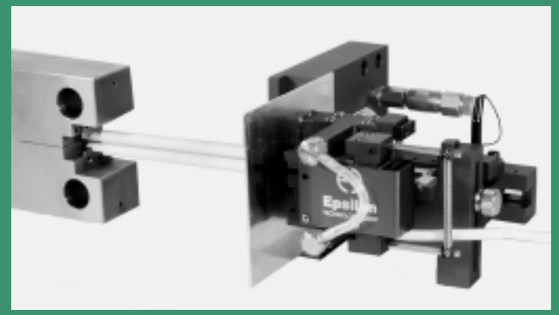
MODEL 3548COD High Temperature COD Gages to 1200 °C or 1600 °C

Epsilon Technology Corp



3548COD shown with typical test specimen.

High temperature COD gages for use in split type materials testing furnaces with a slot for the ceramic rods. Water-cooled and furnace bracket mounted, these are for use to 1200 °C (2200 °F). The high temperature option allows use to 1600 °C (2900 °F). They are specifically designed for fracture mechanics testing.

These COD gages mount on a water-cooled bracket which is mounted on the furnace side cut-out or with optional load frame support brackets. The standard temperature version (to 1200 °C) is supplied with high purity alumina rods. The high temperature option is furnished with alpha grade silicon carbide rods. Rods are made to order to the length required for your furnace. Mounting brackets may be integrated with the furnace cut-out. Epsilon can also provide optional load frame mounting brackets to fit your test frame. Contact edges on the test sample should be somewhat rounded (not sharp knife edges) for best performance with this model.

The Model 3548COD extensometers are strain gaged devices, making them compatible with any electronics designed for strain gaged transducers. Most often they are connected to a test machine controller. The signal conditioning electronics for the extensometer is typically included with the test machine controller or may often be added. In this case the extensometer is shipped with the proper connector and wiring to plug directly into the electronics. For systems lacking the required electronics, Epsilon can provide a variety of solutions, allowing the extensometer output to be connected to data acquisition boards, chart recorders or other equipment. *See the electronics section of this catalog for available signal conditioners and strain meters.*

Contact Epsilon for help with configuring a system to meet your needs.

Epsilon also offers the Model 2050 constant temperature water re-circulating bath.

Features

- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units meet existing ASTM requirements for accuracy.
- All units come with either high purity alumina ceramic rods (1200 °C) or alpha grade silicon carbide rods (1600 °C).
- Rugged, dual flexure design for strength and improved performance.
- All units operate in tension and compression.
- Includes high quality foam lined case and a spare set of ceramic rods.

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% of full scale measuring range, depending on model
Temperature Range:	Standard (-ST) is to 1200 °C (2200 °F), optional (-HT) 1600 °C (2900 °F)
Cable:	Integral, ultra-flexible cable, 8 ft (2.5 m) standard
Operating Force:	100 g typical

Options

Connectors to interface to nearly any brand test equipment
Shunt calibration module (see page 96)
High temperature option (-HT suffix) for use to 1600 °C
Model 2050 constant temperature water re-circulating bath
Load frame mounting brackets

Model 2050 Constant Temperature Re-Circulation Bath.
This bath provides the controlled temperature flow for water-cooled extensometers. Capable of cooling or heating the water, temperature is maintained within 0.1 °C.

These units are ideal for obtaining the maximum stability of any water-cooled extensometer.

Ordering Information

Model 3548COD Available Versions: ANY combination of gage length, measuring range and temperature range listed below is available, except as noted. *Ceramic rod lengths are made to fit furnaces as required. Please provide furnace dimensions at the time of order.*

Gage Length

U.S.A.	
-0020	0.200"
-0030	0.300"
-0040	0.400"
-0047	0.475"
-0050	0.500"
METRIC	
-005M	5.0 mm
-008M	8.0 mm
-010M	10.0 mm
-012M	12.0 mm
-020M	20.0 mm

Measuring Range

DESIGNATION	
-100T	+0.100"
-150T	+0.150"
-200T	+0.200"
-250T	+0.250"
-500T	+0.500"
-025M	+2.5 mm
-040M	+4.0 mm
-070M	+7.0 mm
-100M	+10.0 mm
-120M	+12.0 mm

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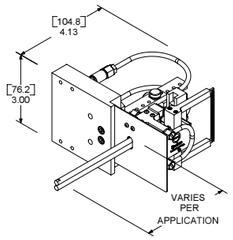
Temperature Range

-ST	Ambient to 1200 ˚C (Ambient to 2200 ˚F)
-HT	Ambient to 1600 ˚C (Ambient to 2900 ˚F)

Example: *3548COD-0050-200T-HT: 0.500 inch compressed gage length, +0.20 inch measuring range, high temperature option (room temperature to 1600 °C (2900 °F))*



3548COD EXTENSOMETER

DIMENSIONS: [mm] inches