

**YMW-USA**  
**2016-2017**  
**CATALOG**  
**SUPPLEMENT**



Think threads with

**YAMAWA**

# Our technical expertise continues to create high quality, high performance products while protecting the environment.

For more than 90 years, YAMAWA has continued to develop superior technical expertise as a pioneer in the tap and die industry.

The Yamawa employees technological know-how throughout its history has helped to produce many of the diverse products that have supported our growth over the years. We have established a flexible production system and a research and development system geared to the needs of our customers.

We remain committed to the development of high-quality, high-performance products, while continuing to refine and advance our technical capabilities.

## YAMAWA's Unique Capabilities

Tap production involves the grinding of many features on a tap blank to produce a finished precision tool. For many years, YAMAWA has recognized the need to build these precision tap grinding machines "in-house" as a means of achieving greater tool precision and higher quality tools. Today, YAMAWA makes more than 90% of its own production machines, thereby controlling tap quality from cutoff to final laser marking and measurement. Machines manufactured include machine tools to thread, flute grind, chamfer, machine tap squares, OD grind, and machines to measure all of the tap's critical elements such as thread pitch diameter. The self-reliance at YAMAWA allows us to control product quality and production capabilities by custom engineering machines not readily available in the open market. At YAMAWA, we understand how to make taps, tap manufacturing machines and tap measuring equipment.

## Research and Development

To achieve maximum tapping efficiency, we analyze materials to be tapped in detail. After carefully selecting a tap base material we thoroughly control heat treatment and design. This allows us to develop and supply taps that are ideally suited to specific application. In addition to the basic tap research taking place at our technical research center, we also have a test center where we conduct performance and durability tests on the taps produced at Yamawa to evaluate tool performance with the goal of continuous improvement.

### ISO9001

Equipped with many measuring machines manufactured in-house, YAMAWA maintains a rigorous quality system that includes inspection of both the machine stage and finished goods. This quality control system has received widespread acclaim, along with numerous awards. In 1996, the Yonezawa Plant stepped ahead of our competitors by receiving ISO9001. The Fukushima Plant and Aizu Plant were ISO9001 certified in 2000. The Tsutsumi plant was certified with ISO9001 in 2011. The head quarters were certified with ISO9001 in 2012.

### ISO14001

Yamawa is proud to announce the certification of ISO14001 for all manufacturing facilities and operations. Our aim is to preserve the environment for future generations under the themes as an ecological friendly while producing the best screw threads available today. Yamawa recognizes that enterprise activities have a major influence on the earth's environments and as a large corporation we proceed with the protection and continuous improvement of the environment. Yamawa decreases the burden on environment, and respects the environmental rules as it continues to pursue an environment friendly enterprise.



**Yonezawa Plant (ISO9001: 1996)  
(ISO14001: 2003)**



Yonezawa is the main manufacturing plant of the Yamawa Group, this location is equipped with production lines and is the Quality Control Center. The plant obtained ISO 9001 certification in 1996. Of the four Yamawa plants, the Yonezawa location has the longest history of manufacturing and the highest production capacity. Products include roll taps, spiral pointed, pipe and hand taps.

The Yonezawa Plant stepped ahead of our competitors by receiving ISO 9001 before any other cutting tool manufacturing in Japan.

**Fukushima Plant (ISO9001: 2000)  
(ISO14001: 2002)**



The Fukushima plant provides both tap production lines and in house facilities for the manufacturing of specialized production machine tools to produce the exceptional high quality cutting tools. This plant develops and manufactures special tap and die production equipment. It also supplies these machines to our other manufacturing sites. Products include spiral fluted taps, dies and combined drill/countersinks as, well as production machinery.

**Aizu Plant (ISO9001: 2000)  
(ISO14001: 2002)**



Equipped with the most sophisticated machine tools available, this plant is famous for its automation and robotized labor saving manufacturing processes. The plant is designed for mass production of the highest quality cutting tools and screw thread tools. Products include spiral fluted taps and carbide taps.

**Tsutsumi Plant (ISO9001: 2011)  
(ISO14001: 2011)**



The Tsutsumi plant is the main tool blank manufacturing operation of Yamawa group. This location is also the testing center where Yamawa executes the innovation in metal machining and performance tests of the products for the Yamawa group.




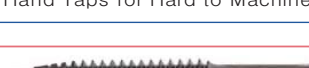

**Head Office (ISO9001: 2012)  
(ISO14001: 2003)**



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**Quality, Consistency, Performance and Product Development. All of the 800 Yamawa employees are committed to these principles and these are reflected in each tool we produce.**

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YMW U.S.A.

# Z-PRO

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels and plastics.

**Economical High Performance Taps**  
For Metric threads

**PO**

Spiral Pointed taps are recommended for tapping through holes.



\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TiCN COATING ON REQUEST**

Custom Blend High Vanadium HSS

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Plug Style (3 to 5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series PO

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	PS2.0E3NEB	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	PS2.2F3NEB	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	PS2.5F3NEB	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	PS2.6F3NEB	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	PS3.0G3NEB	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	PS3.5H4NEB	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	PS4.0I4NEB	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	PS5.0K4NEB	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	PS6.0M5NEB	—	—	.591	1.181	3.15
M7 x 0.75	4	—	PS7.0J4NEB	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	PS7.0G4NEB	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	PS7.0M5NEB	—	—	.748	1.315	3.543
M8 x 0.75	4	—	PS8.0J4NEB	—	—	—	.748	1.382	3.543
M8 x 0.5	4	—	PS8.0G4NEB	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	PS8.0M5NEB	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	PS8.0N5NEB	—	—	.748	1.382	3.543
M9 x 1	4	—	—	PS9.0M5NEB	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	PS9.0N5NEB	—	—	.748	1.382	3.543
M10 X 0.75	4	—	PS10J4NEB	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	PS10M5NEB	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	PS10N5NEB	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	PS10O6NEB	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	PS11O6NEB	—	.906	1.929	3.937
M12 x 1	4	—	—	PS12M5NEB	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	PS12N6NEB	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	PS12O6NEB	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	PS12P6NEB	—	1.024	2.126	4.331

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**Economical High Performance Taps**

For Metric Threads

**PO**

\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

Plug Style (3 to 5 threads chamfered)  
DIN lengths with ANSI shank dimensions.**Z-PRO Series PO****Metric Sizes**

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M14 x 1	4	PS014M5NEB	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	PS014N6NEB	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	PS014O6NEB	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	PS014Q7NEB	—	—	1.024	2.126	4.331
M16 x 1	4	PS016M5NEB	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	PS016O6NEB	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	PS016Q7NEB	—	—	1.024	2.126	4.331
M18 x 1	4	PS018M5NEB	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	PS018O6NEB	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	PS018Q7NEB	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	PS018R7NEB	—	—	1.299	2.402	4.921
M20 x 1	4	PS020M5NEB	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	PS020O6NEB	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	PS020Q7NEB	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	PS020R7NEB	—	—	1.299	2.717	5.512
M22 x 1	4	PS022M5NEB	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	PS022O6NEB	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	PS022Q7NEB	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	PS022R7NEB	—	—	1.299	2.717	5.512
M24 x 1	4	PS024M5NEB	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	PS024O6NEB	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	PS024Q7NEB	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	PS024S8NEB	—	1.457	3.071	6.299
M25 x 1.5	4	—	PS025O6NEB	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	PS026O6NEB	—	—	—	1.063	3.465	7.087
M27 x 1	4	PS027M5NEB	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for the materials that produce stringy chips, such as steels, stainless steels, and plastics.

Spiral Pointed taps are recommended for tapping through holes.

## Economical High Performance Taps For Metric Threads

# PO



\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

Plug Style (3 to 5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

### Z-PRO Series PO

### Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2 x 1.5	4	—	PS027O6NEB	—	—	—	1.063	3.465	7.087
M27 x 2	4	—	—	PS027Q7NEB	—	—	1.063	3.465	7.087
M27 x 3	4	—	—	—	PS027S8NEB	—	1.732	3.465	7.087
M28 x 1	4	PS028M5NEB	—	—	—	—	1.063	3.465	7.087
M28 x 1.5	4	—	PS028O6NEB	—	—	—	1.063	3.465	7.087
M28 x 2	4	—	—	PS028Q7NEB	—	—	1.063	3.465	7.087
M30 x 1	4	PS030M5NEB	—	—	—	—	1.063	3.465	7.087
M30 x 1.5	4	—	PS030O6NEB	—	—	—	1.063	3.465	7.087
M30 x 2	4	—	—	PS030Q7NEB	—	—	1.063	3.465	7.087
M30 x 3.5	4	—	—	—	—	PS030T9NEB	1.732	3.465	7.087
M32 x 1	4	PS032M5NEB	—	—	—	—	1.063	3.465	7.087
M32 x 1.5	4	—	PS032O6NEB	—	—	—	1.063	3.465	7.087
M32 x 2	4	—	—	PS032Q7NEB	—	—	1.063	3.465	7.087
M33 x 1	4	PS033M5NEB	—	—	—	—	1.142	3.465	7.087
M33 x 1.5	4	—	PS033O6NEB	—	—	—	1.142	3.465	7.087
M33 x 2	4	—	—	PS033Q7NEB	—	—	1.142	3.465	7.087
M33 x 3.5	4	—	—	—	—	PS033T9NEB	1.181	3.465	7.087
M36 x 1	4	PS036M5NEB	—	—	—	—	1.142	3.858	7.784
M36 x 1.5	4	—	PS036O6NEB	—	—	—	1.142	3.858	7.874
M36 x 2	4	—	—	PS036Q7NEB	—	—	1.142	3.858	7.874
M36 x 3	4	—	—	—	PS036S8NEB	—	2.047	3.858	7.874
M36 x 4	4	—	—	—	—	PS036U9NEB	2.047	3.858	7.874
M39 x 1	4	PS039M5NEB	—	—	—	—	1.142	3.858	7.874
M39 x 1.5	4	—	PS039O6NEB	—	—	—	1.142	3.858	7.874
M39 x 2	4	—	—	PS039Q7NEB	—	—	1.142	3.858	7.874
M39 x 3	4	—	—	—	PS039S8NEB	—	2.047	3.858	7.874

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## Economical High Performance Taps For Metric Threads PO



\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for the materials that produce stringy chips, such as steels, stainless steels, and plastics.

Spiral Pointed taps are recommended for tapping through holes.

Plug Style (3 to 5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series PO

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers								Dimensions		
		D5	D6	D7	D8	D9	D10	D11		Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	PS039U9NEB	—	—		2.047	3.858	7.874
M42 x 1	4	PS042M5NEB	—	—	—	—	—	—		1.142	3.858	7.874
M42 x 1.5	4	—	PS042O6NEB	—	—	—	—	—		1.142	3.858	7.874
M42 x 2	4	—	—	PS042Q7NEB	—	—	—	—		1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	PS042VONEB	—		2.323	3.858	7.874
M45 x 1	4	PS045M5NEB	—	—	—	—	—	—		1.22	4.252	8.661
M45 x 1.5	4	—	PS045O6NEB	—	—	—	—	—		1.22	4.252	8.661
M45 x 2	4	—	—	PS045Q7NEB	—	—	—	—		1.22	4.252	8.661
M45 x 3	4	—	—	—	PS045S8NEB	—	—	—		2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	PS045VONEB	—		2.323	4.252	8.661
M48 x 1	4	—	PS048M6NEB	—	—	—	—	—		1.22	4.803	9.843
M48 x 1.5	4	—	—	PS048O7NEB	—	—	—	—		1.22	4.803	9.843
M48 x 2	4	—	—	PS048Q7NEB	—	—	—	—		1.22	4.803	9.843
M48 x 3	4	—	—	—	—	PS048S9NEB	—	—		2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	PS048W-NEB		2.559	4.803	9.843





# Z-PRO

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**Economical High Performance Taps**  
For Metric Threads

**PO-OX**



Z-PRO PO have an Oxide Surface Treatment  
Custom Blend High Vanadium HSS

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Plug Style (3 to 5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series PO

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	PS2.0E3NEX	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	PS2.2F3NEX	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	PS2.5F3NEX	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	PS2.6F3NEX	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	PS3.0G3NEX	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	PS3.5H4NEX	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	PS4.0I4NEX	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	PS5.0K4NEX	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	PS6.0M5NEX	—	—	.591	1.181	3.15
M7 x 0.75	4	—	PS7.0J4NEX	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	PS7.0G4NEX	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	PS7.0M5NEX	—	—	.748	1.315	3.543
M8 x 0.75	4	—	PS8.0J4NEX	—	—	—	.748	1.382	3.543
M8 x 0.5	4	—	PS8.0G4NEX	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	PS8.0M5NEX	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	PS8.0N5NEX	—	—	.748	1.382	3.543
M9 x 1	4	—	—	PS9.0M5NEX	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	PS9.0N5NEX	—	—	.748	1.382	3.543
M10 X 0.75	4	—	PS010J4NEX	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	PS010M5NEX	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	PS010N5NEX	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	PS010O6NEX	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	PS011O6NEX	—	.906	1.929	3.937
M12 x 1	4	—	—	PS012M5NEX	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	PS012N6NEX	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	PS012O6NEX	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	PS012P6NEX	—	1.024	2.126	4.331

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## Economical High Performance Taps

For Metric Threads

## PO-OX



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Custom Blend High Vanadium HSS

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Plug Style (3 to 5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

Z-PRO Series PO

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	PS014M5NEX	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	PS014N6NEX	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	PS014O6NEX	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	PS014Q7NEX	—	—	1.024	2.126	4.331
M16 x 1	4	PS016M5NEX	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	PS016O6NEX	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	PS016Q7NEX	—	—	1.024	2.126	4.331
M18 x 1	4	PS018M5NEX	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	PS018O6NEX	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	TS018Q7NEB5	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	TS018R7NEB5	—	—	1.299	2.402	4.921
M20 x 1	4	PS020M5NEX	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	PS020O6NEX	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	PS020Q7NEX	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	PS020R7NEX	—	—	1.299	2.717	5.512
M22 x 1	4	PS022M5NEX	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	PS022O6NEX	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	PS022Q7NEX	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	PS022R7NEX	—	—	1.299	2.717	5.512
M24 x 1	4	PS024M5NEX	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	PS024O6NEX	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	PS024Q7NEX	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	PS024S8NEX	—	1.457	3.071	6.299
M25 x 1.5	4	—	PS025O6NEX	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	PS026O6NEX	—	—	—	1.063	3.465	7.087
M27 x 1	4	PS027M5NEX	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for the materials that produce stringy chips, such as steels, stainless steels and plastics.

**Economical High Performance Taps**  
For Metric threads

**PO-OX**

Spiral Pointed taps are recommended for tapping through holes.



Z-PRO PO have an Oxide Surface Treatment  
Custom Blend High Vanadium HSS

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Plug Style (3 to 5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series PO

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2 7x 1.5	4	—	PS027O6NEX	—	—	—	1.063	3.465	7.087
M27 x 2	4	—	—	PS027Q7NEX	—	—	1.063	3.465	7.087
M27 x 3	4	—	—	—	PS027S8NEX	—	1.732	3.465	7.087
M28 x 1	4	PS028M5NEX	—	—	—	—	1.063	3.465	7.087
M28 x 1.5	4	—	PS028O6NEX	—	—	—	1.063	3.465	7.087
M28 x 2	4	—	—	PS028Q7NEX	—	—	1.063	3.465	7.087
M30 x 1	4	PS030M5NEX	—	—	—	—	1.063	3.465	7.087
M30 x 1.5	4	—	PS030O6NEX	—	—	—	1.063	3.465	7.087
M30 x 2	4	—	—	PS030Q7NEX	—	—	1.063	3.465	7.087
M30 x 3.5	4	—	—	—	—	PS030T9NEX	1.732	3.465	7.087
M32 x 1	4	PS032M5NEX	—	—	—	—	1.063	3.465	7.087
M32 x 1.5	4	—	PS032O6NEX	—	—	—	1.063	3.465	7.087
M32 x 2	4	—	—	PS032Q7NEX	—	—	1.063	3.465	7.087
M33 x 1	4	PS033M5NEX	—	—	—	—	1.142	3.465	7.087
M33 x 1.5	4	—	PS033O6NEX	—	—	—	1.142	3.465	7.087
M33 x 2	4	—	—	PS033Q7NEX	—	—	1.142	3.465	7.087
M33 x 3.5	4	—	—	—	—	PS033T9NEX	1.181	3.465	7.087
M36 x 1	4	PS036M5NEX	—	—	—	—	1.142	3.858	7.784
M36 x 1.5	4	—	PS036O6NEX	—	—	—	1.142	3.858	7.874
M36 x 2	4	—	—	PS036Q7NEX	—	—	1.142	3.858	7.874
M36 x 3	4	—	—	—	PS036S8NEX	—	2.047	3.858	7.874
M36 x 4	4	—	—	—	—	PS036U9NEX	2.047	3.858	7.874
M39 x 1	4	PS039M5NEX	—	—	—	—	1.142	3.858	7.874
M39 x 1.5	4	—	PS039O6NEX	—	—	—	1.142	3.858	7.874
M39 x 2	4	—	—	PS039Q7NEX	—	—	1.142	3.858	7.874
M39 x 3	4	—	—	—	PS039S8NEX	—	2.047	3.858	7.874

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## Economical High Performance Taps

For Metric Threads

### PO-OX



Z-PRO PO have an Oxide Surface Treatment  
Custom Blend High Vanadium HSS

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for the materials that produce stringy chips, such as steels, stainless steels and plastics.

Spiral Pointed taps are recommended for tapping trough holes.

Plug Style (3 to 5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

#### Z-PRO Series PO

#### Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers								Dimensions		
		D5	D6	D7	D8	D9	D10	D11		Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	PS039U9NEX	—	—		2.047	3.858	7.874
M42 x 1	4	PS042M5NEX	—	—	—	—	—	—		1.142	3.858	7.874
M42 x 1.5	4	—	PS042O6NEX	—	—	—	—	—		1.142	3.858	7.874
M42 x 2	4	—	—	PS042Q7NEX	—	—	—	—		1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	PS042VONEX	—		2.323	3.858	7.874
M45 x 1	4	PS045M5NEX	—	—	—	—	—	—		1.22	4.252	8.661
M45 x 1.5	4	—	PS045O6NEX	—	—	—	—	—		1.22	4.252	8.661
M45 x 2	4	—	—	PS045Q7NEX	—	—	—	—		1.22	4.252	8.661
M45 x 3	4	—	—	—	PS045S8NEX	—	—	—		2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	PS045VONEX	—		2.323	4.252	8.661
M48 x 1	4	—	PS048M6NEX	—	—	—	—	—		1.22	4.803	9.843
M48 x 1.5	4	—	—	PS048O7NEX	—	—	—	—		1.22	4.803	9.843
M48 x 2	4	—	—	PS048Q7NEX	—	—	—	—		1.22	4.803	9.843
M48 x 3	4	—	—	—	—	PS048S9NEX	—	—		2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	PS048W-NEX		2.559	4.803	9.843





# Z-PRO

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels and plastics.

Spiral Fluted Bottoming taps are recommended for tapping blind holes where the chips are pulled out of the hole towards the tap shank instead of pushing them to the bottom of the hole.

## Economical High Performance Taps For Metric Threads

### SP



\*Z-PRO SP have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TiCN COATING ON REQUEST**

Custom Blend High Vanadium HSS

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Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

Z-PRO Series SP

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	SS2.0E3NEB	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	SS2.2F3NEB	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	SS2.5F3NEB	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	SS2.6F3NEB	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	SS3.0G3NEB	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	SS3.5H4NEB	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	SS4.0I4NEB	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	SS5.0K4NEB	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	SS6.0M5NEB	—	—	.591	1.181	3.15
M7 x 0.75	4	—	SS7.0J4NEB	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	SS7.0G4NEB	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	SS7.0M5NEB	—	—	.748	1.315	3.543
M8 x 0.75	4	—	SS8.0J4NEB	—	—	—	.748	1.382	3.543
M8 x 0.5	4	—	SS8.0G4NEB	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	SS8.0M5NEB	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	SS8.0N5NEB	—	—	.748	1.382	3.543
M9 x 1	4	—	—	SS9.0M5NEB	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	SS9.0N5NEB	—	—	.748	1.382	3.543
M10 X 0.75	4	—	SS010J4NEB	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	SS010M5NEB	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	SS010N5NEB	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	SS010O6NEB	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	SS011O6NEB	—	.906	1.929	3.937
M12 x 1	4	—	—	SS012M5NEB	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	SS012N6NEB	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	SS012O6NEB	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	SS012P6NEB	—	1.024	2.126	4.331

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## Economical High Performance Taps

For Metric Threads

SP



\*Z-PRO SP have a Bright Surface Treatment

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels, and plastics.

Spiral Fluted Bottoming taps are recommended for tapping blind holes where the chips are pulled out of the hole towards the tap shank instead of pushing them to the bottom of the hole.

## \*AVAILABLE IN TIN AND TICN COATING ON REQUEST

Custom Blend High Vanadium HSS

Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank Dimensions.

## Z-PRO Series SP

## Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	SS014M5NEB	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	SS014N6NEB	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	SS014O6NEB	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	SS014Q7NEB	—	—	1.024	2.126	4.331
M16 x 1	4	SS016M5NEB	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	SS016O6NEB	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	SS016Q7NEB	—	—	1.024	2.126	4.331
M18 x 1	4	SS018M5NEB	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	SS018O6NEB	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	SS018Q7NEB	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	SS018R7NEB	—	—	1.299	2.402	4.921
M20 x 1	4	SS020M5NEB	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	SS020O6NEB	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	SS020Q7NEB	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	SS020R7NEB	—	—	1.299	2.717	5.512
M22 x 1	4	SS022M5NEB	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	SS022O6NEB	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	SS022Q7NEB	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	SS022R7NEB	—	—	1.299	2.717	5.512
M24 x 1	4	SS024M5NEB	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	SS024O6NEB	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	SS024Q7NEB	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	SS024S8NEB	—	1.457	3.071	6.299
M25 x 1.5	4	—	SS025O6NEB	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	SS026O6NEB	—	—	—	1.063	3.465	7.087
M27 x 1	4	SS027M5NEB	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

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The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels and plastics.

## Economical High Performance Taps For Metric Threads

SP



\*Z-PRO SP have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TiCN COATING ON REQUEST**

Custom Blend High Vanadium HSS

Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank Dimensions.

Z-PRO Series SP

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2 7x 1.5	4	—	SS027O6NEB	—	—	—	1.063	3.465	7.087
M27 x 2	4	—	—	SS027Q7NEB	—	—	1.063	3.465	7.087
M27 x 3	4	—	—	—	SS027S8NEB	—	1.732	3.465	7.087
M28 x 1	4	SS028M5NEB	—	—	—	—	1.063	3.465	7.087
M28 x 1.5	4	—	SS028O6NEB	—	—	—	1.063	3.465	7.087
M28 x 2	4	—	—	SS028Q7NEB	—	—	1.063	3.465	7.087
M30 x 1	4	SS030M5NEB	—	—	—	—	1.063	3.465	7.087
M30 x 1.5	4	—	SS030O6NEB	—	—	—	1.063	3.465	7.087
M30 x 2	4	—	—	SS030Q7NEB	—	—	1.063	3.465	7.087
M30 x 3.5	4	—	—	—	—	SS030T9NEB	1.732	3.465	7.087
M32 x 1	4	SS032M5NEB	—	—	—	—	1.063	3.465	7.087
M32 x 1.5	4	—	SS032O6NEB	—	—	—	1.063	3.465	7.087
M32 x 2	4	—	—	SS032Q7NEB	—	—	1.063	3.465	7.087
M33 x 1	4	SS033M5NEB	—	—	—	—	1.142	3.465	7.087
M33 x 1.5	4	—	SS033O6NEB	—	—	—	1.142	3.465	7.087
M33 x 2	4	—	—	SS033Q7NEB	—	—	1.142	3.465	7.087
M33 x 3.5	4	—	—	—	—	SS033T9NEB	1.181	3.465	7.087
M36 x 1	4	SS036M5NEB	—	—	—	—	1.142	3.858	7.784
M36 x 1.5	4	—	SS036O6NEB	—	—	—	1.142	3.858	7.874
M36 x 2	4	—	—	SS036Q7NEB	—	—	1.142	3.858	7.874
M36 x 3	4	—	—	—	SS036S8NEB	—	2.047	3.858	7.874
M36 x 4	4	—	—	—	—	SS036U9NEB	2.047	3.858	7.874
M39 x 1	4	SS039M5NEB	—	—	—	—	1.142	3.858	7.874
M39 x 1.5	4	—	SS039O6NEB	—	—	—	1.142	3.858	7.874
M39 x 2	4	—	—	SS039Q7NEB	—	—	1.142	3.858	7.874
M39 x 3	4	—	—	—	SS039S8NEB	—	2.047	3.858	7.874

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**Economical High Performance Taps**

For Metric Threads

**SP**

\*Z-PRO SP have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels, and plastics.

Spiral Fluted Bottoming taps are recommended for tapping blind holes where the chips are pulled out of the hole towards the tap shank instead of pushing them to the bottom of the hole.

Bottoming Style (2.5 threads chamfered)

DIN lengths with ANSI shank Dimensions.

Z-PRO Series SP

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	SS039U9NEB	—	—	2.047	3.858	7.874
M42 x 1	4	SS042M5NEB	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	SS042O6NEB	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	SS042Q7NEB	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	SS042VONEB	—	2.323	3.858	7.874
M45 x 1	4	SS045M5NEB	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	SS045O6NEB	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	SS045Q7NEB	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	SS045S8NEB	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	SS045VONEB	—	2.323	4.252	8.661
M48 x 1	4	—	SS048M6NEB	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	SS048O7NEB	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	SS048Q7NEB	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	SS048S9NEB	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	SS048W-NEB	2.559	4.803	9.843





# Z-PRO

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels, plastics.

Spiral Fluted Bottoming taps are recommended for tapping blind holes where the chips are pulled out of the hole towards the tap shank instead of pushing them to the bottom of the hole.

**Economical High Performance Taps**  
For Metric Threads

## SP-OX



Z-PRO SP have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

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Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

Z-PRO Series SP

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	SS2.0E3NEX	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	SS2.2F3NEX	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	SS2.5F3NEX	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	SS2.6F3NEX	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	SS3.0G3NEX	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	SS3.5H4NEX	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	SS4.0I4NEX	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	SS5.0K4NEX	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	SS6.0M5NEX	—	—	.591	1.181	3.15
M7 x 0.75	4	—	SS7.0J4NEX	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	SS7.0G4NEX	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	SS7.0M5NEX	—	—	.748	1.315	3.543
M8 x 0.75	4	—	SS8.0J4NEX	—	—	—	.748	1.382	3.543
M8 x 0.5	4	—	SS8.0G4NEX	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	SS8.0M5NEX	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	SS8.0N5NEX	—	—	.748	1.382	3.543
M9 x 1	4	—	—	SS9.0M5NEX	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	SS9.0N5NEX	—	—	.748	1.382	3.543
M10 X 0.75	4	—	SS010J4NEX	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	SS010M5NEX	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	SS010N5NEX	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	SS010O6NEX	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	SS011O6NEX	—	.906	1.929	3.937
M12 x 1	4	—	—	SS012M5NEX	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	SS012N6NEX	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	SS012O6NEX	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	SS012P6NEX	—	1.024	2.126	4.331

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## Economical High Performance Taps

For Metric Threads

## SP-OX



Z-PRO SP have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

The Z-PRO Series is designed for carbon steels, alloyed steels, irons, brass and free machining materials, including stainless steel that require the most economical tool life. They are ideal for materials that produce stringy chips, such as steels, stainless steels and plastics.

Spiral Fluted Bottoming taps are recommended for tapping blind holes where the chips are pulled out of the hole towards the tap shank instead of pushing them to the bottom of the hole.

Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

## Z-PRO Series SP

## Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	SS014M5NEX	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	SS014N6NEX	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	SS014O6NEX	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	SS014Q7NEX	—	—	1.024	2.126	4.331
M16 x 1	4	SS016M5NEX	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	SS016O6NEX	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	SS016Q7NEX	—	—	1.024	2.126	4.331
M18 x 1	4	SS018M5NEX	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	SS018O6NEX	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	SS018Q7NEX	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	SS018R7NEX	—	—	1.299	2.402	4.921
M20 x 1	4	SS020M5NEX	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	SS020O6NEX	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	SS020Q7NEX	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	SS020R7NEX	—	—	1.299	2.717	5.512
M22 x 1	4	SS022M5NEX	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	SS022O6NEX	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	SS022Q7NEX	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	SS022R7NEX	—	—	1.299	2.717	5.512
M24 x 1	4	SS024M5NEX	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	SS024O6NEX	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	SS024Q7NEX	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	SS024S8NEX	—	1.457	3.071	6.299
M25 x 1.5	4	—	SS025O6NEX	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	SS026O6NEX	—	—	—	1.063	3.465	7.087
M27 x 1	4	SS027M5NEX	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

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## Economical High Performance Taps For Metric Threads

### SP-OX



Z-PRO SP have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

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Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

#### Z-PRO Series SP

#### Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2 x 1.5	4	—	SS027O6NEX	—	—	—	1.063	3.465	7.087
M27 x 2	4	—	—	SS027Q7NEX	—	—	1.063	3.465	7.087
M27 x 3	4	—	—	—	SS027S8NEX	—	1.732	3.465	7.087
M28 x 1	4	SS028M5NEX	—	—	—	—	1.063	3.465	7.087
M28 x 1.5	4	—	SS028O6NEX	—	—	—	1.063	3.465	7.087
M28 x 2	4	—	—	SS028Q7NEX	—	—	1.063	3.465	7.087
M30 x 1	4	SS030M5NEX	—	—	—	—	1.063	3.465	7.087
M30 x 1.5	4	—	SS030O6NEX	—	—	—	1.063	3.465	7.087
M30 x 2	4	—	—	SS030Q7NEX	—	—	1.063	3.465	7.087
M30 x 3.5	4	—	—	—	—	SS030T9NEX	1.732	3.465	7.087
M32 x 1	4	SS032M5NEX	—	—	—	—	1.063	3.465	7.087
M32 x 1.5	4	—	SS032O6NEX	—	—	—	1.063	3.465	7.087
M32 x 2	4	—	—	SS032Q7NEX	—	—	1.063	3.465	7.087
M33 x 1	4	SS033M5NEX	—	—	—	—	1.142	3.465	7.087
M33 x 1.5	4	—	SS033O6NEX	—	—	—	1.142	3.465	7.087
M33 x 2	4	—	—	SS033Q7NEX	—	—	1.142	3.465	7.087
M33 x 3.5	4	—	—	—	—	SS033T9NEX	1.181	3.465	7.087
M36 x 1	4	SS036M5NEX	—	—	—	—	1.142	3.858	7.784
M36 x 1.5	4	—	SS036O6NEX	—	—	—	1.142	3.858	7.874
M36 x 2	4	—	—	SS036Q7NEX	—	—	1.142	3.858	7.874
M36 x 3	4	—	—	—	SS036S8NEX	—	2.047	3.858	7.874
M36 x 4	4	—	—	—	—	SS036U9NEX	2.047	3.858	7.874
M39 x 1	4	SS039M5NEX	—	—	—	—	1.142	3.858	7.874
M39 x 1.5	4	—	SS039O6NEX	—	—	—	1.142	3.858	7.874
M39 x 2	4	—	—	SS039Q7NEX	—	—	1.142	3.858	7.874
M39 x 3	4	—	—	—	SS039S8NEX	—	2.047	3.858	7.874

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## Economical High Performance Taps

For Metric Threads

## SP-OX



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Custom Blend High Vanadium HSS

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Bottoming Style (2.5 threads chamfered)  
DIN lengths with ANSI shank dimensions.

## Z-PRO Series SP

## Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	SS039U9NEX	—	—	2.047	3.858	7.874
M42 x 1	4	SS042M5NEX	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	SS042O6NEX	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	SS042Q7NEX	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	SS042VONEX	—	2.323	3.858	7.874
M45 x 1	4	SS045M5NEX	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	SS045O6NEX	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	SS045Q7NEX	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	SS045S8NEX	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	SS045VONEX	—	2.323	4.252	8.661
M48 x 1	4	—	SS048M6NEX	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	SS048O7NEX	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	SS048Q7NEX	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	SS048S9NEX	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	SS048W-NEX	2.559	4.803	9.843





# Z-PRO

For Tapping Steels, Irons, Brass and Plastics

Z-PRO HT are manufactured from YMW's own high speed steel for maximum toughness and wear life.

Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

**Economical High Performance  
Hand Taps**  
For Metric Threads

**Z-PRO HT**



\*Z-PRO HT have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TiCN COATING ON REQUEST**

Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	TS2.0E3NEB5	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	TS2.2F3NEB5	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	TS2.5F3NEB5	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	TS2.6F3NEB5	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	TS3.0G3NEB5	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	TS3.5H4NEB5	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	TS4.0I4NEB5	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	TS.0K4NEB5	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	TS6.0M5NEB5	—	—	.591	1.181	3.15
M7 x 0.75	4	—	TS7.0J4NEB5	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	TS7.0G4NEB5	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	TS7.0M5NEB5	—	—	.748	1.315	3.543
M8 x 0.75	4	—	TS8.0J4NEB5	—	—	—	.748	1.382	3.543
M8 x 0.5	4	—	TS8.0G4NEB5	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	TS8.0M5NEB5	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	TS8.0N5NEB5	—	—	.748	1.382	3.543
M9 x 1	4	—	—	TS9.0M5NEB5	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	TS9.0N5NEB5	—	—	.748	1.382	3.543
M10 X 0.75	4	—	TS010J4NEB5	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	TS010M5NEB5	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	TS010N5NEB5	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	TS010O6NEB5	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	TS011O6NEB5	—	.906	1.929	3.937
M12 x 1	4	—	—	TS012M5NEB5	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	TS012N6NEB5	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	TS012O6NEB5	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	TS012P6NEB5	—	1.024	2.126	4.331

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## Economical High Performance Hand Taps

For Metric Threads

### Z-PRO HT



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\*AVAILABLE IN TIN AND TICN COATING ON REQUEST

Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	TS014M5NEB5	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	TS014N6NEB5	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	TS014O6NEB5	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	TS014Q7NEB5	—	—	1.024	2.126	4.331
M16 x 1	4	TS016M5NEB5	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	TS016O6NEB5	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	TS016Q7NEB5	—	—	1.024	2.126	4.331
M18 x 1	4	TS018M5NEB5	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	TS018O6NEB5	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	TS018Q7NEB5	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	TS018R7NEB5	—	—	1.299	2.402	4.921
M20 x 1	4	TS020M5NEB5	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	TS020O6NEB5	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	TS020Q7NEB5	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	TS020R7NEB5	—	—	1.299	2.717	5.512
M22 x 1	4	TS022M5NEB5	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	TS022O6NEB5	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	TS022Q7NEB5	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	TS022R7NEB5	—	—	1.299	2.717	5.512
M24 x 1	4	TS024M5NEB5	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	TS024O6NEB5	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	TS024Q7NEB5	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	TS024S8NEB5	—	1.457	3.071	6.299
M25 x 1.5	4	—	TS025O6NEB5	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	TS026O6NEB5	—	—	—	1.063	3.465	7.087
M27 x 1	4	TS027M5NEB5	—	—	—	—	1.063	3.465	7.087

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YMW U.S.A.

# Z-PRO

For Tapping Steels, Irons, Brass and Plastics

Z-PRO HT are manufactured from YMW's own high speed steel for maximum toughness and wear life.

Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

**Economical High Performance Hand Taps**  
For Metric Threads

**Z-PRO HT**



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**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2.7 x 1.5	4	—	TS027O6NEB5	—	—	—	1.063	3.465	7.087
M2.7 x 2	4	—	—	TS027Q7NEB5	—	—	1.063	3.465	7.087
M2.7 x 3	4	—	—	—	TS027S8NEB5	—	1.732	3.465	7.087
M2.8 x 1	4	TS028M5NEB5	—	—	—	—	1.063	3.465	7.087
M2.8 x 1.5	4	—	TS028O6NEB5	—	—	—	1.063	3.465	7.087
M2.8 x 2	4	—	—	TS028Q7NEB5	—	—	1.063	3.465	7.087
M3.0 x 1	4	TS030M5NEB5	—	—	—	—	1.063	3.465	7.087
M3.0 x 1.5	4	—	TS030O6NEB5	—	—	—	1.063	3.465	7.087
M3.0 x 2	4	—	—	TS030Q7NEB5	—	—	1.063	3.465	7.087
M3.0 x 3.5	4	—	—	—	—	TS030T9NEB5	1.732	3.465	7.087
M3.2 x 1	4	TS032M5NEB5	—	—	—	—	1.063	3.465	7.087
M3.2 x 1.5	4	—	TS032O6NEB5	—	—	—	1.063	3.465	7.087
M3.2 x 2	4	—	—	TS032Q7NEB5	—	—	1.063	3.465	7.087
M3.3 x 1	4	TS033M5NEB5	—	—	—	—	1.142	3.465	7.087
M3.3 x 1.5	4	—	TS033O6NEB5	—	—	—	1.142	3.465	7.087
M3.3 x 2	4	—	—	TS033Q7NEB5	—	—	1.142	3.465	7.087
M3.3 x 3.5	4	—	—	—	—	TS033T9NEB5	1.181	3.465	7.087
M3.6 x 1	4	TS036M5NEB5	—	—	—	—	1.142	3.858	7.784
M3.6 x 1.5	4	—	TS036O6NEB5	—	—	—	1.142	3.858	7.784
M3.6 x 2	4	—	—	TS036Q7NEB5	—	—	1.142	3.858	7.784
M3.6 x 3	4	—	—	—	TS036S8NEB5	—	2.047	3.858	7.784
M3.6 x 4	4	—	—	—	—	TS036U9NEB5	2.047	3.858	7.784
M3.9 x 1	4	TS039M5NEB5	—	—	—	—	1.142	3.858	7.784
M3.9 x 1.5	4	—	TS039O6NEB5	—	—	—	1.142	3.858	7.784
M3.9 x 2	4	—	—	TS039Q7NEB5	—	—	1.142	3.858	7.784
M3.9 x 3	4	—	—	—	TS039S8NEB5	—	2.047	3.858	7.784

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## Economical High Performance Hand Taps

For Metric Threads

### Z-PRO HT



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Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI shank dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M39 x 4	4	—	—	—	—	TS039U9NEB5	—	—	2.047	3.858	7.874
M42 x 1	4	TS042M5NEB5	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	TS042O6NEB5	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	TS042Q7NEB5	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	TS042VONEB5	—	2.323	3.858	7.874
M45 x 1	4	TS045M5NEB5	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	TS045O6NEB5	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	TS045Q7NEB5	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	TS045S8NEB5	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	TS045VONEB5	—	2.323	4.252	8.661
M48 x 1	4	—	TS048M6NEB5	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	TS048O7NEB5	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	TS048Q7NEB5	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	TS048S9NEB5	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	TS048W-NEB5	2.559	4.803	9.843





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Hand Taps**  
For Metric Threads

## Z-PRO HT-OX



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Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	TS2.0E3NEX5	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	TS2.2F3NEX5	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	TS2.5F3NEX5	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	TS2.6F3NEX5	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	TS3.0G3NEX5	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	TS3.5H4NEX5	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	TS4.0I4NEX5	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	TS.0K4NEX5	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	TS6.0M5NEX5	—	—	.591	1.181	3.15
M7 x 0.75	4	—	TS7.0J4NEX5	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	TS7.0G4NEX5	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	TS7.0M5NEX5	—	—	.748	1.315	3.543
M8 x 0.75	4	—	TS8.0J4NEX5	—	—	—	.394	1.382	3.543
M8 x 0.5	4	—	TS8.0G4NEX5	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	TS8.0M5NEX5	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	TS8.0N5NEX5	—	—	.748	1.382	3.543
M9 x 1	4	—	—	TS9.0M5NEX5	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	TS9.0N5NEX5	—	—	.748	1.382	3.543
M10 X 0.75	4	—	TS010J4NEX5	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	TS010M5NEX5	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	TS010N5NEX5	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	TS010O6NEX5	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	TS011O6NEX5	—	.906	1.929	3.937
M12 x 1	4	—	—	TS012M5NEX5	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	TS012N6NEX5	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	TS012O6NEX5	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	TS012P6NEX5	—	1.024	2.126	4.331

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## Economical High Performance Hand Taps

For Metric Threads

### Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

For Tapping Steels, Irons, Brass and Plastics

Z-PRO HT are manufactured from YMW's own high speed steel for maximum toughness and wear life.

Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

Plug Style (5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	TS014M5NEX5	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	TS014N6NEX5	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	TS014O6NEX5	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	TS014Q7NEX5	—	—	1.024	2.126	4.331
M16 x 1	4	TS016M5NEX5	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	TS016O6NEX5	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	TS016Q7NEX5	—	—	1.024	2.126	4.331
M18 x 1	4	TS018M5NEX5	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	TS018O6NEX5	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	TS018Q7NEX5	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	TS018R7NEX5	—	—	1.299	2.402	4.921
M20 x 1	4	TS020M5NEX5	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	TS020O6NEX5	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	TS020Q7NEX5	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	TS020R7NEX5	—	—	1.299	2.717	5.512
M22 x 1	4	TS022M5NEX5	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	TS022O6NEX5	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	TS022Q7NEX5	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	TS022R7NEX5	—	—	1.299	2.717	5.512
M24 x 1	4	TS024M5NEX5	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	TS024O6NEX5	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	TS024Q7NEX5	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	TS024S8NEX5	—	1.457	3.071	6.299
M25 x 1.5	4	—	TS025O6NEX5	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	TS026O6NEX5	—	—	—	1.063	3.465	7.087
M27 x 1	4	TS027M5NEX5	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

For Tapping Steels, Irons, Brass and Plastics

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Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

**Economical High Performance Hand Taps**

For Metric Threads

## Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

Plug Style (5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2.7 x 1.5	4	—	TS027O6NEX5	—	—	—	1.063	3.465	7.087
M2.7 x 2	4	—	—	TS027Q7NEX5	—	—	1.063	3.465	7.087
M2.7 x 3	4	—	—	—	TS027S8NEX5	—	1.732	3.465	7.087
M2.8 x 1	4	TS028M5NEX5	—	—	—	—	1.063	3.465	7.087
M2.8 x 1.5	4	—	TS028O6NEX5	—	—	—	1.063	3.465	7.087
M2.8 x 2	4	—	—	TS028Q7NEX5	—	—	1.063	3.465	7.087
M3.0 x 1	4	TS030M5NEX5	—	—	—	—	1.063	3.465	7.087
M3.0 x 1.5	4	—	TS030O6NEX5	—	—	—	1.063	3.465	7.087
M3.0 x 2	4	—	—	TS030Q7NEX5	—	—	1.063	3.465	7.087
M3.0 x 3.5	4	—	—	—	—	TS030T9NEX5	1.732	3.465	7.087
M3.2 x 1	4	TS032M5NEX5	—	—	—	—	1.063	3.465	7.087
M3.2 x 1.5	4	—	TS032O6NEX5	—	—	—	1.063	3.465	7.087
M3.2 x 2	4	—	—	TS032Q7NEX5	—	—	1.063	3.465	7.087
M3.3 x 1	4	TS033M5NEX5	—	—	—	—	1.142	3.465	7.087
M3.3 x 1.5	4	—	TS033O6NEX5	—	—	—	1.142	3.465	7.087
M3.3 x 2	4	—	—	TS033Q7NEX5	—	—	1.142	3.465	7.087
M3.3 x 3.5	4	—	—	—	—	TS033T9NEX5	1.181	3.465	7.087
M3.6 x 1	4	TS036M5NEX5	—	—	—	—	1.142	3.858	7.784
M3.6 x 1.5	4	—	TS036O6NEX5	—	—	—	1.142	3.858	7.784
M3.6 x 2	4	—	—	TS036Q7NEX5	—	—	1.142	3.858	7.784
M3.6 x 3	4	—	—	—	TS036S8NEX5	—	2.047	3.858	7.784
M3.6 x 4	4	—	—	—	—	TS036U9NEX5	2.047	3.858	7.784
M3.9 x 1	4	TS039M5NEX5	—	—	—	—	1.142	3.858	7.784
M3.9 x 1.5	4	—	TS039O6NEX5	—	—	—	1.142	3.858	7.784
M3.9 x 2	4	—	—	TS039Q7NEX5	—	—	1.142	3.858	7.784
M3.9 x 3	4	—	—	—	TS039S8NEX5	—	2.047	3.858	7.784

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## Economical High Performance Hand Taps

For Metric Threads

## Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

For Tapping Steels, Irons, Brass and Plastics

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Plug Style (5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	TS039U9NEX5	—	—	2.047	3.858	7.874
M42 x 1	4	TS042M5NEX5	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	TS042O6NEX5	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	TS042Q7NEX5	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	TS042VONEX5	—	2.323	3.858	7.874
M45 x 1	4	TS045M5NEX5	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	TS045O6NEX5	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	TS045Q7NEX5	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	TS045S8NEX5	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	TS045VONEX5	—	2.323	4.252	8.661
M48 x 1	4	—	TS048M6NEX5	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	TS048O7NEX5	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	TS048Q7NEX5	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	TS048S9NEX5	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	TS048W-NEX5	2.559	4.803	9.843



# Z-PRO

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Economical High Performance

Hand Taps  
For Metric Threads

Z-PRO HT



\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

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Bottoming Style (1.5 threads chamfered)  
DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	TS2.0E3NEBA	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	TS2.2F3NEBA	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	TS2.5F3NEBA	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	TS2.6F3NEBA	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	TS3.0G3NEBA	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	TS3.5H4NEBA	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	TS4.0I4NEBA	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	TS5.0K4NEBA	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	TS6.0M5NEBA	—	—	.591	1.181	3.15
M7 x 0.75	4	—	TS7.0J4NEBA	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	TS7.0G4NEBA	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	TS7.0M5NEBA	—	—	.748	1.315	3.543
M8 x 0.75	4	—	TS8.0J4NEBA	—	—	—	.394	1.382	3.543
M8 x 0.5	4	—	TS8.0G4NEBA	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	TS8.0M5NEBA	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	TS8.0N5NEBA	—	—	.748	1.382	3.543
M9 x 1	4	—	—	TS9.0M5NEBA	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	TS9.0N5NEBA	—	—	.748	1.382	3.543
M10 X 0.75	4	—	TS10J4NEBA	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	TS10M5NEBA	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	TS10N5NEBA	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	TS10O6NEBA	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	TS11O6NEBA	—	.906	1.929	3.937
M12 x 1	4	—	—	TS12M5NEBA	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	TS12N6NEBA	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	TS12O6NEBA	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	TS12P6NEBA	—	1.024	2.126	4.331

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## Economical High Performance Hand Taps For Metric Threads Z-PRO HT



\*Z-PRO PO have a Bright Surface Treatment

**\*AVAILABLE IN TIN AND TICN COATING ON REQUEST**

Custom Blend High Vanadium HSS

For Tapping Steels, Irons, Brass and Plastics

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Bottoming Style (1.5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M14 x 1	4	TS014M5NEBA	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	TS014N6NEBA	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	TS014O6NEBA	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	TS014Q7NEBA	—	—	1.024	2.126	4.331
M16 x 1	4	TS016M5NEBA	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	TS016O6NEBA	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	TS016Q7NEBA	—	—	1.024	2.126	4.331
M18 x 1	4	TS018M5NEBA	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	TS018O6NEBA	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	TS018Q7NEBA	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	TS018R7NEBA	—	—	1.299	2.402	4.921
M20 x 1	4	TS020M5NEBA	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	TS020O6NEBA	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	TS020Q7NEBA	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	TS020R7NEBA	—	—	1.299	2.717	5.512
M22 x 1	4	TS022M5NEBA	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	TS022O6NEBA	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	TS022Q7NEBA	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	TS022R7NEBA	—	—	1.299	2.717	5.512
M24 x 1	4	TS024M5NEBA	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	TS024O6NEBA	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	TS024Q7NEBA	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	TS024S8NEBA	—	1.457	3.071	6.299
M25 x 1.5	4	—	TS025O6NEBA	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	TS026O6NEBA	—	—	—	1.063	3.465	7.087
M27 x 1	4	TS027M5NEBA	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

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Hand Taps  
For Metric Threads**

**Z-PRO HT**



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Custom Blend High Vanadium HSS

Bottoming Style (1.5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2.7 x 1.5	4	—	TS027O6NEBA	—	—	—	1.063	3.465	7.087
M2.7 x 2	4	—	—	TS027Q7NEBA	—	—	1.063	3.465	7.087
M2.7 x 3	4	—	—	—	TS027S8NEBA	—	1.732	3.465	7.087
M2.8 x 1	4	TS028M5NEBA	—	—	—	—	1.063	3.465	7.087
M2.8 x 1.5	4	—	TS028O6NEBA	—	—	—	1.063	3.465	7.087
M2.8 x 2	4	—	—	TS028Q7NEBA	—	—	1.063	3.465	7.087
M3.0 x 1	4	TS030M5NEBA	—	—	—	—	1.063	3.465	7.087
M3.0 x 1.5	4	—	TS030O6NEBA	—	—	—	1.063	3.465	7.087
M3.0 x 2	4	—	—	TS030Q7NEBA	—	—	1.063	3.465	7.087
M3.0 x 3.5	4	—	—	—	—	TS030T9NEBA	1.732	3.465	7.087
M3.2 x 1	4	TS032M5NEBA	—	—	—	—	1.063	3.465	7.087
M3.2 x 1.5	4	—	TS032O6NEBA	—	—	—	1.063	3.465	7.087
M3.2 x 2	4	—	—	TS032Q7NEBA	—	—	1.063	3.465	7.087
M3.3 x 1	4	TS033M5NEBA	—	—	—	—	1.142	3.465	7.087
M3.3 x 1.5	4	—	TS033O6NEBA	—	—	—	1.142	3.465	7.087
M3.3 x 2	4	—	—	TS033Q7NEBA	—	—	1.142	3.465	7.087
M3.3 x 3.5	4	—	—	—	—	TS033T9NEBA	1.181	3.465	7.087
M3.6 x 1	4	TS036M5NEBA	—	—	—	—	1.142	3.858	7.784
M3.6 x 1.5	4	—	TS036O6NEBA	—	—	—	1.142	3.858	7.784
M3.6 x 2	4	—	—	TS036Q7NEBA	—	—	1.142	3.858	7.784
M3.6 x 3	4	—	—	—	TS036S8NEBA	—	2.047	3.858	7.784
M3.6 x 4	4	—	—	—	—	TS036U9NEBA	2.047	3.858	7.784
M3.9 x 1	4	TS039M5NEBA	—	—	—	—	1.142	3.858	7.784
M3.9 x 1.5	4	—	TS039O6NEBA	—	—	—	1.142	3.858	7.784
M3.9 x 2	4	—	—	TS039Q7NEBA	—	—	1.142	3.858	7.784
M3.9 x 3	4	—	—	—	TS039S8NEBA	—	2.047	3.858	7.784

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## Economical High Performance Hand Taps

For Metric Threads

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Bottoming Style (1.5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M39 x 4	4	—	—	—	—	TS039U9NEBA	—	—	2.047	3.858	7.874
M42 x 1	4	TS042M5NEBA	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	TS042O6NEBA	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	TS042Q7NEBA	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	TS042VONEBA	—	2.323	3.858	7.874
M45 x 1	4	TS045M5NEBA	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	TS045O6NEBA	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	TS045Q7NEBA	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	TS045S8NEBA	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	TS045VONEBA	—	2.323	4.252	8.661
M48 x 1	4	—	TS048M6NEBA	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	TS048O7NEBA	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	TS048Q7NEBA	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	TS048S9NEBA	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	TS048W-NEBA	2.559	4.803	9.843



# Z-PRO

For Tapping Steels, Irons, Brass and Plastics

Z-PRO HT are manufactured from YMW's own high speed for maximum toughness and wear life.

Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

**Economical High Performance  
Hand Taps  
For Metric Threads**

## Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

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Bottoming Style (1.5 threads chamfered)  
DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D3	D4	D5	D6	D7	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M2 x 0.4	3	TS2.0E3NEXA	—	—	—	—	.314	.382	1.772
M2.2 x 0.45	3	TS2.2F3NEXA	—	—	—	—	.314	.382	1.772
M2.5 x 0.45	3	TS2.5F3NEXA	—	—	—	—	.354	.693	2.205
M2.6 x 0.45	3	TS2.6F3NEXA	—	—	—	—	.354	.693	2.205
M3 x 0.5	3	TS3.0G3NEXA	—	—	—	—	.433	.768	2.205
M3.5 x 0.6	3	—	TS3.5H4NEXA	—	—	—	.433	.787	2.205
M4 x 0.7	4	—	TS4.0I4NEXA	—	—	—	.512	.827	2.48
M5 x 0.8	4	—	TS5.0K4NEXA	—	—	—	.591	.984	3.15
M6 x 1	4	—	—	TS6.0M5NEXA	—	—	.591	1.181	3.15
M7 x 0.75	4	—	TS7.0J4NEXA	—	—	—	.748	1.315	3.543
M7 x 0.5	4	—	TS7.0G4NEXA	—	—	—	.394	1.315	3.543
M7 x 1	4	—	—	TS7.0M5NEXA	—	—	.748	1.315	3.543
M8 x 0.75	4	—	TS8.0J4NEXA	—	—	—	.394	1.382	3.543
M8 x 0.5	4	—	TS8.0G4NEXA	—	—	—	.394	1.382	3.543
M8 x 1	4	—	—	TS8.0M5NEXA	—	—	.748	1.382	3.543
M8 x 1.25	4	—	—	TS8.0N5NEXA	—	—	.748	1.382	3.543
M9 x 1	4	—	—	TS9.0M5NEXA	—	—	.748	1.382	3.543
M9 x 1.25	4	—	—	TS9.0N5NEXA	—	—	.748	1.382	3.543
M10 X 0.75	4	—	TS010J4NEXA	—	—	—	.512	1.929	3.937
M10 x 1	4	—	—	TS010M5NEXA	—	—	.906	1.929	3.937
M10 x 1.25	4	—	—	TS010N5NEXA	—	—	.906	1.929	3.937
M10 x 1.5	4	—	—	—	TS010O6NEXA	—	.906	1.929	3.937
M11 x 1.5	4	—	—	—	TS011O6NEXA	—	.906	1.929	3.937
M12 x 1	4	—	—	TS012M5NEXA	—	—	1.024	2.126	4.331
M12 x 1.25	4	—	—	—	TS012N6NEXA	—	1.024	2.126	4.331
M12 x 1.5	4	—	—	—	TS012O6NEXA	—	1.024	2.126	4.331
M12 x 1.75	4	—	—	—	TS012P6NEXA	—	1.024	2.126	4.331

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## Economical High Performance Hand Taps

For Metric Threads

## Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

For Tapping Steels, Irons, Brass and Plastics

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Bottoming Style (1.5 threads chamfered)

DIN lengths with ANSI dimensions.

### Z-PRO Series HT

### Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M14 x 1	4	TS014M5NEXA	—	—	—	—	1.024	2.126	4.331
M14 x 1.25	4	—	TS014N6NEXA	—	—	—	1.024	2.126	4.331
M14 x 1.5	4	—	TS014O6NEXA	—	—	—	1.024	2.126	4.331
M14 x 2	4	—	—	TS014Q7NEXA	—	—	1.024	2.126	4.331
M16 x 1	4	TS016M5NEXA	—	—	—	—	1.024	2.126	4.331
M16 x 1.5	4	—	TS016O6NEXA	—	—	—	1.024	2.126	4.331
M16 x 2	4	—	—	TS016Q7NEXA	—	—	1.024	2.126	4.331
M18 x 1	4	TS018M5NEXA	—	—	—	—	.945	2.402	4.921
M18 x 1.5	4	—	TS018O6NEXA	—	—	—	.945	2.402	4.921
M18 x 2	4	—	—	TS018Q7NEXA	—	—	1.299	2.402	4.921
M18 x 2.5	4	—	—	TS018R7NEXA	—	—	1.299	2.402	4.921
M20 x 1	4	TS020M5NEXA	—	—	—	—	.945	2.717	5.512
M20 x 1.5	4	—	TS020O6NEXA	—	—	—	.945	2.717	5.512
M20 x 2	4	—	—	TS020Q7NEXA	—	—	1.299	2.717	5.512
M20 x 2.5	4	—	—	TS020R7NEXA	—	—	1.299	2.717	5.512
M22 x 1	4	TS022M5NEXA	—	—	—	—	.945	2.717	5.512
M22 x 1.5	4	—	TS022O6NEXA	—	—	—	.945	2.717	5.512
M22 x 2	4	—	—	TS022Q7NEXA	—	—	1.299	2.717	5.512
M22 x 2.5	4	—	—	TS022R7NEXA	—	—	1.299	2.717	5.512
M24 x 1	4	TS024M5NEXA	—	—	—	—	1.063	3.071	6.299
M24 x 1.5	4	—	TS024O6NEXA	—	—	—	1.063	3.071	6.299
M24 x 2	4	—	—	TS024Q7NEXA	—	—	1.063	3.071	6.299
M24 x 3	4	—	—	—	TS024S8NEXA	—	1.457	3.071	6.299
M25 x 1.5	4	—	TS025O6NEXA	—	—	—	1.063	3.071	6.299
M26 x 1.5	4	—	TS026O6NEXA	—	—	—	1.063	3.465	7.087
M27 x 1	4	TS027M5NEXA	—	—	—	—	1.063	3.465	7.087

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# Z-PRO

YMW U.S.A.

For Tapping Steels, Irons, Brass and Plastics

Z-PRO HT are manufactured from YMW's own high speed for maximum toughness and wear life.

Z-PRO HT are the most popular style of general purpose taps for tapping under power or by hand.

**Economical High Performance  
Hand Taps**  
For Metric Threads

**Z-PRO HT-OX**



Z-PRO HT have an Oxide Surface Treatment  
Custom Blend High Vanadium HSS

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Bottoming Style (1.5 threads chamfered)  
DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers					Dimensions		
		D5	D6	D7	D8	D9	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M2.7 x 1.5	4	—	TS027O6NEXA	—	—	—	1.063	3.465	7.087
M2.7 x 2	4	—	—	TS027Q7NEXA	—	—	1.063	3.465	7.087
M2.7 x 3	4	—	—	—	TS027S8NEXA	—	1.732	3.465	7.087
M2.8 x 1	4	TS028M5NEXA	—	—	—	—	1.063	3.465	7.087
M2.8 x 1.5	4	—	TS028O6NEXA	—	—	—	1.063	3.465	7.087
M2.8 x 2	4	—	—	TS028Q7NEXA	—	—	1.063	3.465	7.087
M3.0 x 1	4	TS030M5NEXA	—	—	—	—	1.063	3.465	7.087
M3.0 x 1.5	4	—	TS030O6NEXA	—	—	—	1.063	3.465	7.087
M3.0 x 2	4	—	—	TS030Q7NEXA	—	—	1.063	3.465	7.087
M3.0 x 3.5	4	—	—	—	—	TS030T9NEXA	1.732	3.465	7.087
M3.2 x 1	4	TS032M5NEXA	—	—	—	—	1.063	3.465	7.087
M3.2 x 1.5	4	—	TS032O6NEXA	—	—	—	1.063	3.465	7.087
M3.2 x 2	4	—	—	TS032Q7NEXA	—	—	1.063	3.465	7.087
M3.3 x 1	4	TS033M5NEXA	—	—	—	—	1.142	3.465	7.087
M3.3 x 1.5	4	—	TS033O6NEXA	—	—	—	1.142	3.465	7.087
M3.3 x 2	4	—	—	TS033Q7NEXA	—	—	1.142	3.465	7.087
M3.3 x 3.5	4	—	—	—	—	TS033T9NEXA	1.181	3.465	7.087
M3.6 x 1	4	TS036M5NEXA	—	—	—	—	1.142	3.858	7.784
M3.6 x 1.5	4	—	TS036O6NEXA	—	—	—	1.142	3.858	7.874
M3.6 x 2	4	—	—	TS036Q7NEXA	—	—	1.142	3.858	7.874
M3.6 x 3	4	—	—	—	TS036S8NEXA	—	2.047	3.858	7.874
M3.6 x 4	4	—	—	—	—	TS036U9NEXA	2.047	3.858	7.874
M3.9 x 1	4	TS039M5NEXA	—	—	—	—	1.142	3.858	7.874
M3.9 x 1.5	4	—	TS039O6NEXA	—	—	—	1.142	3.858	7.874
M3.9 x 2	4	—	—	TS039Q7NEXA	—	—	1.142	3.858	7.874
M3.9 x 3	4	—	—	—	TS039S8NEXA	—	2.047	3.858	7.874

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## Economical High Performance Hand Taps

For Metric Threads

## Z-PRO HT-OX



Z-PRO HT have an Oxide Surface Treatment

Custom Blend High Vanadium HSS

For Tapping Steels, Irons, Brass and Plastics

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Z-PRO HT are the most popular style general purpose taps for tapping under power or by hand.

Bottoming Style (1.5 threads chamfered)

DIN lengths with ANSI dimensions.

Z-PRO Series HT

Metric Sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers							Dimensions		
		D5	D6	D7	D8	D9	D10	D11	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M39 x 4	4	—	—	—	—	TS039U9NEXA	—	—	2.047	3.858	7.874
M42 x 1	4	TS042M5NEXA	—	—	—	—	—	—	1.142	3.858	7.874
M42 x 1.5	4	—	TS042O6NEXA	—	—	—	—	—	1.142	3.858	7.874
M42 x 2	4	—	—	TS042Q7NEXA	—	—	—	—	1.142	3.858	7.874
M42 x 4.5	4	—	—	—	—	—	TS042VONEXA	—	2.323	3.858	7.874
M45 x 1	4	TS045M5NEXA	—	—	—	—	—	—	1.22	4.252	8.661
M45 x 1.5	4	—	TS045O6NEXA	—	—	—	—	—	1.22	4.252	8.661
M45 x 2	4	—	—	TS045Q7NEXA	—	—	—	—	1.22	4.252	8.661
M45 x 3	4	—	—	—	TS045S8NEXA	—	—	—	2.323	4.252	8.661
M45 x 4.5	4	—	—	—	—	—	TS045VONEXA	—	2.323	4.252	8.661
M48 x 1	4	—	TS048M6NEXA	—	—	—	—	—	1.22	4.803	9.843
M48 x 1.5	4	—	—	TS048O7NEXA	—	—	—	—	1.22	4.803	9.843
M48 x 2	4	—	—	TS048Q7NEXA	—	—	—	—	1.22	4.803	9.843
M48 x 3	4	—	—	—	—	TS048S9NEXA	—	—	2.559	4.803	9.843
M48 x 5	4	—	—	—	—	—	—	TS048W-NEXA	2.559	4.803	9.843



The MHSL Series taps are designed for Carbon Steels of mid range hardness and through hole applications.

A combination of HSS-CO (featuring wear resistance) and Yamawa's special coating, resulting in a highly durable tap.

Yamawa's MHSL special flute design results in excellent forward chip ejection.

MHSL superior cutting results in excellent surface finishes.

## MHSL Series



MHSL has attained a very high durability in through hole tapping for steel products of mid range hardness used in the automotive industry.

DIN lengths with ANSI shank dimensions

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers			Dimensions		
		D5	D6	D7	Length of Thread	Neck Length (=Thread + Neck)	Length Overall
M6 x 1	3	LS6.0MEFCL	—	—	.591	1.181	3.150
M8 x 1.25	3	LS8.0NEFCL	—	—	.748	1.382	3.543
M10 x 1.25	3	—	LS010MFFCL	—	.906	1.929	3.937
M12 x 1.25	4	—	LS012NFFCL	—	1.024	2.126	4.331
M14 x 1.5	4	—	—	LS014OHFCL	1.024	2.126	4.331
M216 x 1.5	4	—	—	LS016OHFCL	1.024	2.126	4.331

# AXE-HT Series

For Cast Aluminum



\*AXE-HT have a TiN Surface Treatment

The AXE-HT Series are manufactured from premium HSS powder metals that feature high wear resistance and high heat durability properties along with a new cutting edge design, resulting in extended tool life.

The AXE-HT Series have a special TiN coating resulting in five times longer tool life compared to previous taps designed for Cast Aluminum.

AXE-HT taps offer a wider range of application, from mid range to high speed tapping.



DIN lengths with ANSI shank dimensions

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers		Dimensions		
		D5	D6	Length of Neck	Neck Length (=Thread + Neck)	Length Overall
M6 x 1	3	TS6.0M5LPVA	—	.591	1.181	3.150
M8 x 1.25	4	TS8.0N5LPVA	—	.748	1.382	3.543
M10 x 1	4	—	TS010M6LPVA	.906	1.929	3.937
M10 x 1.25	4	—	TS010N6LPVA	.906	1.929	3.937
M10 x 1.5	4	—	TS010O6LPVA	.906	1.929	3.937
M12 x 1.25	4	—	TS012N6LPVA	1.024	2.126	4.331
M12 x 1.5	4	—	TS012O6LPVA	1.024	2.126	4.331
M12 x 1.75	4	—	TS012P6LPVA	1.024	2.126	4.331



## Hand Taps for Hard-to-Machine Materials

For Unified threads

### MOLD HAND TAPS

Ideal for tapping mold steels, tool steels and gray cast irons, YMW offers this series of ZELX Mold Taps made of Cobalt High Speed Steel, ZELX Mold Hand Taps and Mold Pipe Taps.

Combined with specially designed geometry, Cobalt High Speed Steel improves the toughness of ZELX Taps for use in Prehardened Mold Steels. Furnished bright without surface treatment, taps can be surface treated upon request.

Ideal for tapping mold steels, tool steels and gray cast irons. (35 to 45 HRC)  
YMW offers this series of ZELX Mold Taps made of Cobalt High Speed Steel.

## ZELX MOLD



First Choice For Tapping Mold Steels

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Plug Style  
(4 to 6 threads chamfered)

List 3114 Machine Screw sizes  
3124 Fractional sizes

Nominal Size	Threads per inch		No. of Flutes	Pitch Diameter Limit/EDP Number		Dimensions	
	NC UNC	NF UNF		H2	H3	Length of Thread	Length Overall
4	40	—	3	389599	—	9/16	1-7/8
5	40	—	3	389601	—	5/8	1-15/16
6	32	—	3	—	389602	11/16	2
8	32	—	3	—	389604	3/4	2-1/8
10	24	—	3	—	389606	7/8	2-3/8
10	—	32	3	—	389607	7/8	2-3/8
1/4	20	—	3	—	389613	1	2-1/2
1/4	—	28	3	—	389614	1	2-1/2
5/16	18	—	4	—	389615	1-1/8	2-23/
5/16	—	24	4	—	389616	1-1/8	2-23/
3/8	16	—	4	—	389617	1-1	2-15/
3/8	—	24	4	—	389618	1-1	2-15/
7/16	14	—	4	—	389619	1-7/	3-5/32
7/16	—	20	4	—	389620	1-7/	3-5/
1/2	13	—	4	—	389621	1-21/	3-3
1/2	—	20	4	—	389622	1-21/	3-3/8
5/8	11	—	4	—	389625	1-13/	3-13/
5/8	—	18	4	—	389626	1-13/16	3-13/
3/4	10	—	4	—	389627	2	4-1/4
3/4	—	16	4	—	389628	2	4-1/4



## Hand Taps for Hard-to-Machine Materials

For Metric Threads

### MOLD HAND TAPS

Ideal for tapping mold steels, tool steels and gray cast irons, YMW offers this series of ZELX Mold Taps made of Cobalt High Speed Steel, ZELX Mold Hand Taps and Mold Pipe Taps.

## ZELX MOLD



Plug Style  
(4 to 6 threads chamfered)

List 3114 Metric sizes

Nominal Size	No. of Flutes	Pitch Diameter Limit / EDP Numbers			Dimensions		
		D5	D6	D7	Length of Thread (=Thread + Neck)	Neck Length	Length Overall
M5 x 0.8	3	TS5.0K5DCB5	—	—	.591	.984	3.15
M6 x 1	3	—	TS6.0M6DCB5	—	.591	1.181	3.15
M8 x 1	4	—	TS8.0M6DCB5	—	.748	1.382	3.543
M8 x 1.25	4	—	TS8.0N6DCB5	—	.748	1.382	3.543
M10 x 1.25	4	—	TS010N6DCB5	—	.906	—	3.937
M10 x 1.5	4	—	—	TS010O7DCB5	.906	—	3.937
M12 x 1.75	4	—	—	TS012P7DCB5	1.024	—	4.331

## I Series HT For Unified threads

# IHT



Designed for small batch quantity jobs that require the most economical tap. These taps are designed to tap steels and ferrous materials that produce stringy chips. They are also ideal for brass, plastics in through hole applications.

I Series HT available in blister packs.

Taps have oxide surface treatment

Plug Style (5 thread chamfer)  
Bottoming Style (2 thread chamfer)

I Series HT

Machine Screw sizes  
Fractional sizes

Nominal Size	Threads per Inch		EDP Numbers		No. of Flutes	Dimensions	
	NC UNC	NF UNF	Plug	Bottoming		Length of Thread	Length Overall
6	32	—	IAUN6JXHEX5R	IAUN6JXHEX2R	3	.374	2
8	32	—	IAUN8JXHEX5R	IAUN8JXHEX2R	3	.374	2-1/8
10	24	—	IAUNAMXHEX5R	IAUNAMXHEX2R	3	.512	2-3/8
1/4	20	—	IAU04NXHEX5R	IAU04NXHEX2R	3	.591	2-1/2
5/16	18	—	IAU05OXHEX5R	IAU05OXHEX2R	3	.669	2-3/4
3/8	16	—	IAUN06PXHEX5R	IAUN06PHEX2R	3	.748	2-15/16



AVAILABLE IN A CONVENIENT COUNTERTOP DISPLAY FOR WILL CALL AREAS AND CUSTOMER SERVICE COUNTERS.

EACH TAP IS INDIVIDUALLY WRAPPED IN A SHRINK WRAP BLISTER PACKAGING FOR EASIER HANDLING AND DISPLAY SALES.





The Yamawa "TA" positive drive quick change adapters allow the use of ANSI, DIN, and JIS style tap shanks in one toolholder. This means more styles of taps can be used with one tool holder thus reducing inventories of tapping toolholders.

The YAMAWA "TA" positive drive quick change tap adapter is interchangeable with other brands of tap adapters and toolholder manufacturers.

"TA"



For ANSI style taps



For DIN style taps



For JIS style taps

Choose the YAMAWA "TA" quick change tap adapter for the shank (ΦDs) and the size of square (K) of your ANSI, DIN or JIS tap from chart below.

Tap specification	Product code	Shank dia. (ΦDs) x Size of square (K)	Adaptable Tap Size			JIS	ΦD	K	Φd	Φd2	Φd1	ℓ1	ℓ2	ℓ3	ℓ4
			ANSI	(DIN371)	(DIN374) (DIN376)										
Unit of measurement inch															
ANSI	6711246	.1410 x .110	No. 0 - No. 6				0.141	0.110	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711251	.1680 x .131	No. 8				0.168	0.131	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711257	.1940 x .152	No. 10				0.194	0.152	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711276	.2550 x .191	1/4"				0.255	0.191	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711289	.3180 x .238	5/16"				0.318	0.238	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711301	.3810 x .286	3/8"				0.381	0.286	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711291	.3230 x .242	7/16"				0.323	0.242	1.181	0.748	0.748	0.669	0.157	0.846	0.276
	6711298	.3670 x .275	1/2"				0.367	0.275	1.181	0.748	0.748	0.669	0.157	0.846	0.276
6711305	.4290 x .322	9/16"				0.429	0.322	1.181	0.748	0.748	0.669	0.157	0.846	0.276	
Unit of measurement mm															
DIN	6711244	3.5 x 2.7		M3	M5		3.5	2.7	30	19	19	17	4	21.5	7
	6711253	4.5 x 3.4		M4	M6		4.5	3.4	30	19	19	17	4	21.5	7
	6711268	6 x 4.9		M5, M6	M8		6	4.9	30	19	19	17	4	21.5	7
	6711279(*)	7 x 5.5			M10		7	5.5	30	19	19	17	4	21.5	7
	6711287	8 x 6.2		M8			8	6.2	30	19	19	17	4	21.5	7
	6711294	9 x 7			M12		9	7	30	19	19	17	4	21.5	7
	6711302	10 x 8		M10			10	8	30	19	19	17	4	21.5	7
	6711308	11 x 9			M14		11	9	30	19	19	17	4	21.5	7
Unit of measurement mm															
JIS	6711320	4 x 3.2				M3	4	3.2	30	19	19	17	4	21.5	7
	6711260	5 x 4				M4	5	4	30	19	19	17	4	21.5	7
	6711313	5.5 x 4.5				M5	5.5	4.5	30	19	19	17	4	21.5	7
	6711266	6 x 4.5				M6	6	4.5	30	19	19	17	4	21.5	7
	6711317	6.2 x 5				M8	6.2	5	30	19	19	17	4	21.5	7
	6711279(*)	7 x 5.5				M10	7	5.5	30	19	19	17	4	21.5	7
	6711292	8.5 x 6.5				M12	8.5	6.5	30	19	19	17	4	21.5	7
	6711304	10.5 x 8				M14	10.5	8	30	19	19	17	4	21.5	7

(\*) Same product (The shank diameter and the size of square of a M10 tap are the same in both the JIS specifications and the DIN specifications.)



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