

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.

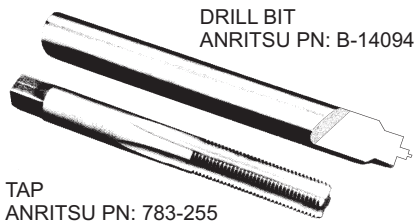


Figure 1. Finishing Step Drill and Tap

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 rebores to the 0.838 mm dimension.

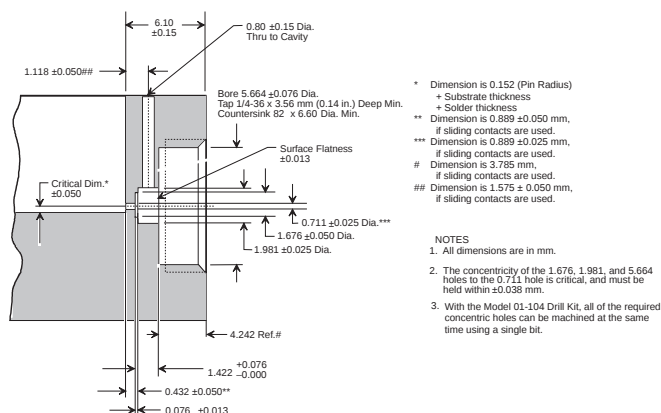


Figure 2. Machining Dimensions (mm)

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.

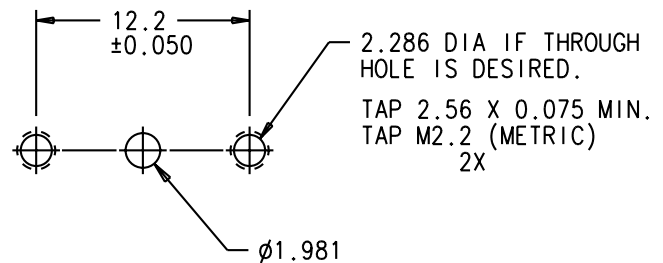


Figure 3. K103 Mounting Hole Dimensions (mm)

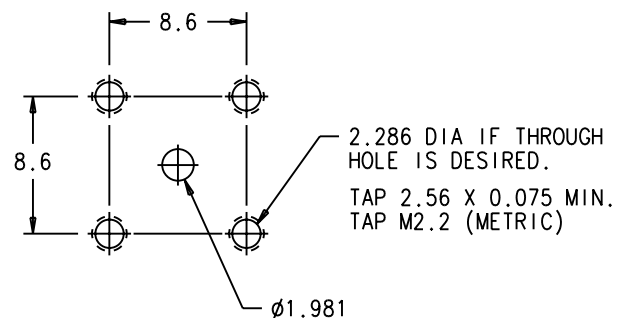


Figure 4. K104 Flange Mount Mounting-Hole Dimensions (mm)

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