Anritsu K Connector ®
01-104
Finishing Step Drill and Tap Kit

The finishing step drill is made of high-speed steel and is designed for use on aluminum and brass housings.

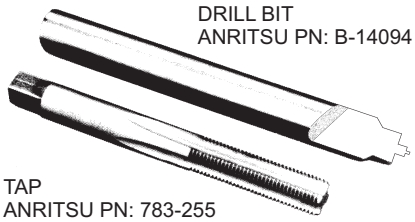

Figure 1. *Finishing Step Drill and Tap*

CAUTION

The drill bit in this kit is not intended for use with stainless steel, invar, or kovar. However, satisfactory operation–with a limited life—can be obtained with these materials if a pilot hole is drilled first. This pilot hole should be 0.025 mm to 0.125 mm smaller than the required 5.664, 1.981, and 0.711 mm hole diameters. *Handle the drill bit with care: It has a 0.711 mm diameter tip.* Do not use a drill press for the following steps. The precise tolerances needed require a milling machine.

Machining Instructions

The drill bit in this kit (Figure 1) simultaneously machines the concentric holes needed to install the K102 Sparkplug and K103/K104 Flange Mount Connectors. If sliding contacts are used, the 01-108 kit is recommended. However, if the 01-104 kit is used, the small hole must be rebored to the 0.838 mm dimension.

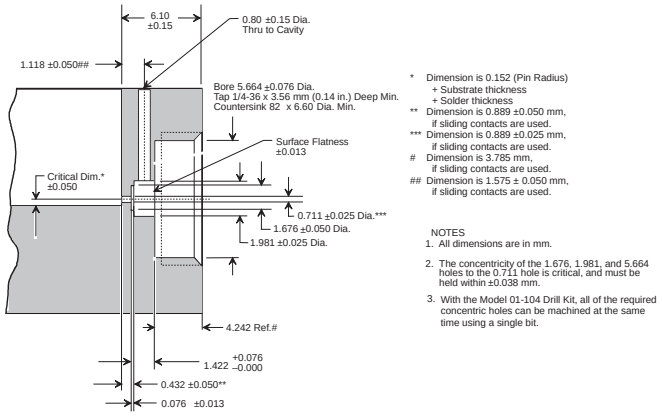

Figure 2. *Machining Dimensions (mm)*

1. Drill a 5.0 mm deep pilot hole using a 1.75 mm drill bit.
2. Install the step-drill bit directly into the collet of the mill. Do not use a drill chuck to hold the bit.
3. Set the drilling speed for 1500 to 2000 rpm and the feed rate for 0.006 mm-per-revolution.
4. Place the material to be machined into the vise of the mill.
5. Drill the holes using full-flood coolant and a steady, even feed. Periodically withdrawing the drill bit and clearing away the chips will make the drilling easier— *it will also make breaking the drill bit less likely.*
6. For the K102 Sparkplug Connector:
   a. Drill the hole as shown in Figure 2 for the 6.10 mm wall thickness.
   b. Tap the hole using the tap supplied with the 01-104 kit.
7. For the K103 and K104 Flange Mount Launchers:
   a. Drill only the 0.711, 1.676, and 1.981 mm holes; make the 1.981 mm hole 1.448 mm deep.
   b. Tap the two or four mounting holes as shown in Figures 3 and 4.

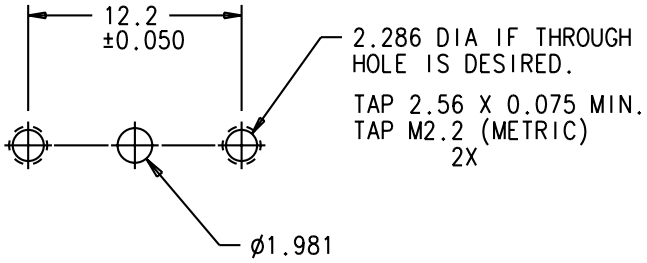

Figure 3. *K103 Mounting Hole Dimensions (mm)*

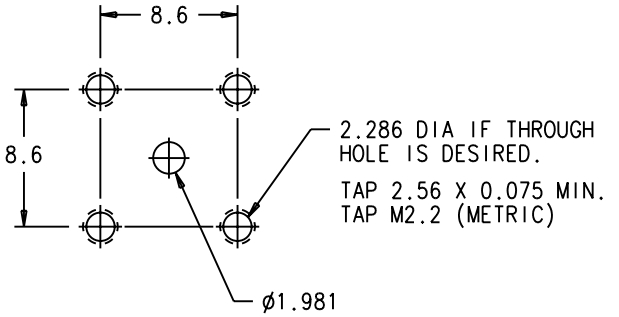

Figure 4. *K104 Flange Mount Mounting-Hole Dimensions (mm)*

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