

# OSP PRECISION CONNECTOR GAGE KIT



A039C

## Description

The Maury A039C connector gage kit is designed to check the center contact pin location of OSP female and male 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 A039C 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 A039C "push-on" connector gage kit is an easy to use measurement instrument primarily intended for production control.

With graduations of 0.00025 inch and a repeatability of 0.000125 of an inch, the gage is equally suitable for the laboratory environment. All gaging parts and the master setting gage are made from hardened stainless steel, providing long wearing characteristics and excellent dimensional stability.

## Chart

Model	Gage Assemblies	Dial Graduations (inches)	Applications
A039C	2	0.00025	Measures contact pin location of OSP female and male precision connectors.



## Applications

The critical contact pin location of OSP 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 male and female connectors. These connectors are designed to achieve a metal contact at the outer conductor mating plane. Destructive interference, which may cause buckling of the female contact fingers, may result if the contacts protrude beyond the dimensions shown in **Figure 1**. Also, an excessive gap of the center contacts when mated produces 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. Maury model A039C is very useful in a variety of applications, such as: incoming inspection, quality control, and in the laboratory.

## Dimensions

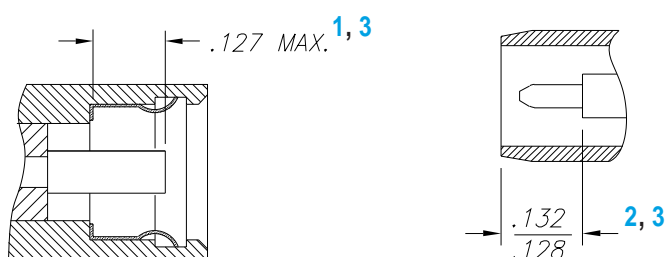


Figure 1. Connector Interface

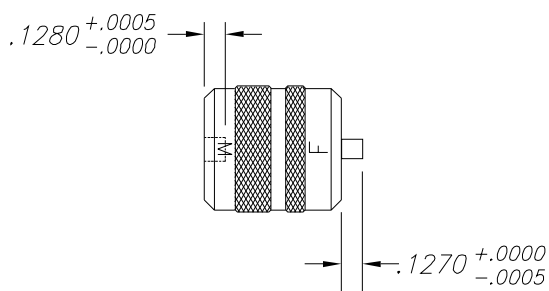


Figure 2. Master Setting Gauge

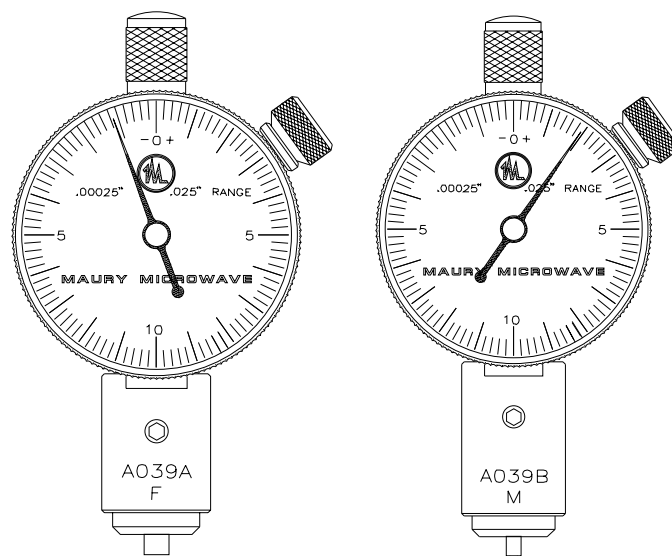


Figure 3. Gauge Assemblies

## Notes

- 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 user's discretion.