

DOWEL PINS (ECONOMY PACKS) SPRING PLUGS FOR PREVENTING DOWEL PIN FALL-OUT

Dowel pins Tapped h7 type **RoHS**
100PACK—MSTH (100 pins)
200PACK—MSTH (200 pins)

If L dimension is 10 with D5-D6, the pilot hole for the tap may go all the way through.

Price **Quotation**

Order **Days to Ship**

Material: SUJ2, 45~50HRC

| ℓ ₁ | ℓ ₂ | M×P | ℓ | D _{h7} | Catalog No. | | L | |
|----------------|----------------|-------|--------|-----------------|-----------------------|------|----|-------------------------|
| | | | | | Pack | Type | D | L |
| 1.5 | 0.3 | 3×0.5 | *6 | 0 -0.012 | 100PACK (100 pins) | MSTH | 5 | 10 15 |
| 2.0 | 0.3 | 4×0.7 | 6 8 | | | | 6 | 10 |
| 2.0 | 0.5 | 5×0.8 | 8 | 0 -0.015 | 200PACK (200 pins) | MSTH | 8 | 15 20 25 30 20 30 40 |
| 2.5 | 0.5 | 6×1.0 | 10 | | | | 10 | 30 40 |

* If D=5, then ℓ=6 is a value for reference only.

Order **Days to Ship** **Quotation**

Catalog No. **Pack** **Type** **D** **L**

(For 100 pins) 100 PACK —MSTH 6 — 20
 (For 200 pins) 200 PACK —MSTH 6 — 20

STEPPED DOWEL PINS / DOWEL PIN EXTRACTORS

Stepped dowel pins **RoHS**

MSFW

Material: SUJ2, 58HRC~

MSFWM (Tapped)

Material: SUJ2, 58HRC~

| MSFWM only M×P | ℓ | d | dL | Catalog No. | | Base unit price 1~49 pieces | Example |
|-------------------|----|----|----|----------------|----|-----------------------------|-----------|
| | | | | Type | D | | |
| — | — | 4 | 5 | MSFW | 5 | 15 | Quotation |
| | | | | | | 25 | |
| 3×0.5 | 6 | 5 | 10 | MSFW | 6 | 20 | Quotation |
| | | | | | | 30 | |
| 4×0.7 | 8 | 6 | 15 | MSFWM (Tapped) | 8 | 25 | Quotation |
| | | | | | | 35 | |
| 5×0.8 | 8 | 8 | 15 | MSFWM (Tapped) | 10 | 35 | Quotation |
| | | | | | | 40 | |
| 6×1.0 | 10 | 10 | 20 | MSFWM (Tapped) | 13 | 45 | Quotation |
| | | | | | | 55 | |
| | | | | | | 70 | |

Order **Days to Ship** **Price** **Quotation**

Catalog No. **L**

MSFW 10 — 35

Spring plugs for preventing dowel pin fall-out **RoHS**

SWA (For FC250, SS400, and similar plates)

Material: SAE1065

SWAL (For hardened plates)

Material: SUS304—CSP—H

For D6 only, tolerance is +0.5 / +0.3. D20 specification is not available.

| SWA | | SWAL | | L | Catalog No. | | Base unit price 1~49 pieces | Order | Catalog No. |
|------------------------|------|------------------------|------|----|-------------|--------------------------|-----------------------------|--------------|-------------|
| * Pullout force N(kgf) | d | * Pullout force N(kgf) | d | | Type | D (applicable dowel pin) | | | |
| 392 {40} | 4.4 | 245 {25} | 4.8 | 6 | SWA SWAL | 6 | Quotation | Days to Ship | Quotation |
| 1373 {140} | 5.6 | 785 {80} | 6.4 | 8 | | 8 | | | |
| 2354 {240} | 6.4 | 1275 {130} | 7.5 | 10 | | 10 | | | |
| 1765 {180} | 8.0 | 981 {100} | 9.2 | 12 | | 12 | | | |
| 1716 {175} | 9.0 | 981 {100} | 10.2 | 13 | | 13 | | | |
| 1422 {145} | 11.0 | 785 {80} | 12.5 | 16 | | 16 | | | |
| 1471 {150} | 15.0 | — | — | 20 | 20 | | | | |

* Pullout force is the average value of 10 repeated pull-outs from a H7 hole. The pullout force will vary depending on factors including the D dimension tolerance of the spring plugs, and the surface roughness and tolerance of press-fit holes.

Price **Quotation**

Example

<When spring plug is used>

<When screw plug is used>

Compared to when a screw plug is used

- Tapping is not necessary.
- Dowel pins can be removed directly when necessary.

KNHN
Dowel extractor

Dowel pin extractors **RoHS**

KNHN (Tool unit ①+Holder cap ②, 1 each)
KNHN—B (① only)
KNHN—M (② only)

① Tool unit: S45C, 38~42HRC
 ② Holder cap: For M4-M5-M6-M8-M10

| Catalog No. | Base unit price | Volume discount unit price |
|-------------|-----------------|----------------------------|
| KNHN (①+②) | 1~9 sets | 10~20 |
| | | Quotation |

| Catalog No. | Base unit price | Volume discount unit price |
|-----------------|-----------------|----------------------------|
| KNHN—B (① only) | 1~9 pieces | 10~20 |
| | | Quotation |

| d | Catalog No. | | Base unit price | Volume discount unit price |
|------|-----------------|-----|-----------------|----------------------------|
| | Type | No. | | |
| 4.2 | KNHN—M (② only) | 4 | Quotation | Quotation |
| 5.2 | | 5 | | |
| 6.3 | | 6 | | |
| 8.5 | | 8 | | |
| 10.5 | | 10 | | |

Order **Days to Ship** **Price** **Quotation**

Catalog No. **L**

KNHN
KNHN—M 5
KNHN—B

- Features**
- The flange machining of the shaft knurled section allows these products to be used safely when the operator uses both hands, preventing hands from being caught between the shaft knurled section and hammer.
 - The hammer part is shot blasted, making slipping less likely.
 - A flat is cut on the hammer part in order to prevent it from turning.
 - Loctite is used on the holder cap threads in order to prevent thread loosening.

- How to use**
1. Insert a hexagon socket head cap screw (CB) into the holder cap.
 2. Install the holder cap ② onto the end of the tool body.
 3. Turn the shaft knurled section in order to insert the end of the screw into the dowel pin.
 4. Slide the hammer and pull out the dowel pin.

Slide Hammer Shaft knurled section ② Holder cap CB (Hexagon socket head cap screw) P.809