Manufacturer:
Thorlabs

Product Name:
Height Gauge for SMA905 Fiber Optic Connectors

Manufacturer Part Number:
10125HG

Click here for more details on the Height Gauge for SMA905 Fiber Optic Connectors

10125HG
SMA Height Gauge

User Guide

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Chapter 1 Operation

The gauge is designed for use with SMA905 fiber optic connectors during the polishing process to measure the height of the SMA ferrule. It is recommended to measure the height several times during the polishing process to ensure you do not over polish the connector. If the connector is overpolished then it will not function properly with its mating parts. The gauge should be ready to use out of the box and comes preset to the ideal SMA height of 0.3860" (see section 1.1 for details). The reading on the gauge with the included device pin should match the value printed on the back of the unit, as shown in the photo to the right. If the gauge does not match this value, please see the height reset section on page 4 before use.

Back of Gauge

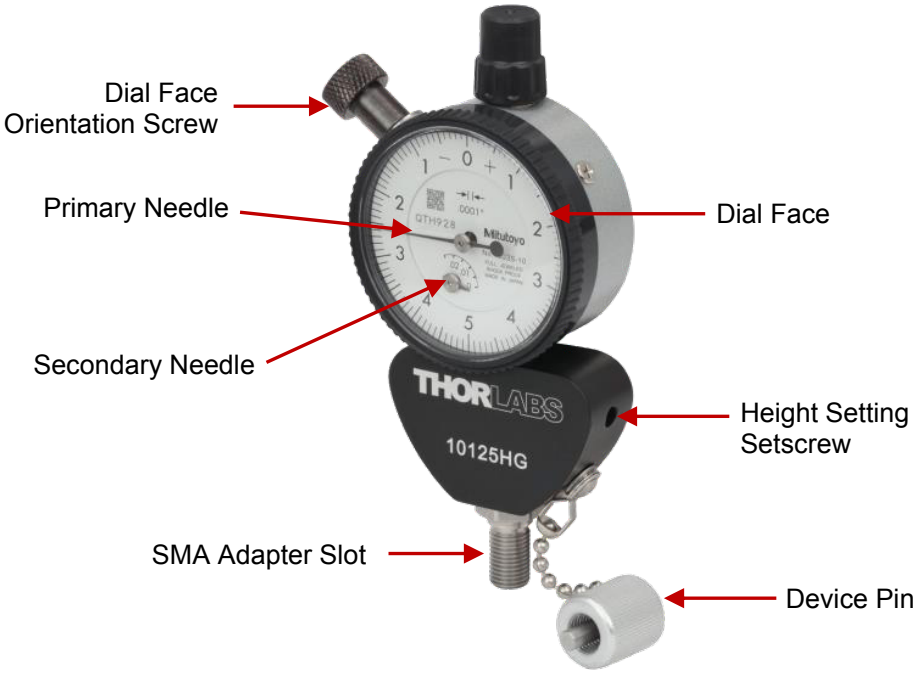


Figure 1 ***Gauge Components***

1.1. Taking Measurements

1. **Cleaning and Preparing the Gauge:** The gauge should be handled with care. Any connector being measured should be clean of debris. This will help to avoid damage to the gauge and will help to provide an accurate height measurement.
2. **Verify Height Setting:** Verify that when the device pin is inserted the gauge height reading is equal to the value printed on the back of the unit, then unscrew the device pin.

Figure 2 ***Gauge Properly Set to Device Pin***

3. **Measure Connector:** Thread an SMA connectorized fiber into the SMA Adapter Slot on the bottom of the gauge, as shown in the photo below. Hand tighten the connector onto the gauge.
4. **Reading the Measurement:** The connector height measurement on the gauge face is with respect to 0.3860″. Readings on the gauge go from -5 to +5, which correspond to -0.0050″ to +0.0050″ (0.3810” to 0.3910”). The SMA ferrule being measured to the right has a height of 0.3863″ which reads as +3 ticks on the gauge face.

Figure 3 ***0.3860” SMA Ferrule***

Note: The IEC standard for the height of an SMA ferrule is 0.3850″ to 0.3863″ (IEC61754-22).

1.2. Cleaning and Storage

The gauge should always be stored in its box when it is not in use.

The Device Pin and the SMA Adapter Slot can be cleaned with canned air and a lint-free cloth. Ensure the pin and slot are clean prior to use.

Chapter 2 Gauge Height Reset

To reset the height of the unit, thread the device Pin into the SMA Adapter Slot on the bottom of the gauge and hand tighten.

2.1. Fine Adjustments

If the Secondary Needle is pointing to 0.01, only fine adjustments are needed.

1. Loosen the Dial Face Orientation Screw and turn the dial face until the primary needle reading matches the number on the back of the gauge (see the photo to the right).

Figure 4 ***Fine Adjustments***

2.2. Coarse Adjustments

If the Secondary Needle is not pointing to 0.01, coarse adjustments are necessary.

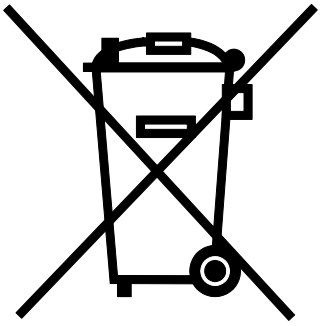
1. Loosen the side-located setscrew using a 0.05 hex key.
2. Raise or lower the dial face until the Secondary Needle points to 0.01 and the Primary Needle points to the number printed on the back of the gauge (see the photo below).
3. Make any necessary fine adjustments as mentioned above.

Figure 5 ***Coarse Adjustments***

Chapter 3 Regulatory

As required by the WEEE (Waste Electrical and Electronic Equipment Directive) of the European Community and the corresponding national laws, Thorlabs offers all end users in the EC the possibility to return “end of life” units without incurring disposal charges.

- This offer is valid for Thorlabs electrical and electronic equipment:
- Sold after August 13, 2005
- Marked correspondingly with the crossed out “wheelie bin” logo (see right)
- Sold to a company or institute within the EC
- Currently owned by a company or institute within the EC
- Still complete, not disassembled and not contaminated



Wheelie Bin Logo

As the WEEE directive applies to self contained operational electrical and electronic products, this end of life take back service does not refer to other Thorlabs products, such as:

- Pure OEM products, that means assemblies to be built into a unit by the user (e.g. OEM laser driver cards)
- Components
- Mechanics and optics
- Left over parts of units disassembled by the user (PCB’s, housings etc.).

If you wish to return a Thorlabs unit for waste recovery, please contact Thorlabs or your nearest dealer for further information.

3.1. Waste Treatment is Your Own Responsibility

If you do not return an “end of life” unit to Thorlabs, you must hand it to a company specialized in waste recovery. Do not dispose of the unit in a litter bin or at a public waste disposal site.

3.2. Ecological Background

It is well known that WEEE pollutes the environment by releasing toxic products during decomposition. The aim of the European RoHS directive is to reduce the content of toxic substances in electronic products in the future.

The intent of the WEEE directive is to enforce the recycling of WEEE. A controlled recycling of end of life products will thereby avoid negative impacts on the environment.