



3540 with 1 mm measuring range.



3540 with magnetic base included.



3540 with 1" measuring range.

Widely used for measuring deformations in three and four point bend tests, on compression tests and for a variety of general purpose deformations. These strain gaged devices come with a magnetic base for easy mounting.

Deflection is measured with a single arm with an attached spherical contact tip, similar to those on a dial indicator. The full bridge strain gaged construction provides an electrical output compatible with any electronics designed for a strain gaged transducer.

The magnetic base furnished with the gage can be mounted to the desired reference surface, whether flat or round. The tip can then be positioned to measure the deformation encountered during the test. The magnetic base can only be used for low and standard temperature testing. Elevated temperature testing requires additional support considerations.

All models feature a spring loaded arm that can break free in the event of excessive displacement, protecting the gage from damage. The upper arm exerts a small spring force against the specimen, which is sufficient to allow dynamic cyclic testing if desired, yet light enough in force to avoid influence on the test.

These units come standard with the arm set to measure downward deflections when oriented in the upright position. They can be used upside down or in any orientation. They may also be configured with the extensometer arm spring loaded downward. Specify this if desired. Note that the measuring ranges listed are total displacement.

Features

- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units have linearity readings of 0.25% or better.
- Rugged, dual flexure design for improved performance.
- Includes high quality foam lined case.
- Comes with an adjustable magnetic base for easy mounting.
- General purpose deflection sensor covers many test requirements.
- Spring loaded arm detaches to prevent damage from overtravel.

SPECIFICATIONS

- Excitation:* 5 to 10 VDC recommended, 12 VDC or VAC max.
- Output:* 2 to 4 mV/V, nominal, depending on model
- Linearity:* 0.15% to 0.25% of full measuring range, depending on model
- Temperature Range:* Standard (-ST) is -40 °C to +100 °C (-40 °F to 210 °F)
- Cable:* Integral ultra-flexible cable, 8 ft. (2.5 m) standard
- Operating Force:* 50 g typical

OPTIONS

- Connectors to interface to nearly any brand test equipment
- Shunt calibration module (see page 96)
- Arm orientation

ORDERING INFORMATION

Model 3540 Available Versions: ANY combination of measuring range and temperature range listed below is available.

Measuring Range		
DESIGNATION		LINEARITY
-005T	0.050"	0.15%
-015T	0.150"	0.15%
-025T	0.250"	0.20%
-050T	0.500"	0.20%
-100T	1.000"	0.25%
METRIC		
-001M	1.0 mm	0.15%
-004M	4.0 mm	0.15%
-006M	6.0 mm	0.20%
-012M	12.0 mm	0.20%
-025M	25.0 mm	0.25%

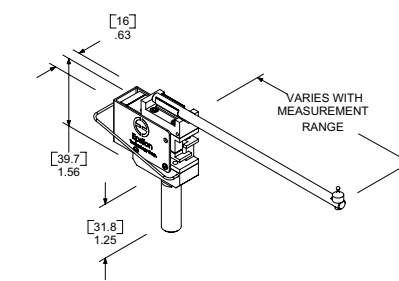
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Temperature Range	
-LT	-265 °C to 100 °C (-450 °F to 210 °F)
-ST	-40 °C to 100 °C (-40 °F to 210 °F)
-HT1	-40 °C to 150 °C (-40 °F to 300 °F) ¹
-HT2	-40 °C to 200 °C (-40 °F to 400 °F) ¹
-LHT	-265 °C to 200 °C (-450 °F to 400 °F) ¹

¹ Magnetic base not for high temperature use 50 °C (125 °F) max.

Example: 3540-012M-ST: 12.0 mm measuring range, standard temperature option (-40 °C to 100 °C)

Contact Epsilon for your special testing requirements.



3540 WITHOUT MAGNETIC BASE

DIMENSIONS: [mm] inches