

| | | | | |
|----------------|---------------|------------|----------------|------------------|
| Overall length | Thread length | Shank dia. | Size of square | Length of square |
| L | ℓ | Ds | K | ℓk |

ANSI

ZELX CARB AL

Carbide Taps for Light Alloys



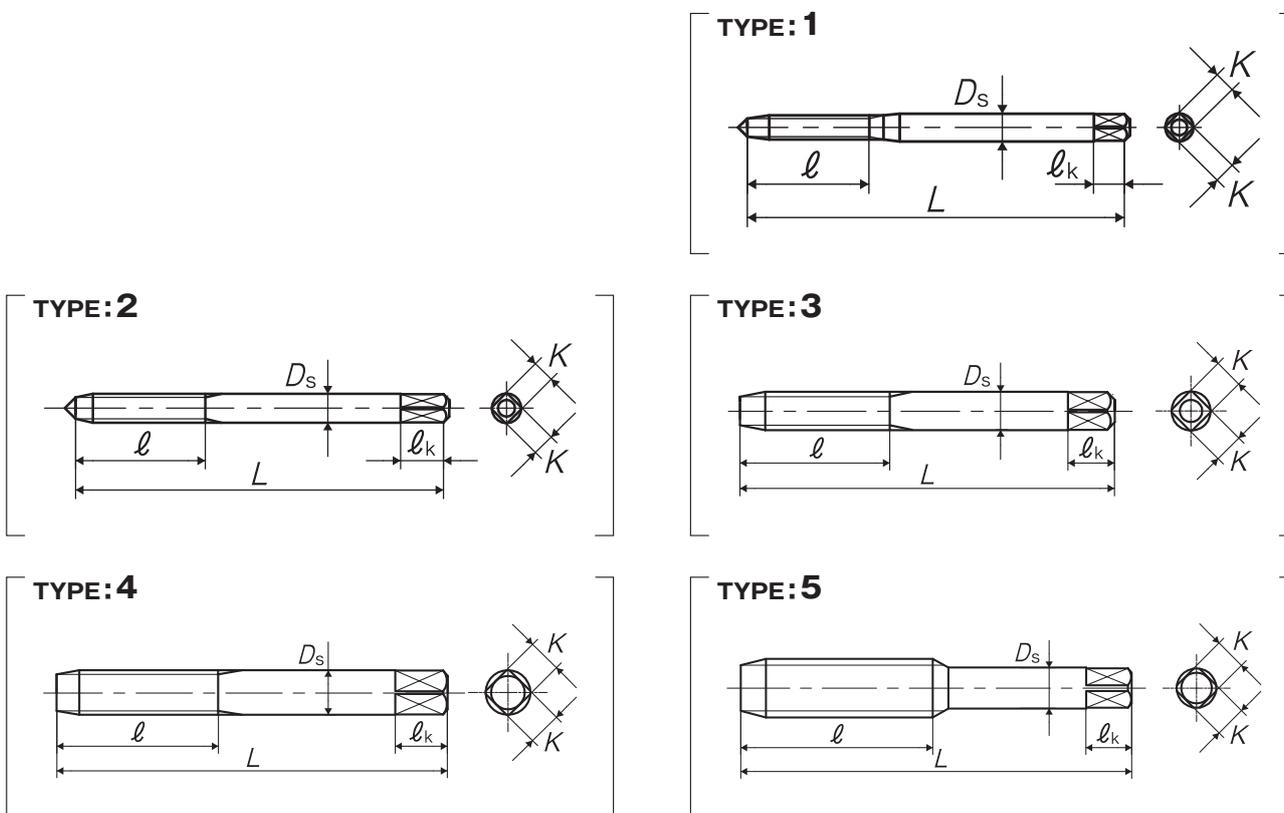
Specification



ZELX CARB AL is the carbide tap suitable for tapping aluminum castings (AC), aluminum die castings (ADC), and zinc die castings (ZDC). For volume production.

Tapping Speed depending on Materials

| | |
|------------------------------------|-------------------------------|
| Aluminum alloy castings アルミ合金鋳物 | Zinc alloy castings 亜鉛合金鋳物 |
| 10~20 (m/min) | 10~20 (m/min) |



Segment : 1L

| Size | Class | Code | Chamfer | L (inch) | ℓ (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|--------------------|-------|--------|---------|-------------|-------------|--------------|-------------|--------------|------------------|------|
| For Metric Threads | | | | | | | | | | |
| M3 × 0.5 | D3 | Y71000 | 4P | 1.937 | 0.625 | 0.141 | 0.11 | 0.187 | 3 | 1 |
| M3 × 0.5 | D3 | Y71001 | 1.5P | 1.937 | 0.625 | 0.141 | 0.11 | 0.187 | 3 | 1 |
| M4 × 0.7 | D4 | Y71002 | 4P | 2.125 | 0.75 | 0.168 | 0.131 | 0.25 | 3 | 2 |
| M4 × 0.7 | D4 | Y71003 | 1.5P | 2.125 | 0.75 | 0.168 | 0.131 | 0.25 | 3 | 2 |
| M5 × 0.8 | D4 | Y71004 | 4P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| M5 × 0.8 | D4 | Y71005 | 1.5P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| M6 × 1 | D5 | Y71006 | 4P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| M6 × 1 | D5 | Y71007 | 1.5P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| M8 × 1.25 | D5 | Y71010 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |

- 5 **ANSI**
- 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)
- 10 Dies
- 11 Center Drills (Centering Tools)
- 12 Precision Machinery/Metal Surgical Instruments

5 Cemented Carbide Tap Series

| Overall length | Thread length | Shank dia. | Size of square | Length of square |
|----------------|---------------|------------|----------------|------------------|
| L | ℓ | Ds | K | ℓk |

- 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)
- ⑩ Dies
- ⑪ Center Drills (Centering Tools)
- ⑫ Precision Machinery/ Medical Surgical Instruments

ZELX CARB AL Carbide Taps for Light Alloys

| Size | Class | Code | Chamfer | L (inch) | ℓ (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|---------------------|-------|--------|---------|----------|----------|-----------|----------|-----------|---------------|------|
| M8 × 1.25 | D5 | Y71011 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| M8 × 1 | D5 | Y71008 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| M8 × 1 | D5 | Y71009 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| M10 × 1.5 | D6 | Y71014 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| M10 × 1.5 | D6 | Y71015 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| M10 × 1.25 | D5 | Y71012 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| M10 × 1.25 | D5 | Y71013 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| M12 × 1.75 | D6 | Y71020 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| M12 × 1.75 | D6 | Y71021 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| M12 × 1.5 | D6 | Y71018 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| M12 × 1.5 | D6 | Y71019 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| M12 × 1.25 | D5 | Y71016 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| M12 × 1.25 | D5 | Y71017 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| For Unified Threads | | | | | | | | | | |
| No.5-40UNC | GH3 | Y84800 | 4P | 1.937 | 0.625 | 0.141 | 0.11 | 0.187 | 3 | 1 |
| No.5-40UNC | GH3 | Y84801 | 1.5P | 1.937 | 0.625 | 0.141 | 0.11 | 0.187 | 3 | 1 |
| No.6-32UNC | GH3 | Y84802 | 4P | 2 | 0.687 | 0.141 | 0.11 | 0.187 | 3 | 2 |
| No.6-32UNC | GH3 | Y84803 | 1.5P | 2 | 0.687 | 0.141 | 0.11 | 0.187 | 3 | 2 |
| No.8-32UNC | GH3 | Y84804 | 4P | 2.125 | 0.75 | 0.168 | 0.131 | 0.25 | 3 | 2 |
| No.8-32UNC | GH3 | Y84805 | 1.5P | 2.125 | 0.75 | 0.168 | 0.131 | 0.25 | 3 | 2 |
| No.10-24UNC | GH3 | Y84806 | 4P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| No.10-24UNC | GH3 | Y84807 | 1.5P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| No.10-32UNF | GH3 | Y84808 | 4P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| No.10-32UNF | GH3 | Y84809 | 1.5P | 2.375 | 0.875 | 0.194 | 0.152 | 0.25 | 3 | 2 |
| 1/4-20UNC | GH3 | Y84810 | 4P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-20UNC | GH3 | Y84811 | 1.5P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-20UNC | GH5 | Y84860 | 4P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-20UNC | GH5 | Y84861 | 1.5P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-28UNF | GH3 | Y84812 | 4P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-28UNF | GH3 | Y84813 | 1.5P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-28UNF | GH5 | Y84862 | 4P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 1/4-28UNF | GH5 | Y84863 | 1.5P | 2.5 | 1 | 0.255 | 0.191 | 0.312 | 3 | 3 |
| 5/16-18UNC | GH3 | Y84814 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-18UNC | GH3 | Y84815 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-18UNC | GH5 | Y84864 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-18UNC | GH5 | Y84865 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-24UNF | GH3 | Y84816 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-24UNF | GH3 | Y84817 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-24UNF | GH5 | Y84866 | 4P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 5/16-24UNF | GH5 | Y84867 | 1.5P | 2.718 | 1.125 | 0.318 | 0.238 | 0.375 | 3 | 4 |
| 3/8-16UNC | GH3 | Y84818 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-16UNC | GH3 | Y84819 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-16UNC | GH5 | Y84868 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-16UNC | GH5 | Y84869 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-24UNF | GH3 | Y84820 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-24UNF | GH3 | Y84821 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-24UNF | GH5 | Y84870 | 4P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 3/8-24UNF | GH5 | Y84871 | 1.5P | 2.937 | 1.25 | 0.381 | 0.286 | 0.437 | 3 | 4 |
| 7/16-14UNC | GH3 | Y84822 | 4P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-14UNC | GH3 | Y84823 | 1.5P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |

| | | | | |
|----------------|---------------|------------|----------------|------------------|
| Overall length | Thread length | Shank dia. | Size of square | Length of square |
| L | ℓ | Ds | K | ℓk |

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ZELX CARB AL Carbide Taps for Light Alloys

| Size | Class | Code | Chamfer | L (inch) | ℓ (inch) | Ds (inch) | K (inch) | ℓk (inch) | No. of flutes | TYPE |
|------------|-------|--------|---------|----------|----------|-----------|----------|-----------|---------------|------|
| 7/16-14UNC | GH5 | Y84872 | 4P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-14UNC | GH5 | Y84873 | 1.5P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-20UNF | GH3 | Y84824 | 4P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-20UNF | GH3 | Y84825 | 1.5P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-20UNF | GH5 | Y84874 | 4P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 7/16-20UNF | GH5 | Y84875 | 1.5P | 3.156 | 1.437 | 0.323 | 0.242 | 0.406 | 3 | 5 |
| 1/2-13UNC | GH3 | Y84826 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-13UNC | GH3 | Y84827 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-13UNC | GH5 | Y84876 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-13UNC | GH5 | Y84877 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-20UNF | GH3 | Y84828 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-20UNF | GH3 | Y84829 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-20UNF | GH5 | Y84878 | 4P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |
| 1/2-20UNF | GH5 | Y84879 | 1.5P | 3.375 | 1.656 | 0.367 | 0.275 | 0.437 | 3 | 5 |

Spiral Fluted Taps
(for blind hole) ①

Spiral Fluted Taps
(for through hole) ②

Spiral Pointed Taps
(for through hole) ③

Hand Taps ④

Cemented Carbide Taps ⑤

Roll Taps ⑥

Special Thread Taps
Simple Inspection Tools ⑦

Pipe Taps ⑧

Thread Mills
Premium Thread Mills ⑨

Dies ⑩

Center Drills
Centering Tools ⑪

Precision Machinery/
Metal Surgical Instruments ⑫

ANSI

⑤-8

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