



Tape Extensometer



The RST Tape Extensometer is a portable device, designed to measure the relative distance between reference anchors fixed to the excavation or structure.

The instrument consists of a precision punched steel tape incorporating a repeatable tensioning system and dial gauge readout. To obtain a reading, the swivel hook, on the fixed end of the extensometer, is connected to the stainless steel eye on the anchor. The tape is unwound, allowing the tape swivel hook to be attached to the opposing anchor eye. Coarse tension adjustment is accomplished by positioning the pin of the extensometer in one of the precision punched tape holes. Fine tension adjustment is by rotating a knurled sleeve until two index marks align. A precision dial gauge measures this fine adjustment, with the tape held under a consistent repeatable spring force. The instrument is then read by noting the tape position, and subtracting the dial gauge reading.

For maximum accuracy, we recommend that one instrument be dedicated to each project, a calibration frame be regularly used to check stability and determine a temperature correlation, new base readings are established if the tape is changed, and the instrument temperature be allowed to stabilize prior to use.

specifications

ITEM	DESCRIPTION
Range	15, 20, 30 m (50, 75, 100 ft.)
Dial Indicator Resolution	0.01 mm
Repeatability	± 0.25 mm (±0.01 in.)
Weight with 20 m Tape	2.2 kg (5.0 lb.)

ordering info

MODEL	PART #
10 m Tape Extensometer with case	EXTE0010
15 m Tape Extensometer with case	EXTE0015
20 m Tape Extensometer with case	EXTE0020
30 m Tape Extensometer with case	EXTE0030
30 ft. Tape Extensometer with case	EXTE0030F
50 ft. Tape Extensometer with case	EXTE0050F
100 ft. Tape Extensometer with case	EXTE00100F
Optional spare 10 m tape	EXTES0010
Optional spare 15 m tape*	EXTES0015
Optional spare 20 m tape*	EXTES0020
Optional spare 30 m tape*	EXTES0030
Optional spare 30 ft. tape*	EXTES0030F
Optional spare 50 ft. tape*	EXTES0050F
Optional spare 100 ft. tape*	EXTES00100F
Optional anchor point, groutable rebar type*	EXTE1000
Optional anchor point, expansion shell type*	EXTE1010
Optional calibration frame*	EXTE2000



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applications

Mine roof sag.

Measurement of tunnel convergence.

Deformation of excavations.

Surface measurements for slope stability.

Monitoring and control of NATM (New Austrian Tunnelling Method) construction.

features

Rugged, simple design.

High accuracy and reliability.

Rapid one man operation.

Applicable in any orientation.

Supplied with robust, water/dust proof carrying case.

optional equipment

Replacement tapes.

Groutable anchors.

Zero stability reference frame.

Expansion shell anchors.

Eyebolt for mechanical connection to steel structures.

ordering info

Metric or Imperial model.

Tape length.

Anchor type.

Optional equipment.