stainless steel</td>
<td>Polyamide (glass-fiber reinforced) Black</td>
<td>Equivalent to SWOSC-V steel</td>
<td>SUS304WPB stainless steel</td>
</tr>
<tr>
<td>QCTHSA-S</td>
<td>(Equivalent to SUS304)</td>
<td>Electroless nickel plated</td>
<td>Quenched and tempered</td>
<td>SCS13 stainless steel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Part Number

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Proper Plate Thickness</th>
<th>Clamping Force (N)</th>
<th>Weight (g)</th>
<th>Proper Locking Receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCTHSA0825-20</td>
<td>6~20 *)</td>
<td>250</td>
<td>76</td>
<td>QCTHS0834-B</td>
</tr>
<tr>
<td>QCTHSA0825-20S</td>
<td></td>
<td>400</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>QCTHSA0834-20</td>
<td></td>
<td></td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>QCTHSA0834-20S</td>
<td></td>
<td></td>
<td>160</td>
<td></td>
</tr>
</tbody>
</table>

*) Spacer [QCASP] is required for thinner plate than 9mm.

### Supplied With

- **QCTHSA QCTHSA-S 0825-20**:
  3 of socket-head cap screws (stainless steel) M2×0.4-8L
- **QCTHSA QCTHSA-S 0834-20**:  
  3 of socket-head cap screws (stainless steel) M3×0.5-10L
**Feature**

- Knob
- Spring A
- Shank
- Spacer
- Base Plate
- Cam Groove
- Plate
- Receptacle
- Ball

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

When the cam groove moves along the ball inside the receptacle, the spring A gets compressed to press down the plate.

**Technical Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Heatresistant Temperature (℃)</th>
<th>Shear Strength(N)</th>
<th>Tensile Strength(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCTHSA0825-20</td>
<td>130</td>
<td>3000</td>
<td>1600</td>
</tr>
<tr>
<td>QCTHSA0825-20S</td>
<td>180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QCTHSA0834-20</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QCTHSA0834-20S</td>
<td>180</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

When the fastener receives tensile load that is bigger than its clamping force, there is a gap between the plates and the fastener could break if this happens frequently.

**How To Use**

1. Ensure that the knob is positioned at the "OFF" mark.
2. Insert the clamp pressing the knob.
3. Turn the knob to the "ON" mark for clamping. The knob clicks when clamped. Turning the knob to the "OFF" position, the shank returns automatically to the unclamping position by the spring.

**Application Example**

**Die Changing**

- RETRACTABLE HEAVY DUTY QUARTER-TURN CLAMP
  - QCTHSA0834-20
  - Clamping
  - Unclamping
  - LOCKING RECEPTACLE
  - QCTHS0834-B

Continuing on Next Page
Application Example

Guide Changing

Accuracy

Machining Accuracy
- Spacing Tolerance ±0.04

Repeatability ±0.1
- Spacing Tolerance ±0.04

Reference
- "How To Install Receptacle" of QCTHS-B LOCKING RECEPTACLE.

Spacing tolerance on both the subplate and the base plate should be ±0.04.

For higher accurate locating, use locating pins.

QCTHSA SPACERS

QCTHSA25-03-SUS
- Body: SUS303 stainless steel
- Part Number: 25 14 21 2.3 7

QCTHSA34-03-SUS
- Body: SUS303 stainless steel
- Part Number: 34 18 28 3.5 14
How To Install

**For 6mm plate**

- **QCTHSA0825-20**
  - For 9mm plate
  - Equally Spaced
  - Plate

- **QCTHSA0834-20**
  - For 9mm plate
  - Equally Spaced
  - Plate

- **QCTHSA25-03-SUS**
  - For over 6mm to under 9mm plate

**For 9mm plate**

- **QCTHSA0825-20S**
  - For over 9mm to 20mm plate
  - Equally Spaced

- **QCTHSA0834-20S**
  - For over 9mm to 20mm plate
  - Equally Spaced

**For over 6mm to under 9mm plate**

- **QCTHSA25-03-SUS**
  - Equally Spaced

**Equally Spaced**

- **QCTHSA0825-20**
  - Plate

- **QCTHSA0834-20**
  - Plate

- **QCTHSA25-03-SUS**
  - Plate

**Plate**

- **QCTHSA0825-20**
  - Plate

- **QCTHSA0834-20**
  - Plate

- **QCTHSA25-03-SUS**
  - Plate