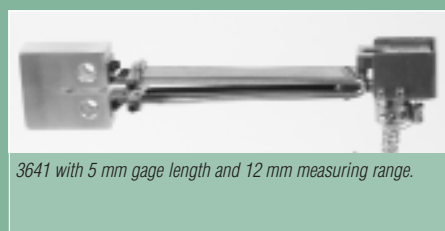


3641 with 0.1 inch gage length and 0.02 inches measuring range.



3641 with 5 mm gage length and 12 mm measuring range.

Designed for fracture mechanics tests in environmental chambers where the entire gage must be exposed to the heat. These capacitive sensor based clip-on gages (or COD gages) may be used up to 540 °C (1000 °F) without any cooling.

These gages are designed for testing at elevated temperatures, much higher than strain gage based clip-on designs. They can be used for several standardized fracture test methods, including ASTM E399 for fracture toughness or E1820 and E813 for J_{IC} and R-curve determination. The Model 3641 uses a high temperature capacitive sensor and can operate without any cooling at the upper temperature limit of most environmental chambers used in materials testing.

High temperature nickel alloy springs are used to create the force to hold the gage in place on the knife edge contacts. Stiff arms with a flexure design at the rear eliminates potential problems of high temperature creep experienced with other designs.

The clip-on gages are supplied with the Model 3603 signal conditioning electronics. The gage and electronics are factory calibrated. The analog output voltage is typically calibrated for 0 to 10 VDC (other ranges are available on request). This can be used directly by data acquisition systems. It usually can be routed to a DC input channel on most test machine controllers as well.

Contact Epsilon for your special testing requirements.

Features

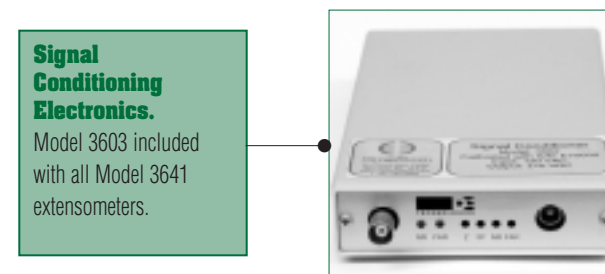
- 3603 signal conditioner included. Provides high level analog DC voltage output with very low noise (0.1 mV typical on 0 to 10 VDC calibrated signal). 10 ft (3 m) long output cable included.
- Shipped fully calibrated with electronics (traceable to NIST) with user specified voltage output.
- All standard units meet existing ASTM requirements for accuracy.
- Sharp grooves per ASTM E1820, E813, and E399 for improved stability when mounted.
- Includes high quality foam lined case.
- Rugged design provides dynamic testing capability to 20 Hz or faster depending on version.

SPECIFICATIONS

- Input:* Includes power supply for your country (specify)
- Output:* User specified, +/-5 VDC or +/-10VDC typical
- Linearity:* ≤0.10% of full scale measuring range, depending on model
- Temperature Range:* Ambient to 540 °C (ambient to 1000 °F)
- Cable:* Triaxial ceramic fiber insulated cable 3 ft (1 m) plus 10 ft (2.5 m) extension cable
- Operating Force:* Exerts 2 to 3 lbs (9 to 14 N), depending on model
- Environment:* Recommended for elevated temperature testing in air or some other gases

OPTIONS

Connectors to interface to nearly any brand test equipment
Bolt-on knife edges



Signal Conditioning Electronics.
Model 3603 included with all Model 3641 extensometers.

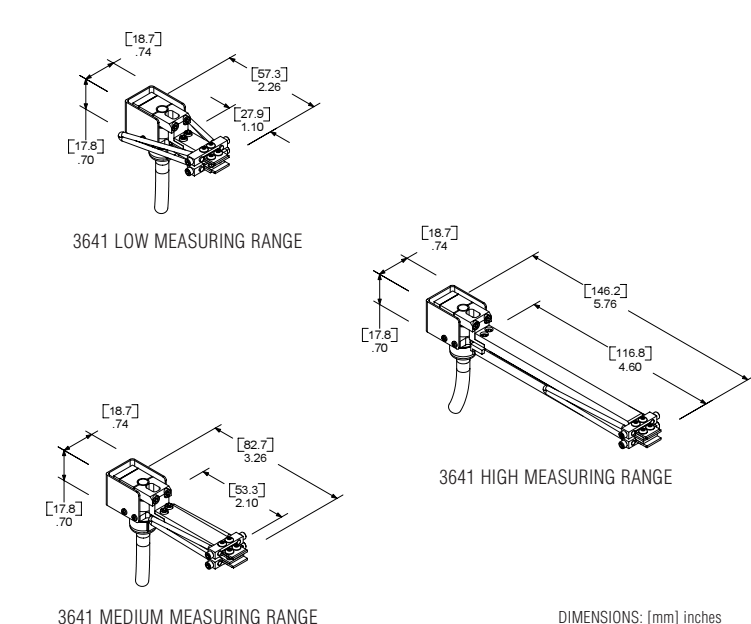
ORDERING INFORMATION

Model 3641 Available Versions: Note: other gage lengths and measuring ranges available on special order.

Gage Length		Measuring Range	
U.S.A.		DESIGNATION	
-0020	0.200"	-100T	+0.100"
-0025	0.250"	-250T	+0.250"
-0030	0.300"	-500T	+0.500"
-0047	0.475"		
-0050	0.500"		
METRIC		-030M	+3.0 mm
-003M	3.0 mm	-060M	+6.0 mm
-006M	6.0 mm	-100M	+10.0 mm
-010M	10.0 mm	-120M	+12.0 mm
-012M	12.0 mm	-125M	+12.5 mm
-0125M	12.5 mm		

Model Number 3641- _____ - _____

Example: 3641-010M-100M: 10.0 mm gage length, +10.0 mm measuring range



DIMENSIONS: [mm] inches