

# 1 Spiral Fluted Tap Series for blind hole

| Overall length | Thread length | Thread + Neck length | Shank length   | Shank dia.     | Size of square | Length of square |
|----------------|---------------|----------------------|----------------|----------------|----------------|------------------|
| L              | ℓ             | ℓ <sub>n</sub>       | ℓ <sub>s</sub> | D <sub>s</sub> | K              | ℓ <sub>k</sub>   |



DIN

1 Spiral Fluted Taps  
(for blind hole)

2 Spiral Fluted Taps  
(for through hole)

3 Spiral Pointed Taps  
(for through hole)

4 Hand Taps

5 Cemented  
Carbide Taps

6 Roll Taps

7 Special Thread Taps  
Simple Inspection Tools

8 Pipe Taps

9 Thread Mills  
Premium Thread Mills

Dies

10

11 Center Drills  
Centering Tools

12 Precision Machinery/  
Medical Surgical Instruments

DIN

①-155

**DIN**

## AL+SP AL-SP

### Spiral Fluted Taps for Aluminum

Specification



■ In aluminum die casting and aluminum casting tapping, AL+SP/AL-SP solves such problems as chip jamming, chip clogging, and torn threads.

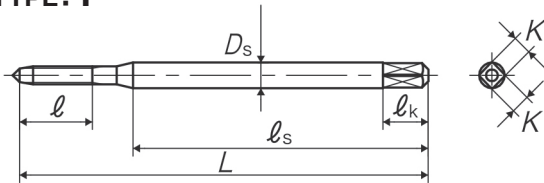
Tapping Speeds depending on Materials

|                                                |                                                        |                                                                |
|------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------|
| Brass<br>黄銅<br>10~25<br>(m/min)                | Brass castings<br>黄銅鑄物<br>10~25<br>(m/min)             | Bronze<br>青銅<br>10~25<br>(m/min)                               |
| Wrought aluminum<br>アルミ圧延材<br>10~25<br>(m/min) | Aluminum alloy castings<br>アルミ合金鑄物<br>10~25<br>(m/min) | Magnesium alloy die castings<br>マグネシウム合金鑄物<br>10~25<br>(m/min) |
|                                                |                                                        | Zinc alloy castings<br>亜鉛合金鑄物<br>10~25<br>(m/min)              |

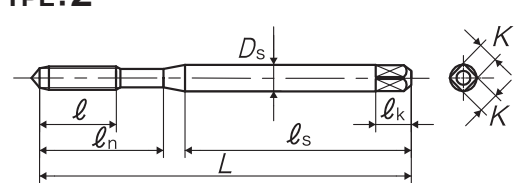
・ Product Name and Size.

|       |     |
|-------|-----|
| AL+SP | ~M6 |
| AL-SP | M8~ |

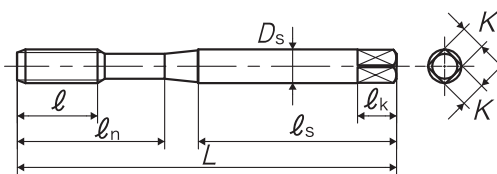
TYPE: 1



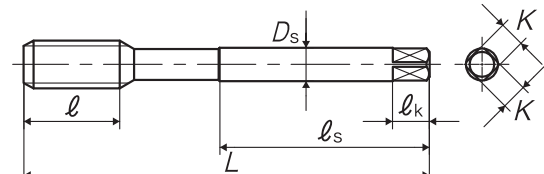
TYPE: 2



TYPE: 3



TYPE: 4



## AL+SP Spiral Fluted Taps for Aluminum

Segment : 1D

| 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 |
|--------------------|-------|------------|---------|-----------|-----------|------------------------|------------------------|------------------------|-----------|------------------------|------------------|------|
| For Metric Threads |       |            |         |           |           |                        |                        |                        |           |                        |                  |      |
| M2 × 0.4           | ISO2  | SE2.0EALEN | 2.5P    | 45        | 8         | -                      | 32                     | 2.8                    | 2.1       | 5                      | 2                | 1    |
| M2.5 × 0.45        | ISO2  | SE2.5FALEN | 2.5P    | 50        | 8         | 15                     | 33                     | 2.8                    | 2.1       | 5                      | 2                | 2    |
| M3 × 0.5           | ISO2  | SE3.0GALEN | 2.5P    | 56        | 9         | 18                     | 34                     | 3.5                    | 2.7       | 6                      | 3                | 2    |
| M4 × 0.7           | ISO2  | SE4.0IALEN | 2.5P    | 63        | 13        | 21                     | 38                     | 4.5                    | 3.4       | 6                      | 3                | 2    |
| M5 × 0.8           | ISO2  | SE5.0KALEN | 2.5P    | 70        | 14        | 25                     | 39                     | 6                      | 4.9       | 8                      | 3                | 2    |
| M6 × 1             | ISO2  | SE6.0MALEN | 2.5P    | 80        | 15        | 30                     | 45                     | 6                      | 4.9       | 8                      | 3                | 2    |

## AL-SP Spiral Fluted Taps for Aluminum

Segment : 1D

| 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 |
|--------------------|-------|------------|---------|-----------|-----------|------------------------|------------------------|------------------------|-----------|------------------------|------------------|------|
| For Metric Threads |       |            |         |           |           |                        |                        |                        |           |                        |                  |      |
| M8 × 1.25          | ISO2  | SD8.0NALEN | 2.5P    | 90        | 19        | 35                     | 47                     | 8                      | 6.2       | 9                      | 3                | 3    |
| M10 × 1.5          | ISO2  | SD010OALEN | 2.5P    | 100       | 23        | 39                     | 52.5                   | 10                     | 8         | 11                     | 3                | 3    |
| M12 × 1.75         | ISO2  | SG012PALEN | 2.5P    | 110       | 26        | -                      | 56                     | 9                      | 7         | 10                     | 3                | 4    |
| M14 × 2            | ISO2  | SG014QALEN | 2.5P    | 110       | 26        | -                      | 56                     | 11                     | 9         | 12                     | 3                | 4    |
| M16 × 2            | ISO2  | SG016QALEN | 2.5P    | 110       | 26        | -                      | 56                     | 12                     | 9         | 12                     | 3                | 4    |

Think threads with  
**YAMAWA**

・ This product is different from JIS products in shape and dimensions, please be careful when using.