

The first name in materials testing

Vector Extensometer B80

Multiple variable gauge length measurement

Axial from 7.5-70mm gauge length; Transverse from 6.0-25mm gauge length;





- Non contacting with digital placement of specimen gauge marks supporting an automated process.
- 0.5 µm resolution (1.9685039e-5 inch), ISO 9513 Class 0.5 and ASTM E83 Class B1 capable.
- Various marking options available, material dependent.
 Rings, speckles.
- Output data available in analog formats.

Specifications



Field of View:	Fixed 80H x 30W x 30D[mm] cuboid
Real-Time Data Rate:	150Hz, platform dependent. Full system from acquisition to output
Strain Outputs:	Dual analog output: $\pm 10 \text{V}$, short-protected, selectable units and range; includes 3m (10ft) shielded output cable
Resolution:	<0.5 µm quasistatic, and cyclic; <i>Typical RMS resolution at typical settings</i> . Resolution is a function of marking, data rate and filter settings
Extensometer Accuracy Class:	Meets or exceeds ISO 9513 Class 0,5 and ASTM E83 Class B-1
Minimum Specimen Dimension:	Axial: 1.5mm flat, 2mm diameter round Transverse: 10mm flat, 12.5mm diameter round [excluding marking accessories]
Gauge Length*:	Axial: 7.5-70mm (0.3-2.75") Transverse: 6.0-25mm (0.24-1.0")
Minimal recommended specimen parallel section length:	8mm
Maximum Tracking Speed:	2500mm/min
Cyclic Testing:	Speed and specimen dependent, typically up to 5Hz
Strain Control:	Suitable for monotonic and cyclic strain control applications; Compliant to ISO6892 and ASTM E8
Out-of-Plane Sensitivity:	Out-of-plane boundary = 285 to 315mm from front of module
Ambient Operating Light Conditions:	Suitable for use in a day light situation, artificial lab or room lighting situations
Suitable for use with Temperature Chambers:	Measuring strain in a temperature chamber at ambient, high and low temperature (min. window width 170mm)
Signals Integration Options:	Control, information, and notification through Vector GUI interface and/or Horizon Software or through test suite software (Manufacturer dependent).
Power Supply:	100-240 VAC, 50-60 Hz, 1.4A 120W max, IEC 320 C14 receptacle.
Power Consumption:	8W (avg)
Recycling Capability:	Up to 60% of this product can be recycled; metals and cabling
System Environment:	10° to 40°C (50 to 100°F), for use and storage; 20-80% relative humidity non-condensing environments
Dimensions:	252H x 201W x 73D mm
Mechanical Integration Options:	Physical mounting schemes available for; T-slot single and twin column vertical testing machine frames. Multi-column vertical testing machine frames. Horizontal testing machine frames.
Typical ROI:	6 months
Component defect warranty:	12 months [extended warranty available, please inquire]
Manufactured:	In the UK
* Minimum transverse gauge length for speckles is 7.5mm.	

TO order numbers

99-993-0002/B0:	Vector Extensometer - Biaxial g/I 7.5-75mm (Axial) & 6-25mm (Transverse) in 80mm FOV incl. T-Bracket & Arm
99-993-9920/00:	Vector mounting bracket split collar clamps round column mount
99-993-9999/10:	Vector Extensometer Dual Channel Analogue Input Signal Conditioner





www.tiniusolsen.com

OHorsham, PA, USA Redhill, Surrey, UK

O Noida, UP, India O Shanghai, PR China