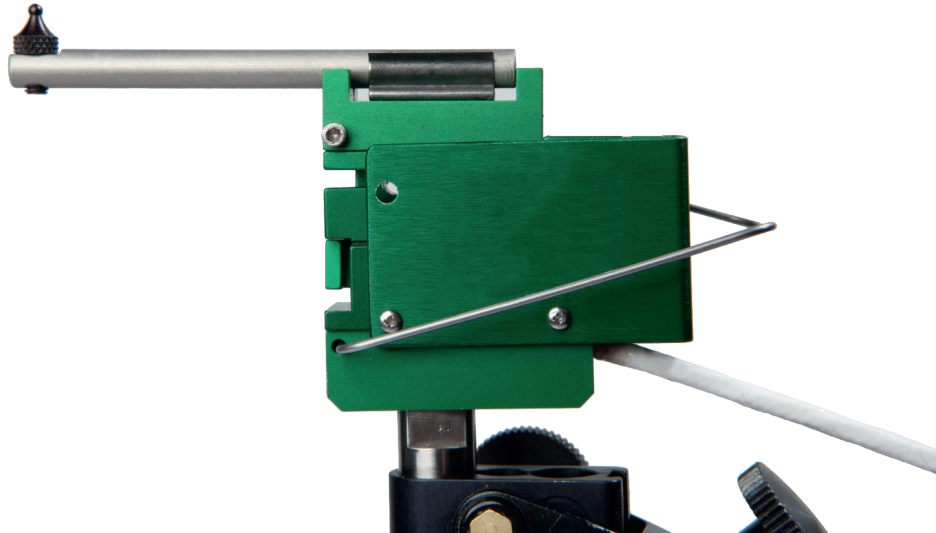


Deflection Gages (Deflecometer)

Series 3540

Widely used for measuring deformations in 3- and 4- point bending tests, on compression tests and for general purpose deformations.

These strain gauged 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 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.

The application range includes:

- Measuring deflection in 3 or 4 point bending tests
- Strain measurements on compression tests
- Variety of general test deflection measurements

Features

- Meets ISO and ASTM accuracy classes:
 - Model 001M, -004M, -006M, -005T, -015T and -025T
 - class 1 according to ISO 9513
 - class A according to ASTM E2309
 - class B-2 (assuming 50 mm gauge length per D790 and D7272) according to ASTM E83
 - Model 012M, -025M, -050M, -050T, -100T and -200T
 - class 2 according to ISO 9513
 - class B according to ASTM E2309
 - class C (assuming 50 mm gauge length per D790 and D7272) according to ASTM E83
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- Comes with an adjustable magnetic base for easy mounting.
- Spring loaded arm detaches to prevent damage from overtravel.
- All standard units have linearity of 0.25% of FS or better.
- Includes the **Shunt** Calibration System for on-site electrical calibration.
- Rugged, dual flexure design for improved performance.
- Includes high quality foam lined case.



Specification:

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

Option

- Arm orientation

Technical Data

Model 3540 Available Versions: ANY combination of measuring range and temperature range listed below is available.
 Other configurations may be available with special order; please contact us to discuss your requirements.

Model Number 3540 - [] - []

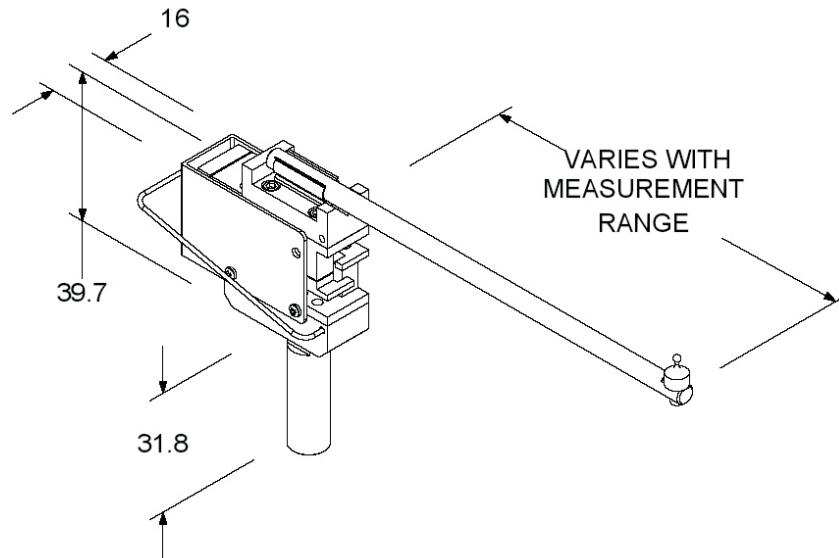
Measuring Range:	
-001M	1.0 mm
-004M	4.0 mm
-006M	6.0 mm
-012M	12.0 mm
-025M	25.0 mm
-050M	50.0 mm

Temperature Range	
-LT	$-270\text{ }^{\circ}\text{C}$ to $100\text{ }^{\circ}\text{C}$ ($-454\text{ }^{\circ}\text{F}$ to $210\text{ }^{\circ}\text{F}$)
-ST	$-40\text{ }^{\circ}\text{C}$ to $100\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $210\text{ }^{\circ}\text{F}$)
-HT1	$-40\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $300\text{ }^{\circ}\text{F}$) ¹
-HT2	$-40\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $400\text{ }^{\circ}\text{F}$) ¹
-LHT	$-270\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$ ($-454\text{ }^{\circ}\text{F}$ to $400\text{ }^{\circ}\text{F}$) ¹

¹ Magnetic base not suitable for high temperature use; $50\text{ }^{\circ}\text{C}$ ($125\text{ }^{\circ}\text{F}$) max

Example: Model 3450-012M-__

Dimensions: mm



Optional Available

- High Temperature Bend Extensometer
- High temperature bend fixture and 3 point bend deflection sensor for bend tests up to $1000\text{ }^{\circ}\text{C}$.
- Capacitive sensor allows very small full scale measurement of 100 microns. Includes radiant furnace, fixtures and controlled atmosphere chamber

