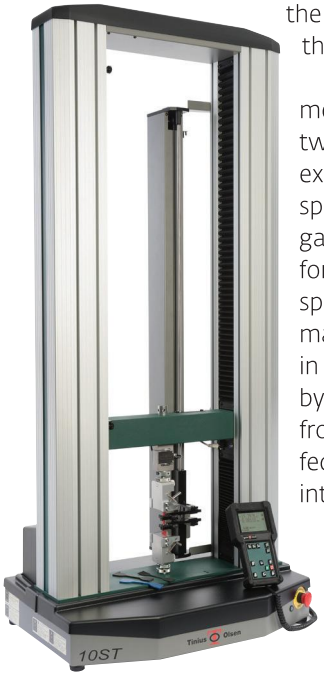
ER0100EN02

MODEL 100R
Extensometer

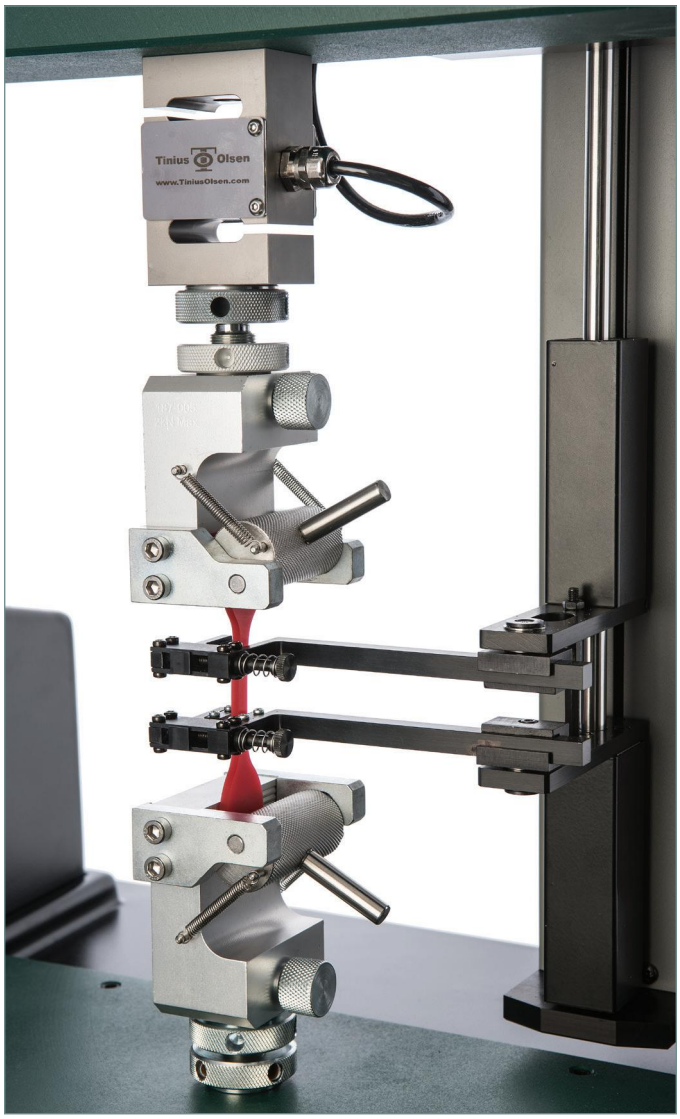
The Tinius Olsen model 100R is a high elongation extensometer that is designed to measure the 'stretch' of a wide range of materials including elastomers and non-rigid plastics.
The initial measuring length, or gauge length, can be changed to suit the specimen size or the test standard that is being applied.

The unique design ensures an extremely low tracking force for testing sensitive materials, as well a robust construction that can easily withstand the high release forces and breaking energies with certain specimens. The design also incorporates a simple yet effective method with which the extensometer followers are attached to the specimen, allowing rapid throughput of testing.



Extension is measured by attaching two counterbalanced extensometer clamps to the specimen at a pre-selected gauge length. When tensile forces are applied to the specimen by the testing machine, the slightest change in gauge length is measured by an optical encoder. Signals from the optical encoder are fed into the signal conditioner interface for processing.

The 100R extensometer can be fitted to all sizes of screw driven materials testing machines.



100R SPECIFICATIONS

Elongation Measurement Range	mm	720 (extended options available)
	in	28.35 (extended options available)
Gauge Lengths	mm	10, 15, 20, 25, 40, 50
Accuracy		1% on 25 mm gauge length, ISO 5893 class A, ASTM E83 class C
Resolution	mm	0.01
	in	0.0004
Tracking Force	g	<10
	lbf	<0.02
Specimen Thickness	mm	0 to 5
	in	0 to 0.2
Dimensions (H x W x D)	mm	1015 x 53 x 200
	in	40 x 2.1 x 7.9
Weight	kg	5.5
	lb	11

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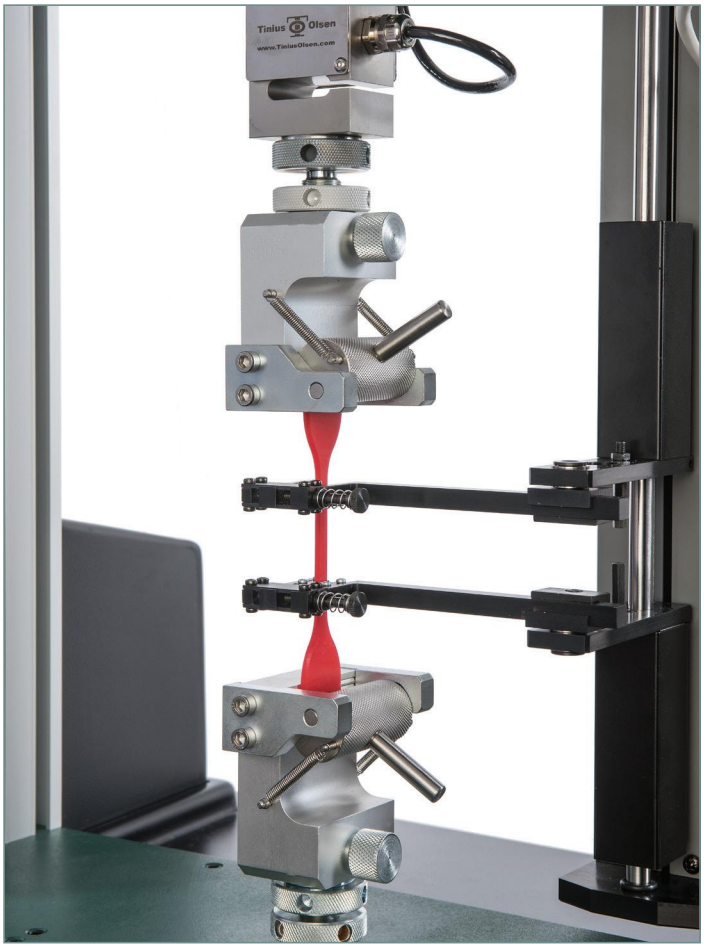
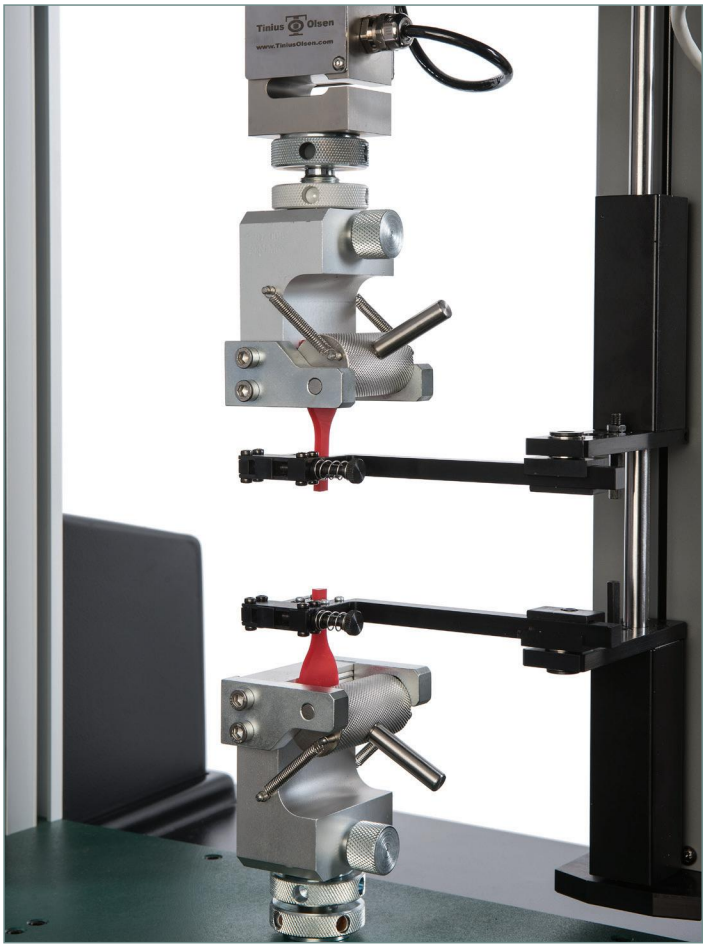
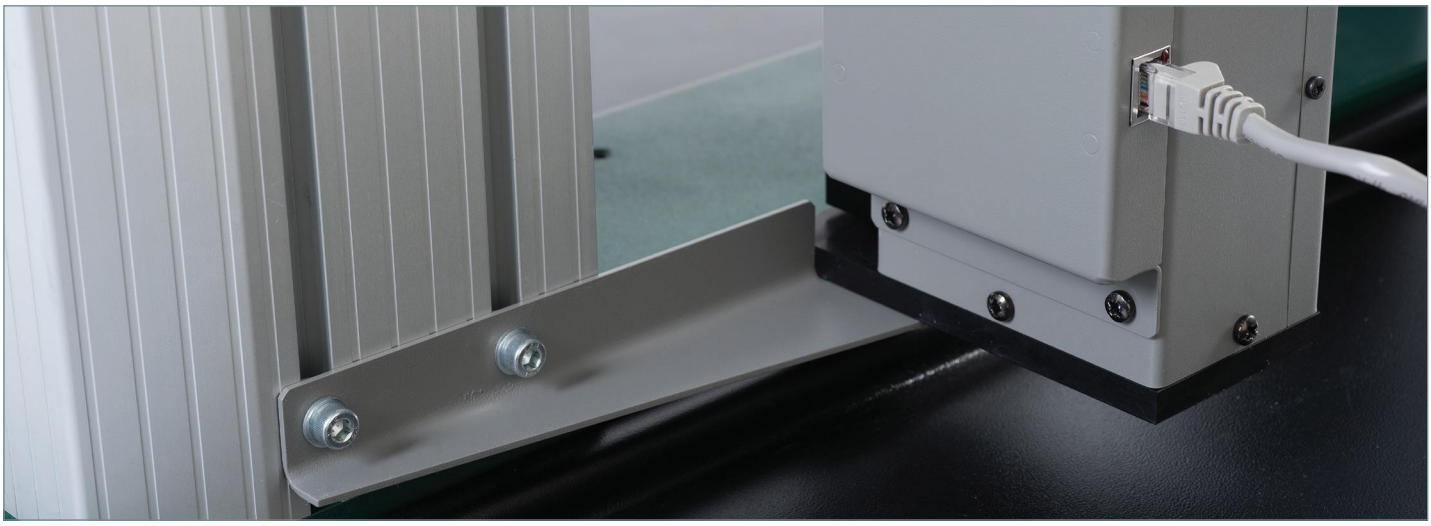


Model 100R long travel extensometer on specimen.



Model 100R long travel extensometer on specimen at specimen break.



Model 100R long travel extensometer machine mounting detail.

Tinius Olsen

The first name in materials testing

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