

# Agilent 55290A Angular Position Measurement Kit

## Data Sheet

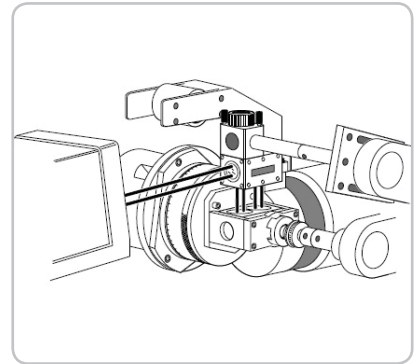
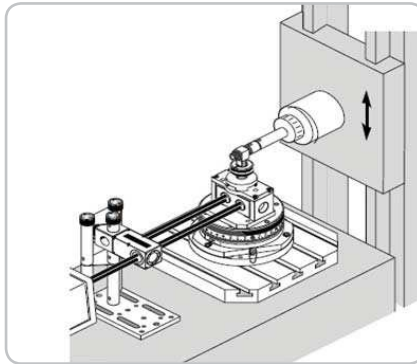
The Agilent 55290A Angular Position Measurement Kit automatically calibrates rotational axes in turning and machining centers. It can perform calibrations on full, partial or multiple rotations. The purpose of the measurement is to document machine tool capability and improve angular positioning accuracy when possible.

### Additional Capabilities

- Enable users to keep the laser beam on indexing tables that require a great deal of lift - up to 15 mm.
- Perform partial arcs for tools that cannot rotate 360° as well as multiple revolutions.
- Calibration of C-Axis on turning centers using adapter plate and flange (included in the kit).

### Basic Equipment

- Agilent 5530 Laser Calibration System
- Agilent 55281A Angular Optics Kit
- Agilent 55290A Angular Position Measurement Kit
- Agilent 55290A-744 Supplemental Fixturing Kit



### Indexing Mode (Zero-reference measurement)

Accuracy	0.5 arc sec + 0.2% of displayed reading
Index Step size (resolution)	1 °
Range	Multiple rotations or partial arcs

### Laser Measurement Mode

Accuracy	0.2% of displayed reading. Accuracy can be improved to 0.5 arc sec by calibrating laser optics with the indexing table (55290A)
Range	±10 °

### Setup Requirements

Travel (using +2 mm, -1 mm machine axis or manual from zero reference)

### Indexing Mode (Interferometer in fixture)

Maximum lift	15 mm (2 mm required for fixture)
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## Components included in the 55290A Angular Position Measurement Kit

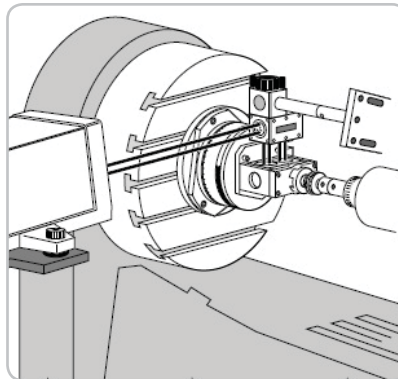
Description	Quantity
Adaptor	1
Post (~ 25 mm)	1
Split nut with O-ring	3
Flanged shaft	1
Carrying case	1
Circular adaptor plate	1
Precision angular indexing table	1
Angular optics mounting fixture and clutch assembly	1
Mounting hardware with hex keys	1 set

## Related Literature

Publication title	Publication number
Agilent 5530 Laser Calibration System Brochure	5989-9354EN
Agilent 5530 Laser Calibration System Data Sheet	5989-9712EN
Agilent 5530 Laser Calibration System Flyer	5989-9707EN
Agilent 55290A/B Angular Position Measurement Kits Supplemental Guide	55290-90011



55290A Angular Position Measurement Kit



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Product specifications and descriptions in this document subject to change without notice.

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