



VERTEX

ELECTRONIC EXTENSOMETER



An extensometer is a highly precise mechanical or electronic instrument employed for the measurement and quantification of dimensional alterations in materials subjected to mechanical stresses, encompassing tensile, compressive, or flexural forces. This instrumental apparatus typically integrates specialized sensors or strain gauges, meticulously calibrated to detect and record even the minutest variations in a material's length or deformation. Extensometers are indispensable tools in materials testing, structural analysis, and mechanical properties assessment, furnishing engineers and researchers with invaluable insights into parameters such as:

- elasticity;
- yield strength;
- strain;
- stress-strain behavior (within the context of diverse testing and evaluation applications).

DESCRIPTION:

Contact extensometers are designed for versatile material testing, accommodating metals, plastics, composites, and ceramics, providing both tension and compression strain measurements. Their robust dual flexure design ensures durability and insensitivity to vibrations, allowing for high-frequency operation.

Standardized with VERTEX quick attach kit, these extensometers facilitate easy, one-handed mounting on the test specimen. The kit is removable, enabling alternative mounting using springs or rubber bands.

VERTEX extensometers conform to several testing standards, including ISO 6892-1, 527-2, 527-4, 527-5, 10113, as well as ASTM E8, E9, D3039, D638, A370, D3552, E517, and E646.

As strain-gauged devices, they seamlessly integrate with electronics designed for strain-gauged transducers, commonly connecting to a test machine controller with a compatible connector.

SPECIFICATIONS:

Gauge Length (mm)	25, 50, 100, 250, 500
Accuracy (%)	0.5 / 1
Sensitivity	1.5 ~ 2m V / V
Non - Linearity	≤ 0.1 % FS
Repeatability	≤ 0.1 % FS
Input Resistance	350 Ω
Extension (mm)	10 or 25
Output Resistance	350 Ω
Insulation Resistance	>200MΩ
Reference Excitation voltage	10 V(DC)
Nominal Range of excitation voltage	6 ~ 12 V(DC)
Service Temperature Range	-30 ~ 70°C

