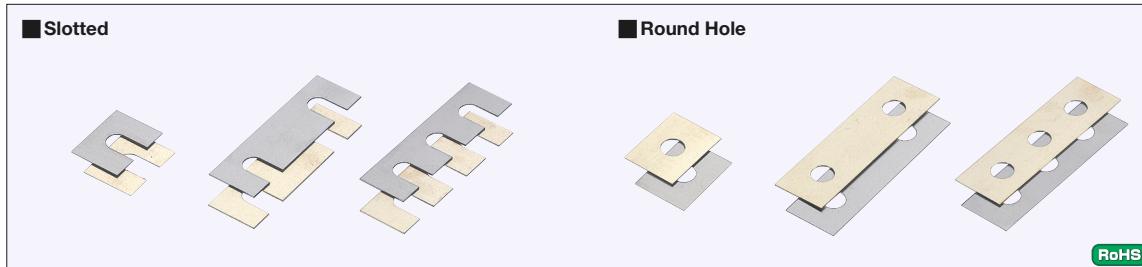


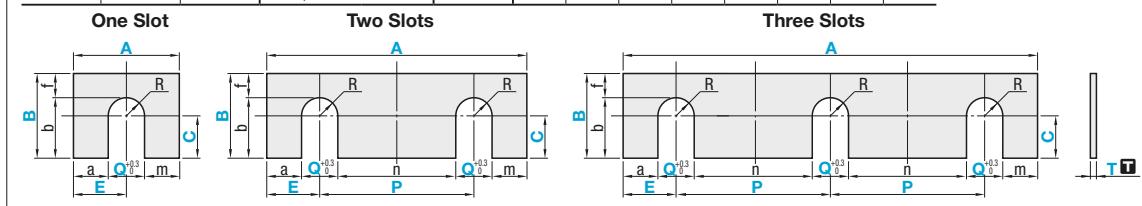
# Square Shims

## Slotted Hole / Round Hole



| Part Number |           |             | Material                                     | Hardness                      | Thickness (T) Tolerance |       |       |        |       |       |       |       |
|-------------|-----------|-------------|--|-------------------------------|-------------------------|-------|-------|--------|-------|-------|-------|-------|
| One Slot    | Two Slots | Three Slots |  |                               | 0.05                    | 0.1   | 0.2   | 0.3    | 0.5   | 1.0   | 2.0   | 3.0   |
| ASAFR       | ASFFR     | ASCFR       | EN 1.0330 Equiv.                             | -                             | -                       | ±0.03 | ±0.04 | ±0.06  | ±0.11 | ±0.17 | -     |       |
| ASAFB       | ASFFB     | ASCFB       | Brass (EN CW505L Equiv. or EN CW507L Equiv.) | -                             | ±0.005                  | ±0.02 | ±0.03 | ±0.04  | ±0.05 | ±0.08 | ±0.12 | ±0.15 |
| ASAFS       | ASFFS     | ASCFCS      | T=0.05~1.0<br>EN 1.4301 Equiv.<br>T=2.0, 3.0 | 370~430HV<br>EN 1.4301 Equiv. | ±0.005                  | ±0.02 | ±0.03 | ±0.035 | ±0.04 | ±0.05 | ±0.20 | ±0.25 |

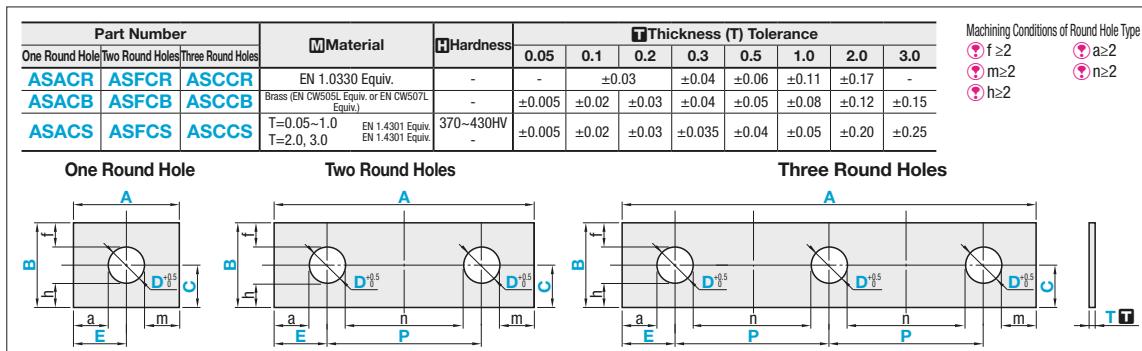
Machining Conditions of Slotted Hole Type  
 f $\geq$ 3      a $\geq$ 3  
 m $\geq$ 3      n $\geq$ 3



| Part Number      |       | 1mm Increment       |        | Selection | 0.1mm Increment |   |      |        | P |  |
|------------------|-------|---------------------|--------|-----------|-----------------|---|------|--------|---|--|
| Type             |       | A                   | B      | T         | Q               | E   | C    |        |   |  |
| EN 1.0330 Equiv. | Brass | EN 1.4301 Equiv.(H) |        | 10~150    | 10~150          | (0.05)<br>0.1<br>0.2<br>0.3<br>0.5<br>1.0 | 3~31 | Q/2+3~ | 0 | For One Hole Type, specification is not necessary. |
| One Hole         | ASAFR | ASAFB               | ASAFS  |           |                 |   |      |        |   |  |
| Two Holes        | ASFFR | ASFFB               | ASFFS  | 16~200    | 10~200          |   |      |        |   |  |
| Three Holes      | ASCFR | ASCFB               | ASCFCS | 16~200    | 10~200          |   |      |        |   |  |

EN 1.0330 Equiv. is not available for T(0.05) and T(3.0).

**Ordering Example** Part Number - A - B - T - Q - E - C - P  
 ASFFB - A100 - B25 - T1.0 - Q12 - E15 - C12 - P70



| Part Number      |       | 1mm Increment       |       | Selection | 0.1mm Increment |   |       |                     | P     |  |
|------------------|-------|---------------------|-------|-----------|-----------------|---|-------|---------------------|-------|--|
| Type             |       | A                   | B     | T         | D               | E   | C     |                     |       |  |
| EN 1.0330 Equiv. | Brass | EN 1.4301 Equiv.(H) |       | 10~150    | 10~150          | (0.05)<br>0.1<br>0.2<br>0.3<br>0.5<br>1.0 | 3~100 | D/2+2~<br>B-(D/2+2) | D/2+2 | For One Hole Type, specification is not necessary. |
| One Hole         | ASACR | ASACB               | ASACS |           |                 |   |       |                     |       |  |
| Two Holes        | ASFCR | ASFCB               | ASFCS | 15~200    | 10~200          |   |       |                     |       |  |
| Three Holes      | ASCCR | ASCCB               | ASCCS | 15~200    | 10~200          |   |       |                     |       |  |

EN 1.0330 Equiv. is not available for T(0.05) and T(3.0).

**Ordering Example** Part Number - A - B - T - D - E - C - P  
 ASACR - A50 - B25 - T0.1 - D7.5 - E25 - C11  
 ASCCS - A120 - B15 - T3.0 - D10 - E15 - C7 - P45

### One Slot / One Round Hole

| A       | B       | Unit Price   |         |              |
|---------|---------|--------------|---------|--------------|
|         |         | ASAFR, ASACR |         | ASAFB, ASACB |
| 10~50   | 10~50   | T0.1~0.5     | T1.0    | T2.0         |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 101~150 | 101~150 | 101~150      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 131~150 | 131~150 | 131~150      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |

### Two Slots / Two Round Holes

| A       | B       | Unit Price   |         |              |
|---------|---------|--------------|---------|--------------|
|         |         | ASFFR, ASFCR |         | ASFFB, ASFCB |
| 10~50   | 10~50   | T0.1~0.5     | T1.0    | T2.0         |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 101~150 | 101~150 | 101~150      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 131~150 | 131~150 | 131~150      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 151~200 | 151~200 | 151~200      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 151~200 | 151~200 | 151~200      | 151~200 | 151~200      |

### Three Slots / Three Round Holes

| A       | B       | Unit Price   |         |              |
|---------|---------|--------------|---------|--------------|
|         |         | ASCFR, ASCCR |         | ASCFB, ASCCB |
| 10~50   | 10~50   | T0.1~0.5     | T1.0    | T2.0         |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 51~100  | 51~100  | 51~100       | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 131~150 | 131~150 | 131~150      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 151~200 | 151~200 | 151~200      | 51~100  | 51~100       |
| 101~150 | 101~150 | 101~150      | 101~150 | 101~150      |
| 101~150 | 101~150 | 101~150      | 10~50   | 10~50        |
| 151~200 | 151~200 | 151~200      | 151~200 | 151~200      |