

SENSORS & MESUREMENTS ENTERPRISES



MODEL SME-2330

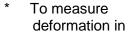
TAPE EXTENSOMETER

FEATURES

- * Simple to operate
- * Accurate Measurement
- * Dial gage or digital display for fine Measurement
- * Rugged design



Tape Extensometer (digital or dial gage type) is a instrument to measure closure between two reference point. The basic applications:



structure and support in a cavity.

- * To measure closure between opposite Walls or between roof & floor in excavation, tunnels, mine opening or in power houses.
- * To measure movement instable slopes in rocks.

DESCRIPTION

SME 2330 or 2340 series Tape Extensometer is used to measure small movement between two reference points. Digital display for fine adjustment is provided which makes its use very simple to the extent that even a layman can easily use it with a little practice. Extensometer basically comprises of an anodized aluminum body, steel measuring tape, with punched holes at equal intervals & a spring loaded tension adjustment screw attachment. The punching of tape is done very accurately at 20 or 40mm interval to facilitate for easy setting of rough measurement and a fine & final adjustment is done with the help of adjustment nut or thumbnut. Fine adjustment closes the instrument and a spring loaded mark comes closer for alignment with a fixed mark on the window provided on instrument. This provides measurement data at fixed tension all the time. Two attachment hooks are provided, one at each end to fix on measurement points i.e. on eye bolt anchors or groutable anchors. Generally measurement points are groutable anchors but sometimes expandable anchors are also used.

MEASUREMENT

During measurement snap type fixing hook attached to tape is clipped on over one of the reference eye bolt anchor and then the tape is unreeled to reach the other reference anchor and hooked over the





second reference anchor. Now the slack of tape is reduced to minimum possible by fixing the punched hole on the pin provided on the instrument. The fine and final setting of tape is done by tightening the tensioning knurlad nut till the index marks provided on the instrument are aligned perfectly. This gives final measurement between two points always at a fixed tension on tape.

Repeatability within 0.1mm is easily possible. Instrument is a available in 10,15,30 meter tape lengths. The accuracy of instrument can be checked time to time by using a calibration jig which can occur due to worn out parts in a long run or misuse by the operator. The calibration jig is provided with the anchorage points at a fixed known distance. The periodical check of tape extensometer will indicate change in zero stability of instrument and corrective action can be taken accordingly. The tape extensometer & calibrating jigs are supplied in separate wooden boxes.

SPECIFICATIONS: DIGITAL TYPE DIAL TYPE

SME -2330 SME-2340 Model

Standard Range in (m) 10, 15, 20 & 30m.

: SME -2330 : 10, 15, 20 & 30M. : 0.1mm : 0.01mm Repeatability (mm) 0.2mm Resolution (mm) 0.01mm 0.01mm

ORDERING INFORMATION

SPECIFY: Model No.

Range

Accessories required Reference anchor

Accessories

Reference Anchors – (a) Groutable or (b) Expandable **Spare Tapes** Calibration Jig.

> Due to continuous development program the specification and dimensions are subject to change without notice. Our engineers do undertake the work for development as per the customer's requirement.

Sensors & Measurements Enterprises

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