



MTS Fundamental Series 635 Extensometers

Monotonic Metric Gage Length Extensometers for Tensile Testing

Features

- » Designed for monotonic test
- » Proven MTS reliability and can be left in place through specimen failure
- » Easy to use with MTS patented Quick Attach springs

MTS Fundamental Series 635 Extensometers are ideal for measuring strain in tension applications. The design is optimized for monotonic testing with reliability, durability and affordability in mind.

Like all MTS extensometers, the 635 series feature our unique design of proprietary strain gaged elements using a special heat treated alloy. They are designed with a ground profile, dual-member flexure that provides for very low activation force with excellent strength. The design assures true center-point bending resulting in low hysteresis and exceptionally accurate strain readings.

Mechanical stops on these extensometers make it possible to leave them attached through specimen failure without damaging the unit. They also feature a zero-set pin for accurate and consistent determination of the initial gage length.

MTS Fundamental Series 635 Extensometers come standard with hardened, replaceable knife edges for flat and round specimens. These units come standard with patented MTS Quick-attach springs which make attachment to specimens fast and easy. Each extensometer is packed in a storage case containing the instrument and attached cable.

Linearity¹

Typical: 0.08% of range

Immersibility

Not intended for immersion in water or other liquids

Cable Length

Standard 1.5m (60 in)

Connectors

Extensometer connector: Bendix PT01A-10-6P. All zero-balancing circuitry is situated in the connector to reduce unit weight.

Accuracy²

Designed to meet ASTM E83 Class B1 and ISO 9513 Class 0.5 standards

Temperature Range

-85°C to -120°C (-120°F to -250°F)

Specifications

Model	Part Number	Gage Length	Maximum Travel	Maximum Strain	Length (from knife edge to back of housing)	Height (from bottom to top)
635.25F-05	057-863-506	25 mm	+5 mm	20%	77.5 mm (3.1 in)	39.6 mm (1.1 in)
635.50F-05	057-863-505	50 mm	+5 mm	10%	77.5 mm (3.1 in)	59.2 mm (2.3 in)
635.50F-10	057-863-504	50 mm	+10 mm	20%	77.5 mm (3.1 in)	61.5 mm (2.4 in)
635.50F-25	057-863-503	50 mm	+25 mm	50%	153.7 mm (6.1 in)	69.1 mm (2.7 in)
635.100F-10	057-863-502	100 mm	+10 mm	10%	77.5 mm (3.1 in)	111.8 mm (4.4 in)
635.100F-25	057-863-501	100 mm	+25 mm	25%	153.7 mm (6.1 in)	119.1 mm (4.7 in)

Notes:

- 1 Linearity stated is for ascending data and is the deviation from best fit straight line thru zero expressed as a percent of full scale.*
- 2 Calibrations are separate. These extensometers leave the factory with a quality validation and verification by sampling three measurement points to validate performance. The 635 series extensometers are intended to meet ASTM Class B-1 and ISO Class 0.5.*

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ISO 9001 Certified QMS

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