



## MTS Fundamental™ Automatic Extensometer (FAX)

Accurate axial strain measurement

### Benefits

- » FAX1352 automatic extensometer is compatible with MTS Criterion and Exceed Universal Test Systems
- » Designed for longevity
- » Optimized for high-volume testing of single gage length specimens
- » Rotational Mount allows the operator to quickly rotate the FAX out of the test area for easy access to the specimen
- » Ideal for axial strain measurement for tensile testing on Universal Test Systems

Reduce inconsistencies and improve the accuracy of test results with an MTS Fundamental™ Automatic Extensometer (FAX). The high-resolution automatic extensometer is suitable for a wide variety of applications that require linear strain measurement. The FAX can determine a variety of calculations including modulus, offset yield and plastic elongation to failure.

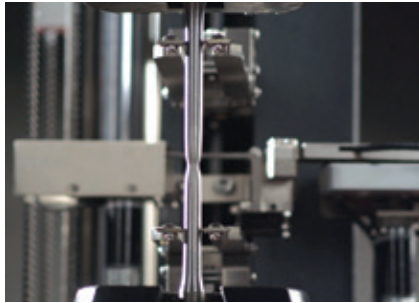
FAX offers a fast and highly accurate contact measurement for tensile testing on a wide range of materials such as plastics, composites, metals and rebar. Designed to automatically trace and measure specimen deformation, the

MTS FAX performs standard axial measurement. Improve lab productivity with the automatic self-adjusting gage length positioning to ensure test consistency.

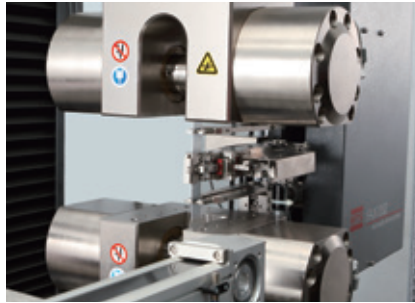
The FAX enables higher accuracy and greater versatility of axial deformation measurements. The innovative design of the support can keep the extensometer moving along the center of the specimen synchronously to ensure measurement precision. It is designed with a high precision measure up to 0.2  $\mu\text{m}$  in resolution and meets the requirements of ISO and ASTM test methods.

## Tensile testing for the following materials:

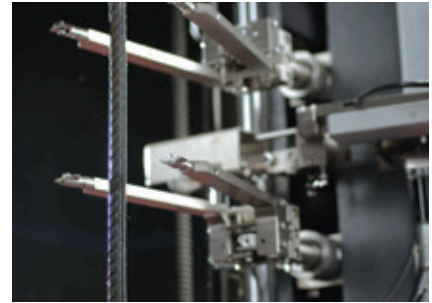
- » Metals
- » Plastics
- » Composites
- » Rebar



Round specimen



Sheet metal



Rebar

## Mounting

Intuitive design allows operators to quickly position the extensometer out of the test area.

### PIVOTAL MOUNT

Allows the operator to quickly withdraw the device from the test area from two positions.

## Testing Results

E (elastic modulus)

Rt (specified total elongation intensity)

n (strain hardening index)

At (total elongation at break)

Agt (total elongation at maximum force)

$\mu$  (Poisson's ratio)

Rp (specified plastic elongation length)

r (plastic strain ratio)

Ae (yield point elongation)

Ag (plastic elongation at maximum force)

A (percentage elongation after fracture)

## Axial Model Specifications

<b>Model</b>	FAX1352
<b>Part Number</b>	100-530-550
<b>Frame Family</b>	Criterion & Exceed
<b>Measuring Range</b>	0-80 mm (0-3.1 in)
<b>Gage Length*</b>	10-200 mm (0.4-7.9 in)
<b>Thickness or Diameter Range</b>	Flat: 0.2-40 mm (0.0008-1.57 in) Round: 0.2-40 mm (0.0008-1.57 in)
<b>Relative Error</b>	±1%
<b>Axial Resolution</b>	≤0.2 $\mu$ m
<b>Temperature Range</b>	5°C (41°F) to 40°C (104°F)
<b>Height</b>	530 mm (20.9 in)
<b>Width</b>	120 mm (4.7 in)
<b>Depth</b>	673 mm (26.5 in)
<b>Width</b>	100-240 VAC 50/60Hz 1.4A

*\* Recalibration is required whenever the specimen gage length is changed.*

### Learn More Today

Contact your MTS representative to learn more about how the MTS Fundamental Automatic Extensometer can meet your contact extensometry needs, easily and affordably.



Pivotal Mounts



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