

| Overall length | Chamfer+ full thread | Thread length | Thread+Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|----------------------|---------------|--------------------|--------------|------------|----------------|------------------|
| L              | $\ell_t$             | $\ell$        | $\ell_n$           | $\ell_s$     | Ds         | K              | $\ell_k$         |

# LS-SP

## Long Shank Spiral Fluted Taps Specification



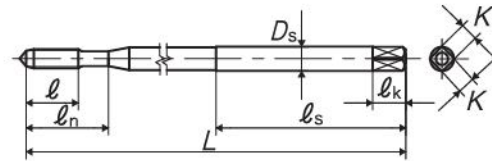
### Recommended Tapping Speeds depending on Materials

Medium carbon steels  
中炭鋼  
**5~10**  
(m/min)

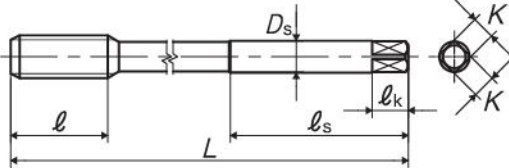
For icon explanation, refer to P.24



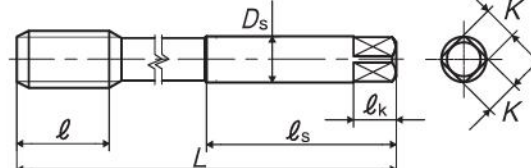
TYPE:1



TYPE:2



TYPE:3



Oversize  
Segment : 1C

| Size               | Class | Code       | Chamfer | L (mm) | $\ell$ (mm) | $\ell_n$ (mm) | $\ell_s$ (mm) | Ds (mm) | K (mm) | $\ell_k$ (mm) | No. of flutes | Type | Stock |
|--------------------|-------|------------|---------|--------|-------------|---------------|---------------|---------|--------|---------------|---------------|------|-------|
| For Metric Threads |       |            |         |        |             |               |               |         |        |               |               |      |       |
| <b>M2 × 0.4</b>    | P1    | SPP2.0EL07 | 2.5P    | 70     | 7.2         | 12            | 55            | 3       | 2.5    | 5             | 2             | 1    | △     |
|                    |       | SPP2.0EL10 |         | 100    |             |               | 85            |         |        |               |               |      | △     |
| <b>M2.3 × 0.4</b>  | P1    | SPP2.3EL07 | 2.5P    | 70     | 7.2         | 12            | 55            | 3       | 2.5    | 5             | 2             | 1    | △     |
|                    |       | SPP2.3EL10 |         | 100    |             |               | 85            |         |        |               |               |      | △     |
| <b>M2.5 × 0.45</b> | P1    | SPP2.5FL07 | 2.5P    | 70     | 8.1         | 14            | 53            | 3       | 2.5    | 5             | 2             | 1    | △     |
|                    |       | SPP2.5FL10 |         | 100    |             |               | 83            |         |        |               |               |      | △     |
| <b>M2.6 × 0.45</b> | P1    | SPP2.6FL07 | 2.5P    | 70     | 8.1         | 14            | 53            | 3       | 2.5    | 5             | 2             | 1    | △     |
|                    |       | SPP2.6FL10 |         | 100    |             |               | 83            |         |        |               |               |      | △     |
| <b>M3 × 0.5</b>    | P1    | SPP3.0GL07 | 2.5P    | 70     | 9           | 14            | 50            | 4       | 3.2    | 6             | 3             | 1    | △     |
|                    |       | SPP3.0GL10 |         | 100    |             |               |               |         |        |               |               |      | ○     |
|                    |       | SPP3.0GL12 |         | 120    |             |               |               |         |        |               |               |      | △     |
|                    |       | SPP3.0GL15 |         | 150    |             |               |               |         |        |               |               |      | ◎     |
|                    | P2    | SPQ3.0GL10 |         | 100    |             |               | 40            |         |        |               |               |      | △     |
|                    |       | SPQ3.0GL15 |         | 150    |             |               |               |         |        |               |               |      |       |
|                    | P3    | SPR3.0GL10 |         | 100    |             |               |               |         |        |               |               |      | △     |
|                    |       | SPR3.0GL15 |         | 150    |             |               |               |         |        |               |               |      |       |
| <b>M4 × 0.7</b>    | P2    | SPQ4.0IL07 | 2.5P    | 70     | 11          | 17            | 47            | 5       | 4      | 7             | 3             | 1    | △     |
|                    |       | SPQ4.0IL10 |         | 100    |             |               |               |         |        |               |               |      | △     |
|                    |       | SPQ4.0IL12 |         | 120    |             |               |               |         |        |               |               |      |       |
|                    |       | SPQ4.0IL15 |         | 150    |             |               | 40            |         |        |               |               |      | ◎     |
|                    | P3    | SPR4.0IL10 |         | 100    |             |               |               |         |        |               |               |      | △     |
|                    |       | SPR4.0IL15 |         | 150    |             |               |               |         |        |               |               |      | △     |

◎=Standard ○=Semi standard △=Made to order  
For improvement, spec may change without advance notice.

Think threads with  
**YAMAWA**

Spiral Fluted Taps  
(for blind hole)

Spiral Fluted Taps  
(for through hole)

Spiral Pointed Taps  
(for through hole)

Hand Taps

Cemented  
Carbide Taps

Roll Taps

Special Thread Taps  
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

SP-26

51

# Spiral Fluted Tap Series for blind hole

## LS-SP Long Shank Spiral Fluted Taps

| Size       | Class | Code       | Chamfer | L<br>(mm) | ℓ<br>(mm) | ℓn<br>(mm) | ℓs<br>(mm) | Ds<br>(mm) | K<br>(mm) | ℓk<br>(mm) | No. of<br>flutes | Type | Stock |
|------------|-------|------------|---------|-----------|-----------|------------|------------|------------|-----------|------------|------------------|------|-------|
| M5 × 0.8   | P2    | SPQ5.0KL10 | 2.5P    | 100       | 13        | 22         | 40         | 5.5        | 4.5       | 7          | 3                | 1    | ○     |
|            |       | SPQ5.0KL12 |         | 120       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPQ5.0KL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
|            | P3    | SPR5.0KL10 |         | 100       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPR5.0KL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M6 × 1     | P2    | SPQ6.0ML10 | 2.5P    | 100       | 15        | 26         | 40         | 6          | 4.5       | 7          | 3                | 1    | ○     |
|            |       | SPQ6.0ML12 |         | 120       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPQ6.0ML15 |         | 150       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ6.0ML20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
|            | P3    | SPR6.0ML10 |         | 100       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPR6.0ML15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M6 × 0.75  | P2    | SPQ6.0JL10 | 2.5P    | 100       | 15        | 26         | 40         | 6          | 4.5       | 7          | 3                | 1    | △     |
| M8 × 1.25  | P2    | SPQ8.0NL10 | 2.5P    | 100       | 19        | -          | 50         | 6.2        | 5         | 8          | 3                | 2    | ○     |
|            |       | SPQ8.0NL12 |         | 120       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ8.0NL15 |         | 150       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ8.0NL20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
|            | P3    | SPR8.0NL10 |         | 100       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPR8.0NL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M8 × 1     | P2    | SPQ8.0ML10 | 2.5P    | 100       | 19        | -          | 50         | 6.2        | 5         | 8          | 3                | 2    | △     |
|            |       | SPQ8.0ML15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M10 × 1.5  | P2    | SPQ0100L10 | 2.5P    | 100       | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | ○     |
|            |       | SPQ0100L12 |         | 120       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ0100L15 |         | 150       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ0100L20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
|            | P3    | SPR0100L10 |         | 100       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPR0100L15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M10 × 1.25 | P2    | SPQ010NL10 | 2.5P    | 100       | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | ○     |
|            |       | SPQ010NL12 |         | 120       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ010NL15 |         | 150       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ010NL20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
| M10 × 1    | P2    | SPQ010ML10 | 2.5P    | 100       | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | △     |
|            |       | SPQ010ML15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M12 × 1.75 | P2    | SPQ012PL10 | 2.5P    | 100       | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
|            |       | SPQ012PL12 |         | 120       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ012PL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPQ012PL20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
|            | P3    | SPR012PL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M12 × 1.5  | P2    | SPQ012OL10 | 2.5P    | 100       | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
|            |       | SPQ012OL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPQ012OL20 |         | 200       |           |            |            |            |           |            |                  |      | △     |
| M12 × 1.25 | P2    | SPQ012NL10 | 2.5P    | 100       | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
|            |       | SPQ012NL12 |         | 120       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ012NL15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
|            |       | SPQ012NL20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
| M12 × 1    | P2    | SPQ012ML12 | 2.5P    | 120       | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
|            |       | SPQ012ML15 |         | 150       |           |            |            |            |           |            |                  |      | △     |
| M14 × 2    | P2    | SPQ014QL12 | 2.5P    | 120       | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △     |
|            |       | SPQ014QL15 |         | 150       |           |            |            |            |           |            |                  |      | ○     |
|            |       | SPQ014QL20 |         | 200       |           |            |            |            |           |            |                  |      | ○     |
| M14 × 1.5  | P2    | SPQ014OL12 | 2.5P    | 120       | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △     |

SP-27



Think threads with  
 ○=Standard ○=Semi standard △=Made to order  
 For improvement, spec may change without advance notice.



| Overall length | Chamfer+ full thread | Thread length | Thread+Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|----------------------|---------------|--------------------|--------------|------------|----------------|------------------|
| L              | ℓt                   | ℓ             | ℓn                 | ℓs           | Ds         | K              | ℓk               |

## LS-SP Long Shank Spiral Fluted Taps

| Size                | Class | Code                                   | Chamfer | L<br>(mm)         | ℓ<br>(mm) | ℓn<br>(mm) | ℓs<br>(mm) | Ds<br>(mm) | K<br>(mm) | ℓk<br>(mm) | No. of<br>flutes | Type | Stock       |
|---------------------|-------|----------------------------------------|---------|-------------------|-----------|------------|------------|------------|-----------|------------|------------------|------|-------------|
| M14 × 1.5           | P2    | SPQ0140L15<br>SPQ0140L20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △<br>○      |
| M16 × 2             | P2    | SPQ0160L15<br>SPQ0160L20<br>SPQ0160L25 | 2.5P    | 150<br>200<br>250 | 26        | -          | 60         | 12.5       | 10        | 13         | 3                | 2    | ◎<br>△<br>◎ |
| M16 × 1.5           | P2    | SPQ0160L15<br>SPQ0160L20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 12.5       | 10        | 13         | 3                | 2    | ○           |
| M18 × 2.5           | P3    | SPR018RL15<br>SPR018RL20<br>SPR018RL25 | 2.5P    | 150<br>200<br>250 | 33        | -          | 70         | 14         | 11        | 14         | 4                | 2    | ○<br>△      |
| M18 × 1.5           | P2    | SPQ0180L15<br>SPQ0180L20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 14         | 11        | 14         | 4                | 2    | ○           |
| M20 × 2.5           | P3    | SPR020RL15<br>SPR020RL20<br>SPR020RL25 | 2.5P    | 150<br>200<br>250 | 33        | -          | 70         | 15         | 12        | 15         | 4                | 3    | ◎<br>△<br>◎ |
| M20 × 1.5           | P3    | SPR0200L15<br>SPR0200L20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 15         | 12        | 15         | 4                | 3    | ○           |
| M22 × 2.5           | P3    | SPR022RL15<br>SPR022RL20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 17         | 13        | 16         | 4                | 3    | △           |
| M22 × 1.5           | P3    | SPR0220L15<br>SPR0220L20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 17         | 13        | 16         | 4                | 3    | ○           |
| M24 × 3             | P3    | SPR024SL15<br>SPR024SL20<br>SPR024SL25 | 2.5P    | 150<br>200<br>250 | 39        | -          | 80         | 19         | 15        | 18         | 4                | 3    | ○<br>△<br>◎ |
| M24 × 2             | P3    | SPR024QL20                             | 2.5P    | 200               | 39        | -          | 80         | 19         | 15        | 18         | 4                | 3    | △           |
| M24 × 1.5           | P3    | SPR0240L15<br>SPR0240L20               | 2.5P    | 150<br>200        | 39        | -          | 80         | 19         | 15        | 18         | 4                | 3    | ○           |
| M27 × 3             | P3    | SPR027SL20<br>SPR027SL25               | 2.5P    | 200<br>250        | 39        | -          | 80         | 20         | 15        | 18         | 4                | 3    | △           |
| M27 × 2             | P3    | SPR027QL20                             | 2.5P    | 200               | 39        | -          | 80         | 20         | 15        | 18         | 4                | 3    | △           |
| M27 × 1.5           | P3    | SPR0270L20<br>SPR0270L25               | 2.5P    | 200<br>250        | 39        | -          | 80         | 20         | 15        | 18         | 4                | 3    | △           |
| M30 × 3.5           | P4    | SPS030TL20<br>SPS030TL25<br>SPS030TL30 | 2.5P    | 200<br>250<br>300 | 46        | -          | 80         | 23         | 17        | 20         | 4                | 3    | △           |
| M30 × 1.5           | P3    | SPR0300L20<br>SPR0300L25               | 2.5P    | 200<br>250        | 46        | -          | 80         | 23         | 17        | 20         | 4                | 3    | △           |
| For Unified Threads |       |                                        |         |                   |           |            |            |            |           |            |                  |      |             |
| Size                | Class | Code                                   | Chamfer | L<br>(mm)         | ℓ<br>(mm) | ℓn<br>(mm) | ℓs<br>(mm) | Ds<br>(mm) | K<br>(mm) | ℓk<br>(mm) | No. of<br>flutes | Type | Stock       |
| 1/4-20UNC           | P2    | SPQU04NL10<br>SPQU04NL15               | 2.5P    | 100<br>150        | 15        | 26         | 40         | 6          | 4.5       | 7          | 3                | 1    | △           |
| 1/4-28UNF           | P2    | SPQU04KL10<br>SPQU04KL15               | 2.5P    | 100<br>150        | 15        | 26         | 40         | 6          | 4.5       | 7          | 3                | 1    | △           |
| 5/16-18UNC          | P2    | SPQU050L10<br>SPQU050L15               | 2.5P    | 100<br>150        | 19        | -          | 50         | 6.2        | 5         | 8          | 3                | 2    | △           |
| 5/16-24UNF          | P2    | SPQU05ML10<br>SPQU05ML15               | 2.5P    | 100<br>150        | 19        | -          | 50         | 6.2        | 5         | 8          | 3                | 2    | △           |
| 3/8-16UNC           | P2    | SPQU06PL10<br>SPQU06PL15<br>SPQU06PL20 | 2.5P    | 100<br>150<br>200 | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | △           |

Spiral Fluted Taps  
(for blind hole)

Spiral Fluted Taps  
(for through hole)

Spiral Pointed Taps  
(for through hole)

Hand Taps

Cemented  
Carbide Taps

Roll Taps

Special Thread Taps  
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools

# Spiral Fluted Tap Series for blind hole

## LS-SP Long Shank Spiral Fluted Taps

| Spiral Fluted Taps<br>(for blind hole)         | Size                  | Class | Code                                   | Chamfer | L<br>(mm)         | ℓ<br>(mm) | ℓn<br>(mm) | ℓs<br>(mm) | Ds<br>(mm) | K<br>(mm) | ℓk<br>(mm) | No. of<br>flutes | Type | Stock |
|------------------------------------------------|-----------------------|-------|----------------------------------------|---------|-------------------|-----------|------------|------------|------------|-----------|------------|------------------|------|-------|
|                                                | 3/8-24UNF             | P2    | SPQU06ML10<br>SPQU06ML15               | 2.5P    | 100<br>150        | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | △     |
| Spiral Fluted Taps<br>(for through hole)       | 7/16-14UNC            | P3    | SPRU07QL15                             | 2.5P    | 150               | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
|                                                | 7/16-20UNF            | P2    | SPQU07NL15                             | 2.5P    | 150               | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
| Spiral Pointed Taps<br>(for through hole)      | 1/2-13UNC             | P3    | SPRU08RL15<br>SPRU08RL20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △     |
|                                                | 1/2-20UNF             | P2    | SPQU08NL15                             | 2.5P    | 150               | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △     |
| Hand Taps                                      | 5/8-11UNC             | P3    | SPRU10UL15<br>SPRU10UL20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 12.5       | 10        | 13         | 3                | 2    | △     |
|                                                | 5/8-18UNF             | P2    | SPQU10OL15                             | 2.5P    | 150               | 26        | -          | 60         | 12.5       | 10        | 13         | 3                | 2    | △     |
| Cemented<br>Carbide Taps                       | 3/4-10UNC             | P3    | SPRU12VL15<br>SPRU12VL20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 15         | 12        | 15         | 4                | 3    | △     |
|                                                | 3/4-16UNF             | P3    | SPRU12PL15                             | 2.5P    | 150               | 33        | -          | 70         | 15         | 12        | 15         | 4                | 3    | △     |
| Roll Taps                                      | 7/8-9UNC              | P3    | SPRU14WL15<br>SPRU14WL20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 17         | 13        | 16         | 4                | 3    | △     |
|                                                | 1 -8UNC               | P3    | SPRU16XL15<br>SPRU16XL20               | 2.5P    | 150<br>200        | 39        | -          | 80         | 19         | 15        | 18         | 4                | 3    | △     |
| Special Thread Taps<br>Simple Inspection Tools | For Whitworth Threads |       |                                        |         |                   |           |            |            |            |           |            |                  |      |       |
|                                                | Size                  | Class | Code                                   | Chamfer | L<br>(mm)         | ℓ<br>(mm) | ℓn<br>(mm) | ℓs<br>(mm) | Ds<br>(mm) | K<br>(mm) | ℓk<br>(mm) | No. of<br>flutes | Type | Stock |
| Pipe Taps                                      | 1/4W20                | P2    | SPQW04NL10<br>SPQW04NL15               | 2.5P    | 100<br>150        | 15        | 26         | 40         | 6          | 4.5       | 7          | 3                | 1    | △     |
|                                                | 5/16W18               | P2    | SPQW05OL10<br>SPQW05OL15               | 2.5P    | 100<br>150        | 19        | -          | 50         | 6.2        | 5         | 8          | 3                | 2    | △     |
| Thread Mills                                   | 3/8W16                | P2    | SPQW06PL10<br>SPQW06PL15<br>SPQW06PL20 | 2.5P    | 100<br>150<br>200 | 23        | -          | 50         | 7          | 5.5       | 8          | 3                | 2    | △     |
|                                                | 7/16W14               | P3    | SPRW07QL15                             | 2.5P    | 150               | 26        | -          | 50         | 8.5        | 6.5       | 9          | 3                | 2    | △     |
| Dies                                           | 1/2W12                | P3    | SPRW08SL15<br>SPRW08SL20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 10.5       | 8         | 11         | 3                | 2    | △     |
|                                                | 5/8W11                | P3    | SPRW10UL15<br>SPRW10UL20               | 2.5P    | 150<br>200        | 26        | -          | 60         | 12.5       | 10        | 13         | 3                | 2    | △     |
|                                                | 3/4W10                | P3    | SPRW12VL15<br>SPRW12VL20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 15         | 12        | 15         | 4                | 3    | △     |
|                                                | 7/8W9                 | P3    | SPRW14WL15<br>SPRW14WL20               | 2.5P    | 150<br>200        | 33        | -          | 70         | 17         | 13        | 16         | 4                | 3    | △     |
|                                                | 1 W8                  | P3    | SPRW16XL15<br>SPRW16XL20               | 2.5P    | 150<br>200        | 39        | -          | 80         | 19         | 15        | 18         | 4                | 3    | △     |



| Overall length | Chamfer+ full thread | Thread length | Thread+Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|----------------------|---------------|--------------------|--------------|------------|----------------|------------------|
| L              | $\ell_t$             | $\ell$        | $\ell_n$           | $\ell_s$     | Ds         | K              | $\ell_k$         |

# LS-SP LH

Long Shank Spiral Fluted Taps for Left Hand Threads

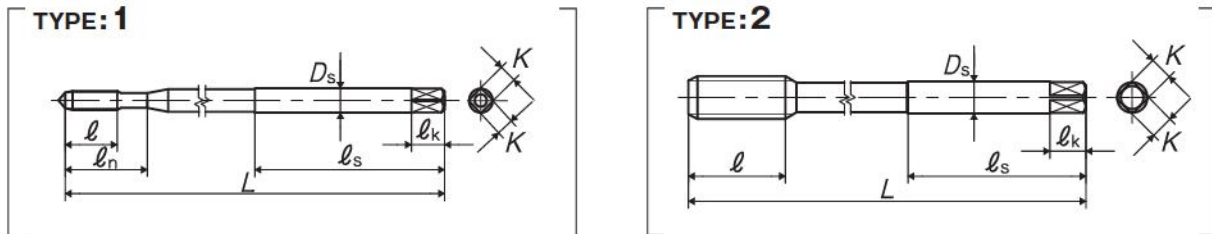
Specification



Recommended Tapping Speeds depending on Materials



For icon explanation, refer to P.24



Segment : 1C

| Size               | Class | Code         | Chamfer | L (mm) | $\ell$ (mm) | $\ell_n$ (mm) | $\ell_s$ (mm) | Ds (mm) | K (mm) | $\ell_k$ (mm) | No. of flutes | Type | Stock |
|--------------------|-------|--------------|---------|--------|-------------|---------------|---------------|---------|--------|---------------|---------------|------|-------|
| For Metric Threads |       |              |         |        |             |               |               |         |        |               |               |      |       |
| <b>M3 × 0.5</b>    | P1    | SPP3.0GL10L  | 2.5P    | 100    | 9           | 14            | 40            | 4       | 3.2    | 6             | 3             | 1    | △     |
| <b>M4 × 0.7</b>    | P2    | SPQ4.0IL10L  | 2.5P    | 100    | 11          | 17            | 40            | 5       | 4      | 7             | 3             | 1    | △     |
| <b>M5 × 0.8</b>    | P2    | SPQ5.0KL10L  | 2.5P    | 100    | 13          | 22            | 40            | 5.5     | 4.5    | 7             | 3             | 1    | △     |
| <b>M6 × 1</b>      | P2    | SPQ6.0ML10L  | 2.5P    | 100    | 15          | 26            | 40            | 6       | 4.5    | 7             | 3             | 1    | △     |
|                    |       | SPQ6.0ML15L  |         | 150    |             |               |               |         |        |               |               |      |       |
| <b>M8 × 1.25</b>   | P2    | SPQ8.0NL15-L | 2.5P    | 150    | 19          | -             | 50            | 6.2     | 5      | 8             | 3             | 2    | △     |
| <b>M10 × 1.5</b>   | P2    | SPQ0100L15-L | 2.5P    | 150    | 23          | -             | 50            | 7       | 5.5    | 8             | 3             | 2    | △     |
| <b>M10 × 1.25</b>  | P2    | SPQ010NL15-L | 2.5P    | 150    | 23          | -             | 50            | 7       | 5.5    | 8             | 3             | 2    | △     |
| <b>M12 × 1.75</b>  | P2    | SPQ012PL15-L | 2.5P    | 150    | 26          | -             | 50            | 8.5     | 6.5    | 9             | 3             | 2    | △     |
| <b>M12 × 1.5</b>   | P2    | SPQ0120L15-L | 2.5P    | 150    | 26          | -             | 50            | 8.5     | 6.5    | 9             | 3             | 2    | △     |
| <b>M12 × 1.25</b>  | P2    | SPQ012NL15-L | 2.5P    | 150    | 26          | -             | 50            | 8.5     | 6.5    | 9             | 3             | 2    | △     |
| <b>M14 × 2</b>     | P2    | SPQ014QL15-L | 2.5P    | 150    | 26          | -             | 60            | 10.5    | 8      | 11            | 3             | 2    | △     |
| <b>M14 × 1.5</b>   | P2    | SPQ0140L15-L | 2.5P    | 150    | 26          | -             | 60            | 10.5    | 8      | 11            | 3             | 2    | △     |
| <b>M16 × 2</b>     | P2    | SPQ016QL15-L | 2.5P    | 150    | 26          | -             | 60            | 12.5    | 10     | 13            | 3             | 2    | △     |
| <b>M16 × 1.5</b>   | P2    | SPQ0160L15-L | 2.5P    | 150    | 26          | -             | 60            | 12.5    | 10     | 13            | 3             | 2    | △     |

## LS-SP V

Long Shank Spiral Fluted Taps, Coated



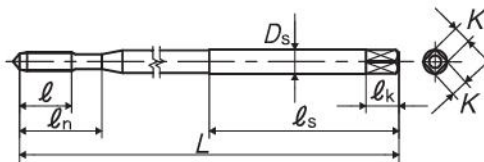
■ Adopting the optimum coating for the tapping condition.

Recommended Tapping Speeds depending on Materials

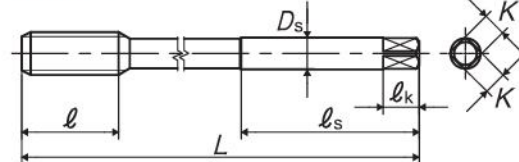
| Low carbon steels<br>低碳鋼 | Medium carbon steels<br>中炭鋼 | High carbon steels<br>高炭鋼 | Alloy steels<br>合金鋼 |
|--------------------------|-----------------------------|---------------------------|---------------------|
| 10~20<br>(m/min)         | 10~20<br>(m/min)            | 10~20<br>(m/min)          | 10~20<br>(m/min)    |

For icon explanation, refer to P.24

TYPE:1



TYPE:2



Segment : 1C

| Size               | Class | Code        | Chamfer | L<br>(mm) | l<br>(mm) | l <sub>n</sub><br>(mm) | l <sub>s</sub><br>(mm) | D <sub>s</sub><br>(mm) | K<br>(mm) | l <sub>k</sub><br>(mm) | No. of<br>flutes | Type | Stock |
|--------------------|-------|-------------|---------|-----------|-----------|------------------------|------------------------|------------------------|-----------|------------------------|------------------|------|-------|
| For Metric Threads |       |             |         |           |           |                        |                        |                        |           |                        |                  |      |       |
| M3 × 0.5           | P1    | VSP3.0GL10  | 2.5P    | 100       | 9         | 14                     | 40                     | 4                      | 3.2       | 6                      | 3                | 1    | ○     |
| M4 × 0.7           | P2    | VSP4.0IL10  | 2.5P    | 100       | 11        | 17                     | 40                     | 5                      | 4         | 7                      | 3                | 1    | ○     |
| M5 × 0.8           | P2    | VSP5.0KL10  | 2.5P    | 100       | 13        | 22                     | 40                     | 5.5                    | 4.5       | 7                      | 3                | 1    | ○     |
| M6 × 1             | P2    | VSP6.0ML10  | 2.5P    | 100       | 15        | 26                     | 40                     | 6                      | 4.5       | 7                      | 3                | 1    | ○     |
|                    |       | VSP6.0ML15  |         | 150       |           |                        |                        |                        |           |                        |                  |      | △     |
| M8 × 1.25          | P2    | VSP8.0NL10  | 2.5P    | 100       | 19        | -                      | 50                     | 6.2                    | 5         | 8                      | 3                | 2    | ○     |
|                    |       | VSP8.0NL15  |         | 150       |           |                        |                        |                        |           |                        |                  |      | ○     |
| M10 × 1.5          | P2    | VSP10.0L15  | 2.5P    | 150       | 23        | -                      | 50                     | 7                      | 5.5       | 8                      | 3                | 2    | ○     |
| M10 × 1.25         | P2    | VSP10.0NL15 | 2.5P    | 150       | 23        | -                      | 50                     | 7                      | 5.5       | 8                      | 3                | 2    | △     |
| M12 × 1.75         | P2    | VSP12.0PL15 | 2.5P    | 150       | 26        | -                      | 50                     | 8.5                    | 6.5       | 9                      | 3                | 2    | ○     |
| M12 × 1.5          | P2    | VSP12.0L15  | 2.5P    | 150       | 26        | -                      | 50                     | 8.5                    | 6.5       | 9                      | 3                | 2    | △     |
| M12 × 1.25         | P2    | VSP12.0NL15 | 2.5P    | 150       | 26        | -                      | 50                     | 8.5                    | 6.5       | 9                      | 3                | 2    | △     |

| Overall length | Chamfer+ full thread | Thread length | Thread+Neck length | Shank length | Shank dia. | Size of square | Length of square |
|----------------|----------------------|---------------|--------------------|--------------|------------|----------------|------------------|
| L              | $\ell_t$             | $\ell$        | $\ell_n$           | $\ell_s$     | Ds         | K              | $\ell_k$         |

# LS-SP-K

Long Shank Spiral Fluted Taps with Neck  
Specification

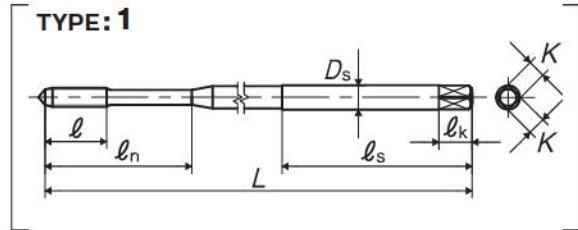


■ Having long neck design, LS-SP-K is the long shank spiral fluted tap enabling the tapping in rather deep holes.

Recommended Tapping Speeds depending on Materials

|                              |                            |
|------------------------------|----------------------------|
| Medium carbon steels<br>中炭素鋼 | High carbon steels<br>高炭素鋼 |
| <b>5~10</b><br>(m/min)       | <b>5~10</b><br>(m/min)     |

For icon explanation, refer to P.24



Segment : 1C

| Size               | Class | Code | Chamfer | L<br>(mm) | $\ell$<br>(mm) | $\ell_n$<br>(mm) | $\ell_s$<br>(mm) | Ds<br>(mm) | K<br>(mm) | $\ell_k$<br>(mm) | No. of<br>flutes | Type | Stock |
|--------------------|-------|------|---------|-----------|----------------|------------------|------------------|------------|-----------|------------------|------------------|------|-------|
| For Metric Threads |       |      |         |           |                |                  |                  |            |           |                  |                  |      |       |
| <b>M3 × 0.5</b>    | P1    | -    | 2.5P    | 100       | 9              | 28               | 40               | 4          | 3.2       | 6                | 3                | 1    | △     |
| <b>M4 × 0.7</b>    | P2    | -    | 2.5P    | 100       | 11             | 31               | 40               | 5          | 4         | 7                | 3                | 1    | △     |
| <b>M5 × 0.8</b>    | P2    | -    | 2.5P    | 100       | 13             | 38               | 40               | 5.5        | 4.5       | 7                | 3                | 1    | △     |
| <b>M6 × 1</b>      | P2    | -    | 2.5P    | 100       | 15             | 45               | 40               | 6          | 4.5       | 7                | 3                | 1    | △     |

Spiral Fluted Taps  
(for blind hole)

Spiral Fluted Taps  
(for through hole)

Spiral Pointed Taps  
(for through hole)

Hand Taps

Cemented  
Carbide Taps

Roll Taps

Special Thread Taps  
Simple Inspection Tools

Pipe Taps

Thread Mills

Dies

Center Drills

Centering Tools