



STROKE MEASUREMENT	STROKE SAMPLE	Conway Stewart	Typical Japanese Round Nibs (Namiki & Pilot)	Metric Gel Pens (examples)
0.004" = 0.1 mm				
0.008" = 0.2 mm				
0.012" = 0.3 mm			-XF-	Uni-ball micro (0.5)
0.016" = 0.4 mm		-XF-	-F-	Uni-ball micro (0.7)
0.020" = 0.5 mm		-F-	-M-	Uni-ball micro (1.0)
0.024" = 0.6 mm				PaperMate Bold (1.4)
0.028" = 0.7 mm		-M-	-B-	
0.031" = 0.8 mm				
0.035" = 0.9 mm		-B-		
0.039" = 1.0 mm				
0.043" = 1.1 mm				
0.047" = 1.2 mm				
0.051" = 1.3 mm				
0.055" = 1.4 mm				

- Notes:**
1. All measurements were made with a 50X microscope (metric reticle, line spacing 0.02 mm).
 2. The Stroke Sample set was generated with a computer to give you a very accurate metric against which you can measure the strokes of the pens you're evaluating.
 3. Because no paper is perfectly smooth, parts of any stroke made with a real pen may be broader or narrower than the precise measurement. The measurements in this chart represent slow strokes drawn by nibs. A rapid stroke will typically be narrower than the width illustrated. Out of the box, many nibs are set too dry and will write narrower than shown here – but they may be prone to skipping or have starting problems. Different inks, different flow rates, and different papers will produce different results. Even temperature, humidity, and barometric pressure can affect a fountain pen's performance. *You should not expect your testing to duplicate exactly the measurements shown here.*
 4. Measurements for the example metric gel pens shown here were taken with the pens used lightly, as a fountain pen user might use them. Pressing harder will produce a stroke 0.2 to 0.3 mm wider than shown in the chart. *Manufacturers' measurements for these pens represent the physical sizes of the pens' tips, not their stroke widths.*

Measure this scale with a ruler to ensure that your printout is accurately sized.

