

# Stopper Bolts

With Urethane, Polyacetal, Silicon, MC Nylon

■ UST, USRT, PUST and USTS are now RoHS Compliant.

## ■ Shoulder Type

| Standard       | Hex Socket Type | Stopper        | Screw    | Accessory (Hex Nut)           | M          | D          | B                | (C)                      | H          | t                   | t <sub>1</sub> | m | (l) | B <sub>1</sub> | SR |
|----------------|-----------------|----------------|----------|-------------------------------|------------|------------|------------------|--------------------------|------------|---------------------|----------------|---|-----|----------------|----|
| Straight Shape | SR Shape        | Straight Shape | SR Shape | M Material                    | H Hardness | M Material | * Strength Class | S Surface Treatment      | M Material | S Surface Treatment |                |   |     |                |    |
| UST            | USRT            | USTH           | USRTH    | Urethane (Black)              | Shore A90  | SCM435     | 10.9             | Trivalent Chromate       | SUS304     | Equivalent          |                |   |     |                |    |
| SUST           | SUSRT           | SUSTH          | SUSRTH   | Low Repulsion Urethane (Gray) | Shore A70  | SCM435     | 10.9             | Bright Chromate Pating * | SS400      | Trivalent Chromate  |                |   |     |                |    |
| LUST           | -               | -              | -        | Polyacetal (White)            | -          | SCM435     | 10.9             | Trivalent Chromate       | SUS304     | Equivalent          |                |   |     |                |    |
| PUST           | -               | PUSTH          | -        | Silicon (Light Gray)          | Shore A70  | SCM435     | 10.9             | Trivalent Chromate       | SS400      | Trivalent Chromate  |                |   |     |                |    |
| PSST           | -               | PSSTH          | -        | -                             | -          | SCM435     | 10.9             | Trivalent Chromate       | SUS304     | Equivalent          |                |   |     |                |    |
| USTS           | -               | -              | -        | -                             | -          | SCM435     | 10.9             | Trivalent Chromate       | SS400      | Trivalent Chromate  |                |   |     |                |    |
| SSTS           | -               | -              | -        | -                             | -          | SCM435     | 10.9             | Trivalent Chromate       | SUS304     | Equivalent          |                |   |     |                |    |

\* Part numbers in   are not RoHS compliant.

Standard Straight

Hex Socket Straight

Standard Type, SR

Hex Socket Type, SR

\* For bolt strength class, see P2297

⚠ Incomplete threaded portion of 2 x pitch is under the neck.

| Part Number | Type                 | M (Coarse) | L Selection                | Unit Price |
|-------------|----------------------|------------|----------------------------|------------|
| Standard    | Hex Socket Type (SR) | 3          | 15 20 25 30 35 40          | UST        |
| UST         | SR                   | 4          | 15 20 25 30 35 40          | SUST       |
| SUST        | SR                   | 5          | 15 20 25 30 35 40          | LUST       |
| LUST        | SR                   | 6          | 20 25 30 35 40 45 50 60    | PUST       |
| PUST        | SR                   | 8          | 20 25 30 35 40 45 50 60    | USRT       |
| PSST        | SR                   | 10         | 20 25 30 35 40 45 50 60 70 | SUSRT      |
| USTS        | SR                   | 12         | 30 40 50 60 70             | SUSRT      |
| SSTS        | SR                   | 12         | 30 40 50 60 70             | PSST       |

⚠ The unit price of Shape SR (USRT and SUSRT) is the price of the same material plate shape multiplied by 1.2.

⚠ The unit price of Shape SR (UST, USRT, USTH, SUSRT) is the price of the same material plate shape multiplied by 1.2.

## ■ Straight Type

| Type | Stopper            | Screw     | Accessory (Hex Nut) |
|------|--------------------|-----------|---------------------|
| USS  | Urethane (Black)   | Shore A90 | SCM435              |
| USUS | Urethane (Black)   | Shore A90 | SUS304              |
| PUSS | Polyacetal (White) | -         | SCM435              |
| SPUS | Polyacetal (White) | -         | SUS304              |

⚠ For bolt strength class, see P2297

| Part Number | Type | M (Coarse) | L Selection                | Unit Price |
|-------------|------|------------|----------------------------|------------|
| USS         | SR   | 4          | 10 15 20 25 30 35          | USUS       |
| USUS        | SR   | 5          | 10 15 20 25 30 35 40       | PUSS       |
| PUSS        | SR   | 6          | 15 20 25 30 35 40 45 50 60 | SPUS       |
| SPUS        | SR   | 8          | 25 30 35 40 45 50 60       |            |
|             | SR   | 10         | 30 35 40 45 50 60 70       |            |
|             | SR   | 12         | 30 40 50 60 70             |            |

## ■ Hex Socket Head Cap Screw Type

| Type  | Stopper            | Screw     | Accessory (Hex Nut) |
|-------|--------------------|-----------|---------------------|
| UUSCB | Urethane (Black)   | Shore A90 | SUS304              |
| PSCB  | Polyacetal (White) | -         | SUS304 Equivalent   |

⚠ For bolt strength class, see P2297

| Part Number | Type | M (Coarse) | L Selection | Unit Price |
|-------------|------|------------|-------------|------------|
| UUSCB       | SR   | 4          | 10 12 15 20 | PSCB       |
| PSCB        | SR   | 5          | 12 15 20 25 |            |
|             | SR   | 6          | 15 20 25 30 |            |
|             | SR   | 8          | 20 25 30 40 |            |
|             | SR   | 10         | 25 30 40 50 |            |

■ Features: Large-headed Stoppers. Best for receiving workpieces on large surfaces.

## ■ Hex Socket Head Cap MC Nylon Type

| Type  | Stopper  | Screw  | Accessory (Hex Nut) |
|-------|----------|--------|---------------------|
| UNAHM | MC Nylon | SCM435 | SS400               |

⚠ Bolts and MC Nylon are adhered together using adhesives.

⚠ Contact Nut A to the MC Nylon for use.

⚠ If strong forces are applied, the MC Nylon may be damaged.

⚠ Do not use from the B direction.

⚠ For tightening, use a Hex Hole, not Nut A.

| Part Number | Type | M (Coarse) | L Selection       | t  | D  | d   | B   | H  | m   | Unit Price |
|-------------|------|------------|-------------------|----|----|-----|-----|----|-----|------------|
| UNAHM       | SR   | 4          | 10 15 20 25 30    | 3  | 10 | 2.4 | 2   | 7  | 2.4 |            |
|             | SR   | 5          | 15 20 25 30 40    | 4  | 12 | 3   | 2.5 | 9  | 3.2 |            |
|             | SR   | 6          | 15 20 25 30 40 50 | 5  | 15 | 3.5 | 3   | 10 | 3.6 |            |
|             | SR   | 8          | 25 30 40 50       | 6  | 20 | 4.7 | 4   | 13 | 5   |            |
|             | SR   | 10         | 30 40 50          | 7  | 25 | 6   | 5   | 15 | 6   |            |
|             | SR   | 12         | 30 40 50          | 8  | 30 | 7   | 6   | 18 | 7   |            |
|             | SR   | 16         | 30 40 50          | 10 | 40 | 9.5 | 8   | 22 | 10  |            |

|                  |             |   |    |
|------------------|-------------|---|----|
| Ordering Example | Part Number | - | L  |
|                  | UNAHM5      | - | 15 |

## ■ Hex Socket Head Cap Urethane Type

| Type  | Stopper                       | Screw     | Accessory (Hex Nut) |
|-------|-------------------------------|-----------|---------------------|
| UNAH  | Urethane (Black)              | Shore A90 | SCM435              |
| UNAHH | Urethane (Blue)               | Shore A70 | SUS304              |
| SLUNA | Low Repulsion Urethane (Gray) | Shore A70 | SUS304 Equivalent   |

⚠ For bolt strength class, see P2297

| Part Number | Type | M (Coarse) | L Selection                       | t                   | D    | A   | d   | B   | H  | ℓ                | m   | Unit Price |
|-------------|------|------------|-----------------------------------|---------------------|------|-----|-----|-----|----|------------------|-----|------------|
| UNAH        | SR   | 3          | 10 15                             | 10 15               | 7.5  | 5.5 | 3.3 | 2.5 | 6  | Full Thread      | 1.8 | UNAH       |
| UNAHH       | SR   | 4          | 10 15 20 (*25) (*30)              | 10 15 20 *25 *30    | 10   | 7   | 4.2 | 3   | 7  | Full Thread (22) | 2.4 | UNAHH      |
| SLUNA       | SR   | 5          | 10 15 20 25 *30 (*40)             | 15 20 25 *30 *40    | 12.5 | 8.5 | 5.5 | 4   | 9  | Full Thread (24) | 3.2 | SLUNA      |
|             | SR   | 6          | 10 15 20 25 30 *40 (*50)          | 15 20 25 30 *40 *50 | 15   | 10  | 6   | 5   | 10 | Full Thread (26) | 3.6 |            |
|             | SR   | 8          | 10 15 20 25 30 *40 (*50) (*60)    | 25 30 *40 *50 *60   | 20   | 13  | 7.3 | 6   | 13 | Full Thread (30) | 5   |            |
|             | SR   | 10         | 10 15 20 25 30 40 *50 (*60) (*70) | 30 40 *50 *60 *70   | 25   | 16  | 10  | 8   | 15 | Full Thread (34) | 6   |            |
|             | SR   | 12         | 15 20 25 30 40                    |                     | 30   | 18  | 13  | 10  | 18 | Full Thread      | 7   |            |
|             | SR   | 16         | 20 25 30 40                       |                     | 40   | 24  | 17  | 14  | 22 | Full Thread      | 10  |            |

⚠ L sizes in ( ) are not available for SLUNA. ⚠ ℓ dimension for \* marked L dimension is in ( ).

## ■ Tip Hex Socket Urethane Type

| Type  | Stopper          | Screw     | Accessory (Hex Nut) |
|-------|------------------|-----------|---------------------|
| UNBH  | Urethane (Black) | Shore A90 | SCM435              |
| UNBHH | Urethane (Blue)  | Shore A70 | SUS304              |

⚠ For bolt strength class, see P2297

| Part Number | Type | M (Coarse) | L Selection       | t <sub>1</sub> | D    | B <sub>1</sub> | H <sub>1</sub> | ℓ           | m   | (ℓ <sub>1</sub> ) | Unit Price |
|-------------|------|------------|-------------------|----------------|------|----------------|----------------|-------------|-----|-------------------|------------|
| UNBH        | SR   | 3          | 10 15             | 4              | 7.5  | -              | 14             | Full Thread | 1.8 | 1.8               | UNBH       |
| UNBHH       | SR   | 4          | 10 15 20 25 30    | 5              | 10   | 2              | 15             | Full Thread | 2.4 | 2.2               | UNBHH      |
|             | SR   | 5          | 15 20 25 30 40    | 6              | 12.5 | 2.5            | 16             | Full Thread | 3.2 | 2.8               |            |
|             | SR   | 6          | 15 20 25 30 40 50 | 7              | 15   | 3              | 17             | Full Thread | 3.6 | 3                 |            |
|             | SR   | 8          | 25 30 40 50 60    | 8              | 20   | 4              | 18             | Full Thread | 5   | 4                 |            |
|             | SR   | 10         | 30 40 50 60 70    | 10             | 25   | 5              | 19             | Full Thread | 6   | 5                 |            |

|                  |             |   |    |
|------------------|-------------|---|----|
| Ordering Example | Part Number | - | L  |
|                  | UNAH4       | - | 20 |
|                  | UNBH5       | - | 25 |