

Release Date: 01/07/10

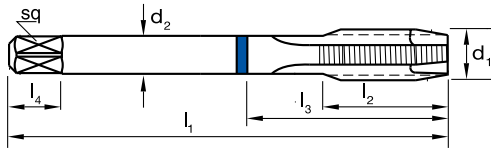
Sharepoint No: NPM00052



NEW

## VAPM G-Series Gun Taps

- Use in stainless steels and high strength steels up to 1000N/mm<sup>2</sup>
- PM-HSSE V3 offers higher edge hardness than standard VA series
- Through holes
- Suitable for synchronous tapping in machine operations
- Depths up to approx. 3 x d<sub>1</sub>



Catalogue Code		T349		T350									
Discount Group		D0402		D0408									
Material		PM-HSSE V3		PM-HSSE V3									
Surface Finish		Blu		TiCN									
Colour Ring & Application		VA		VA									
Geometry		Special Relief		Special Relief									
Chamfer		Form B / 4.5 x P		Form B / 4.5 x P									
Limit & Nut Tolerance		ISO 228		ISO 228									
d <sub>1</sub>	TPI	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>2</sub>	sq	l <sub>4</sub>	z	drill Ø	Price	Item #	Price	Item #
G 1/8	28	90	20	-	7.0	5.5	8	3	8.8		T349 0973		T350 0973
G 1/4	19	100	22	-	11.0	9.0	12	3	11.8		T349 1316		T350 1316
G 3/8	19	100	22	-	12.0	9.0	12	3	15.3		T349 1666		T350 1666
G 1/2	14	125	25	-	16.0	12.0	15	3	19.0		T349 2096		T350 2096
G 5/8	14	125	25	-	18.0	14.5	17	4	21.0		T349 2291		T350 2291
G 3/4	14	140	28	-	20.0	16.0	19	4	24.5		T349 2644		T350 2644
G 7/8	14	150	28	-	22.0	18.0	21	4	28.5		T349 3020		T350 3020
G 1	11	160	30	-	25.0	20.0	23	4	31.0		T349 3325		T350 3325

Materials	HB	N/mm <sup>2</sup>	% Elong.	Material eg.	Vc (m/min) For up to 3xD	Vc (m/min) For up to 3xD
<b>1.0 Steels</b>						
1.1 Mild steels, magnetic soft steel	<200	>200 <400	10	RFe100	12	20
1.2 Free cutting, structural, unalloyed	<200	>350 <700	30	C10, C15, ST37, ST52	12	15
1.3 Plain carbon, low allowed	<300	>350 <850	20	C45, C92D, D95-S	12	20
1.4 Alloy steels harden. / tempered	<250	>500 <850	30	41CrMo4, 36CrNiMo4, X15CrNiMo12-1, 90MnV8	10	20
1.5 Alloy steels harden. / tempered	<350	>850 <1200	30		10	15
<b>2.0 Stainless Steels</b>						
2.1 Free machining	<250	<850	25	X8CrNiS18-9	10	12
2.2 Austenitic	<250	<850	20	X5CrNi18-10	8	10
<b>7.0 Aluminiums</b>						
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
7.6 Magnesium alloys	-	<400	N	MgAl3Zn	-	20
<b>8.0 Plastics</b>						
8.1 Plastics, Thermoplastics, Polyethylene	<340	<50	N	ABS, PVC, Polycarbonate	-	30

### 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)

### 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<sub>c</sub> = cutting speed (m/min)  
 f = pitch (mm)  
 v<sub>f</sub> = feed rate (mm/min)

Product Advice  
 G Series Gun Taps

