

# HSSE-V3 SPIRAL POINT TAPS METRIC-YELLOW RING



Designed for high-speed tapping applications. Developed to withstand the high stress and high heat associated with high-speed CNC production tapping. Features a unique free-cutting design with a special tempering and geometry which contributes to extra tool life.

## HSSE-V3% VANADIUM

- Superior performance in hardened tool steels such as 4140, 4340, H13, D2.
- Up to 35 HRC

**Bright Finish Available**

Add "B" to the end of the Code No.  
e.g. 123-650B

### • 4.5 PITCH LEAD (INTERMEDIATE)

## HSSE-V3 SPIRAL POINT TAPS METRIC SIZES

Nominal Size and Pitch	No. Flutes	Thread Limits	O/A Length (in)	Thread Length (in)	Code No.	Price \$
M2 x .4	2	D3	1-3/4	.433	123-502	9.60
M2.5 x .45	2	D3	1-13/16	.512	123-504	9.60
M3 x .5	3	D3	1-15/16	.433	123-505	8.60
M3.5 x .6	3	D4	2	.512	123-506	8.60
M4 x .7	3	D4	2-1/8	.512	123-507	9.10
M4.5 x .75	3	D4	2-3/8	.512	123-508	9.30
M5 x .8	3	D4	2-3/8	.512	123-509	9.30
M6 x 1	3	D5	2-1/2	.630	123-510	10.60
M7 x 1	3	D5	2-23/32	.630	123-511	12.80
M8 x 1	3	D5	2-23/32	.748	123-512	12.80
M8 x 1.25	3	D5	2-23/32	.748	123-513	12.80
M10 x 1.25	3	D5	2-15/16	.748	123-516	15.60
M10 x 1.5	3	D6	2-15/16	.748	123-515	15.60
M12 x 1.25	3	D5	3-3/8	.945	123-518	22.60
M12 x 1.75	3	D6	3-3/8	.945	123-517	22.60
M14 x 1.5	3	D7	3-19/32	.984	123-519	30.10
M14 x 2	3	D6	3-19/32	.984	123-520	30.10
M16 x 1.5	3	D6	3-13/16	1.102	123-522	35.60
M16 x 2	3	D7	3-13/16	1.102	123-521	35.60
M18 x 1.5	4	D6	4-1/32	1.102	123-523	59.60
M18 x 2.5	4	D7	4-1/32	1.102	123-524	59.60
M20 x 1.5	4	D5	4-15/32	1.220	123-525	71.40
M20 x 2.5	4	D6	4-15/32	1.220	123-526	71.40
M22 x 1.5	4	D6	4-11/16	1.339	123-527	83.10
M22 x 2.5	4	D6	4-11/16	1.339	123-528	83.10
M24 x 1.5	4	D5	4-29/32	1.339	123-529	111.70
M24 x 3	4	D7	4-29/32	1.339	123-530	111.70
M27 x 1.5	4	D7	5-1/8	1.181	123-531	158.20
M27 x 3	4	D7	5-1/8	1.181	123-532	158.20
M30 x 1.5	4	D7	5-7/16	1.378	123-533	184.10
M30 x 3.5	4	D7	5-7/16	1.378	123-534	184.10

### cutting conditions

Materials			Hardness (HRC)	Cutting Speed (FPM)
Main Group	Sub-Group	Condition		
Tool steels	01, A-2, D-2 H-13, P-20	Annealed	<35	15-25
Medium Carbon	1030, 1035 1038, 1040 1045, 1050	Normalized	<28	20-40
Alloyed high carbon	1065, 1070, 1080, 1090 1095, 1561, 1572	Normalized	<32	20-30
High strength	4140, 4340	Normalized	<32	20-30
Titanium	Commercially pure	Annealed	<32	15-30
Aluminum	Cast, wrought	-	-	30-90

### cutting speed (fpm)

	10	20	30	40	50	60	70	80	90	100
Tool Steels										
Medium Carbon										
Alloyed High Carbon										
High Strength										
Titanium										
Aluminum										

  

hardness (hrc)		0	5	10	15	20	25	30	35	35	40
Tool Steels											
Medium Carbon											
Alloyed High Carbon											
High Strength											
Titanium											
Aluminum											