

MULTIPOINT (M8™) CONNECTOR GAGE KIT

Features

- Direct Reading
- Self Checking
- Accurate
- Easy To Use



A045A

Description

The Maury A045A connector gage kit is a universal gage kit designed to measure the contact pin and dielectric locations of multiport connectors. The critical interface locations for these connectors are shown in **Figure 1**. This gage kit provides a fast and accurate means for checking these dimensions.

The model A045A is supplied with individual gages to measure each of the interface locations shown in **Figure 1**. There are no parts to change; each gage is ready for measurement. The A045A kit is supplied with six indicators and three master set gages. The gage assemblies are precision dial indicators that are zero-set with high accuracy master setting gages. These gages measure the actual deviation of the center conductor and dielectric from the outer conductor mating plane. The model A045A "push-on" connector gage kit is easy to use for both laboratory and field applications. Graduations of 0.0001 inch provide repeatability of 50 millionths of an inch with an overall accuracy of four times better

than the measured value for compliance with MIL-STD-45662A and ISO10012-1. All gaging parts and the master setting gages are made from hardened stainless steel for long wear and good dimensional stability.

A045A Uncertainty Data

Specifications		Limits	Comments
Gage resolution		0.00002 in	Fifth of an increment
Gage calibration accuracy		0.00004 in	—
Gage repeatability		0.00005 in	Half of an increment
Master accuracy		0.0005 in	—
Total Uncertainty	Worst case	0.00061 in	Add resolution, repeatability, gage and master accuracy limits.
	RSS	0.00050 in	Root sum of the squares.

Note: The M8™ interface was designed by Times Microwave.



Applications

The critical pin and dielectric locations of TNC 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. Destructive interference may result when mated if the contacts protrude beyond the specifications. Also, an

excessive gap of the center contacts will result in high reflections. 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.

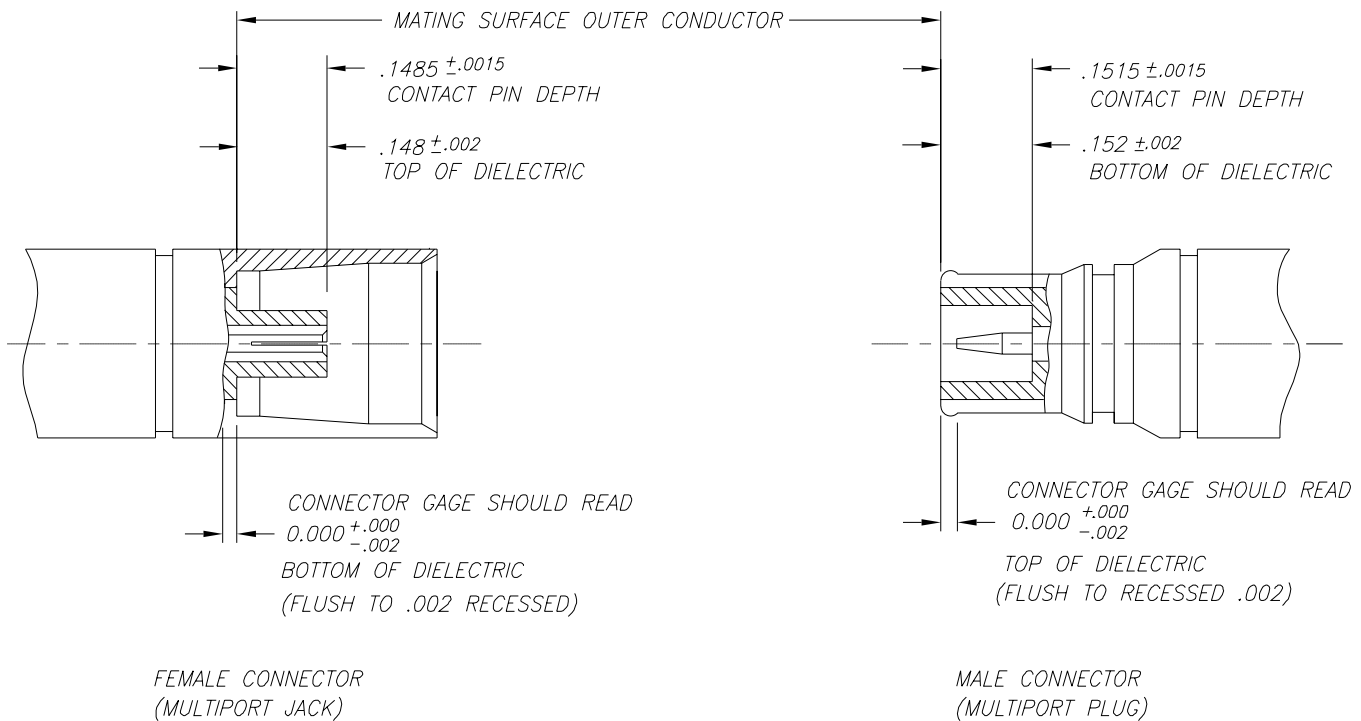


Figure 1 — Critical Pin and Dielectric Location of Multiport Connectors