

2.4mm PRECISION CONNECTOR GAGE KIT



Description

The Maury model A035C connector gage kit is designed to check the center contact pin location of 2.4mm female and male precision connectors. The critical contact pin location dimensions for these connectors is shown in **Figure 1**. This gage kit provides a fast and accurate means for checking these dimensions.

The model A035C consists of two gage assemblies (one for female connectors, and one for male connectors) and one master setting gage, all supplied in a wooden instrument case. The gage assemblies are basically dial indicators which can be zero-set by

means of the master setting gage. They will measure the actual deviation of the center conductor from the outer conductor mating plane. The model A035C "push-on" connector gage kit is an easy to use measurement instrument primarily intended for production control. With graduations of 0.0001 inch and a repeatability of ± 50 millionths of an inch, the model A035C is equally suitable for the laboratory environment. All gaging parts and the master setting gage are made from stainless steel, providing long wearing characteristics and excellent dimensional stability.

Model	Gage Assemblies	Dial Graduations (inches)	Applications
A035C	2	0.0001	Measures contact pin location of 2.4mm female and male precision connectors



Applications

The critical contact pin locations of 2.4mm female and male precision connectors are shown in **Figure 1**. These dimensions must be maintained in order to provide proper electrical performance and mechanical mating of female and male connectors. These connectors are designed to achieve a co-planar mating at the outer conductor mating plane, i.e., a metal contact at the outer conductor mating plane. Destructive interference may result if the contacts protrude beyond the outer conductor mating planes which may cause buckling of the female contact fingers, or damage to associated equipment during mating. Also, an excessive gap of the center contacts when mated pro-

duces high reflections and causes breakdown under peak power conditions. All connectors should be gaged after assembly to insure compliance to applicable specifications, to prevent destructive interference, and to insure electrical performance. In addition, connectors on all equipment should be gaged periodically to detect out of tolerance conditions which may impair electrical performance, or cause damage to mating connectors. The model A035C is very useful in a variety of applications, such as: production control, incoming inspection, quality control, and in the laboratory.

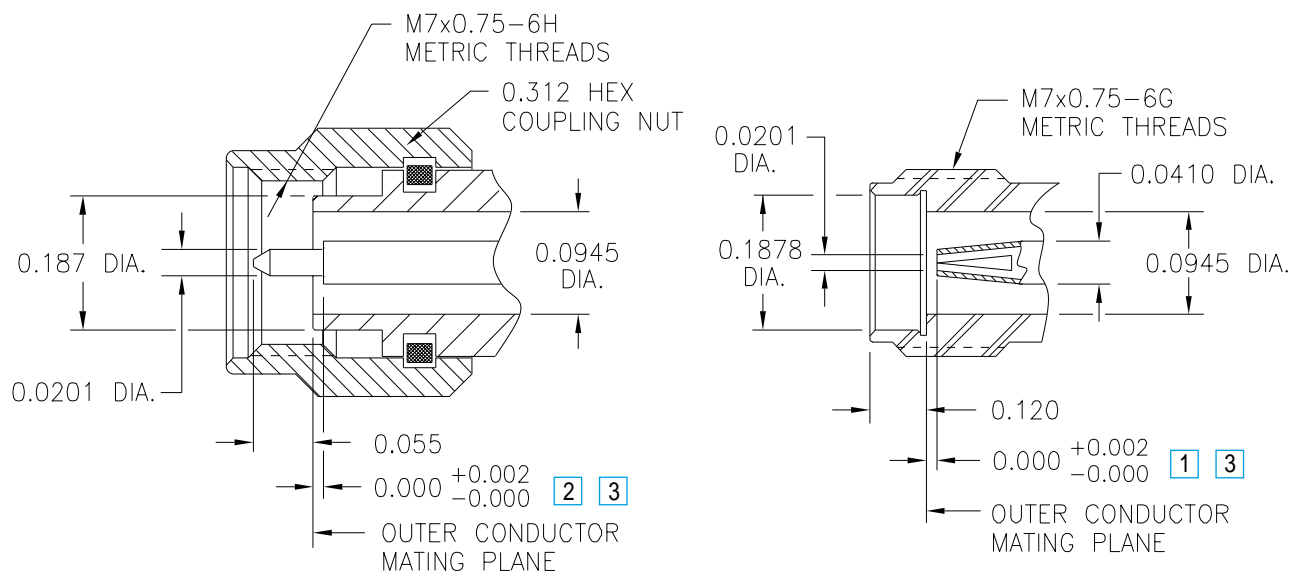


Figure 1 — Critical pin location dimensions of 2.4mm connectors 4

- 1 Female contact pin location -- use gage assembly marked "F".
- 2 Male contact pin location -- use gage assembly marked "M".
- 3 Tighter tolerances can be used at users' discretion. Maury recommends +0.0001 to +0.0015 for high precision measurements.

- 4 Other dimensions shown in these figures are shown since they affect the mating of the gage assemblies gaging mechanism (bushing and pin). Deviation from these dimensions may cause measurement errors, or improper fit between the gaging mechanism and the connectors being measured. Consult our customer service department on measuring connectors with interface dimensions other than those specified above.