

Release Date: 01/07/10

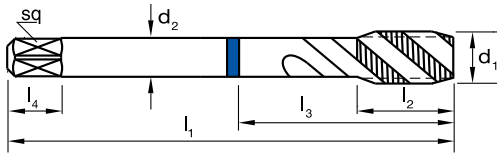
Sharepoint No: NPM00052



NEW

VAPM G-Series Spiral Taps

- Use in stainless steels and high strength steels up to 1000N/mm²
- PM-HSSE V3 offers higher edge hardness than standard VA series
- Blind holes
- Suitable for synchronous tapping in machine operations
- Depths up to approx. 3 x d₁



Catalogue Code	T351	T352
Discount Group	D0402	D0408
Material	PM-HSSE V3	PM-HSSE V3
Surface Finish	Blu	TICN
Colour Ring & Application	VA PM	VA
Geometry	R50°	R50°
Chamfer	Form C / 2.5 x P	Form C / 2.5 x P
Limit & Nut Tolerance	ISO 228	ISO 228

d ₁	TPI	l ₁	l ₂	l ₃	d ₂	sq	l ₄	z	drill Ø	Price	Item #	Price	Item #
G 1/8	28	90	20	-	7.0	5.5	8	3	8.8		T351 0973		T352 0973
G 1/4	19	100	22	-	11.0	9.0	12	3	11.8		T351 1316		T352 1316
G 3/8	19	100	22	-	12.0	9.0	12	3	15.3		T351 1666		T352 1666
G 1/2	14	125	25	-	16.0	12.0	15	3	19.0		T351 2096		T352 2096
G 5/8	14	125	25	-	18.0	14.5	17	4	21.0		T351 2291		T352 2291
G 3/4	14	140	28	-	20.0	16.0	19	4	24.5		T351 2644		T352 2644
G 7/8	14	150	28	-	22.0	18.0	21	4	28.5		T351 3020		T352 3020
G 1	11	160	30	-	25.0	20.0	23	4	31.0		T351 3325		T352 3325

Materials	HB	N/mm ²	% Elong.	Material eg.	Vc (m/min) For up to 3xD	Vc (m/min) For up to 3xD
1.0 Steels						
1.1 Mild steels, magnetic soft steel	<200	>200 <400	10	RFe100	10	25
1.2 Free cutting, structural, unalloyed	<200	>350 <700	30	C10, C15, ST37, ST52	10	20
1.3 Plain carbon, low allowed	<300	>350 <850	20	C45, C92D, D95-S	10	25
1.4 Alloy steels harden. / tempered	<250	>500 <850	30	41CrMo4, 36CrNiMo4, X15CrNiMo12-1, 90MnV8	8	12
1.5 Alloy steels harden. / tempered	<350	>850 <1200	30		8	12
2.0 Stainless Steels						
2.1 Free machining	<250	<850	25	X8CrNiS18-9	8	12
2.2 Austenitic	<250	<850	20	X5CrNi18-10	5	10
2.3 Ferritic + martensitic	<250	<850	20	X20Cr13	4	8
6.0 Coppers						
6.1 Pure Copper (electrolytic copper)	<120	<400	12	SF-Cu	-	8
6.3 Long chip Brass, Bronze	<200	<700	12	G-CuPb20Sn	-	15
7.0 Aluminiums						
7.1 Aluminium unalloyed	<100	<350	15	Al99.5	-	30
7.2 Magnesium unalloyed	<150	<350	15	Al99.85Mg0.5	-	30
7.3 Al Alloyed Si < 1.5 %	<120	<500	15	AlMg1.5	-	30
7.4 Al Alloyed 1.5 % < Si < 10%	<120	<400	10	AlSi10Mg	-	25
7.5 Al Alloyed > 10% Si	-	<400	N	AlSi17Cu4	-	15

Notes on Tapping

- The speeds listed above are a recommendation only, and are based on depth of thread listed, speeds can be adjusted on application. As a general rule;
 - If hole depth required is less than above mentioned = increase speed
 - If hole depth required is more than above mentioned = reduce speed
- Taps must be driven by the square to eliminate slippage, eg, ER-GB collets (square drive)
- When using spiral flute taps with length compensation tapping attachment, it is recommended to short pitch the feed 95%, to eliminate tap cutting oversize, eg. M6x1 @ 1000RPM, Feedrate= 950mm/min

FORMULAS

$$n = (v_c \times 1000) / (\phi \times \pi)$$

$$v_c = (\phi \times \pi \times n) / 1000$$

$$v_f = f \times n$$

LEGEND

n = rev. per minute
 v_c = cutting speed (m/min)
 f = pitch (mm)
 v_f = feed rate (mm/min)

Product Advice
 G Series Spiral Taps

