

For use in environmental chambers where the entire extensometer must be exposed to elevated temperatures. These capacitive extensometers may be used up to 540 °C (1000 °F) without any cooling.



Model 3555BP with 50 mm gauge length and +20/-10% measuring range

These extensometers use a high temperature capacitive sensor and do not require any cooling. They will operate up to the maximum temperature limit of most environmental chambers used in materials testing. The Model 3555 is ideal for testing composites, metals and high temperature polymers in tensile, compression or cyclic testing. All units can be displaced in both compression and tension.

The extensometer comes with a signal conditioner. The output is an analog DC voltage, factory calibrated with the extensometer to 0 to 10 VDC typically.

They are readily interfaced with most existing test controllers, and may be directly connected to data acquisition systems and chart recorders. Bringing the signal into a spare DC input channel (or external input) on the test controller allows the extensometer to be used for strain controlled tests like low cycle fatigue.



Model 3555 with 0.5 inch gauge length and +10/-5% measuring range



Models 3555 and 3675 (transverse) extensometers



Model 3555BP with 1 inch gauge length and +50/-10% measuring range

Features

- May be left on through specimen failure.
- Capacitive signal conditioner and power supply included. Provides high level DC voltage output with low noise. Easily interfaced to test controllers, data acquisition boards and chart recorders.
- Shipped fully calibrated with electronics (traceable to NPL (UK)) with user specified voltage output.
- All models can measure in both tension and compression and can be used for cyclic testing.
- Mechanical overtravel stops in both directions.
- All standard units meet existing ASTM class B-1 and ISO 9513, class 0,5 requirements for accuracy.
- Hardened tool steel knife edges are easily replaced. A spare set comes with every extensometer.
- Includes high quality foam lined case and a spare set of knife edges.
- Rugged, dual flexure design for strength and improved performance. Much stronger than single flexure designs, this also allows cyclic testing at higher frequencies.

SPECIFICATIONS

- Input: Includes power supply for your country (specify)
- Output: User specified, +/-5 VDC or +/-10VDC typical
- Linearity: ≤0.15% of full scale measuring range
- Temperature Range: Ambient to 540 °C (ambient to 1000 °F)
- Cable: Triaxial ceramic fiber insulated cable 2 ft (0.6 m) plus 10 ft (3 m) room temperature extension cable
- Standard Quick Attach Kit: Fits round samples up to 0.5 inch diameter (12 mm) and flats to 2.0 inches (50 mm) wide for thicknesses up to 0.25 inches (6.35 mm) and 0.75 inches (19 mm) wide for thicknesses between 0.25 (6.35 mm) and 0.50 inches (12.5 mm).
- Operating force: <30 g typical
- Environment: Recommended for elevated temperature testing in air or some other gases

OPTIONS

- Adapter kits to change gauge lengths
- Connectors to interface to nearly any brand test equipment
- Bottom or back mounted probe
- Specialty knife edges (see page 105)

ORDERING INFORMATION

Model 3555 Available Versions: ANY combination of gauge length, measuring range and temperature range listed below is available, except as noted. Other configurations may be available with special order; please contact Epsilon to discuss your requirements.

Gauge Length		Measuring Range	
U.S.A.		DESIGNATION	% STRAIN
-0050	0.500"	-005	±5%
-0100	1.000"	-010	+10%/-5%
-0200	2.000"	-020	+20%/-10%
		-050 ¹	+50%/-10%
METRIC			
-010M	10.0 mm		
-025M	25.0 mm		
-050M	50.0 mm		

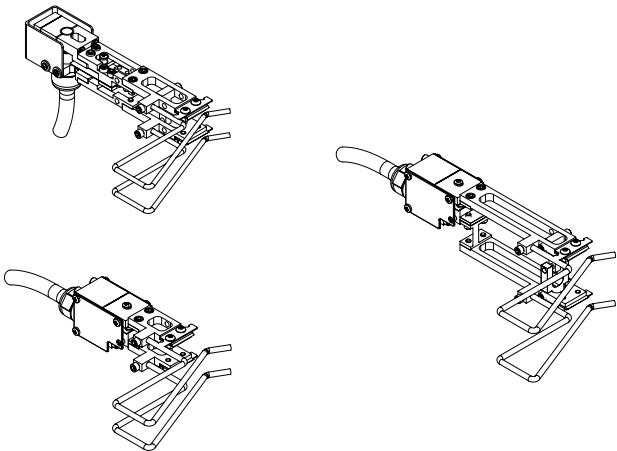
Model Number 3555- - - - - *
or
Model Number 3555BP- - - - - **

¹ Not available in 50 mm or 2 inch gauge lengths.

Example: 3555-0100-020: 1.0 inch gauge length, +20%/-10% measuring range

* back probe configuration
** bottom probe configuration

Visit our website at www.epsilontech.com
Contact us for your special testing requirements.



MODEL 3555 EXAMPLES

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