
TAPE EXTENSOMETER

Model CONVEX EALEY



APPLICATIONS

The CONVEX EALEY tape extensometer is used to measure quickly and accurately changes in distance between two reference points. It is primarily used to monitor convergence in underground excavations such as tunnels. It can also be used to monitor deformations in structures or surface movements.

DESCRIPTION

The CONVEX EALEY tape extensometer is comprised of a head, a measuring tape, and two reference points.

The extensometer head

Houses an electronic tensioning device ensuring constant and repetitive tension of the tape, and a digital gauge. A fitting with a pin to attach the tape is located at the front end of the head. Changes in distance between the two anchor points are read by means of the steel tape and the digital gauge.

The tape

The stainless steel perforated measuring tape is held inside the extensometer head and is mounted on a reel attached to one end of the extensometer head.

The reference points

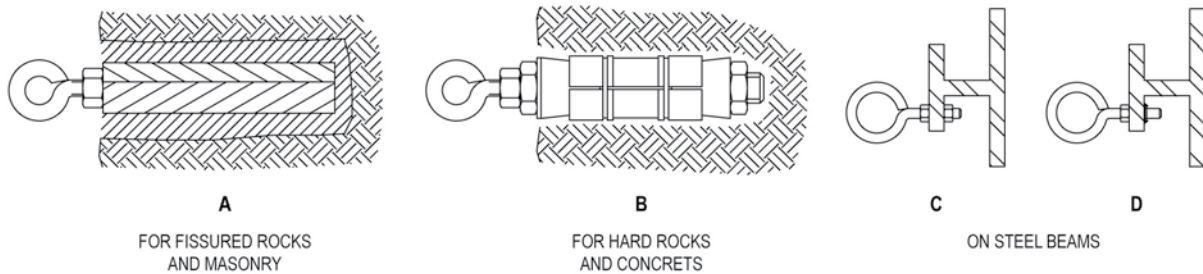
The standard reference point consists of a stainless steel eyebolt attached to an anchor. The anchors, chosen to suit the application, are either groutable steel rebar for installation in shallow drill holes, or expanding rock bolts. The eyebolts can also be directly bolted or welded to structural steel beams.

FEATURES

- Easy to read
- Interchangeable tapes or tape extensometers
- Digital display
- Lightweight and rugged design

READING

To take a reading, the hook on the end of the tape is clipped onto one eyebolt previously anchored to the structure to be monitored. Moving towards opposite anchor, the tape unwinds until it is possible to fix the hook mounted on the end of the extensometer head to the second eyebolt. The slack in the tape is taken out and the pin fitting on the head is inserted in one of the holes of the tape. The tape-tensioning handle on the side of the extensometer head is then turned until proper tension in the tape is reached, as indicated by the green light located on the frame. The user can now proceed to a reading.



Methods of Installation of reference points

STANDARD SPECIFICATIONS

Range	15 m, 20 m or 30 m 50 ft, 66 ft or 100 ft
Accuracy	±0.01 mm
Batteries	
Light indicator	9 V
Digital micrometer	3 V
Weight	2 kg
Length	550 mm

REFERENCE POINT

Stainless steel eyebolt with two nuts

Diameter	6.35 mm
Length	50 mm

ANCHOR	TYPE A	TYPE B
Diameter	20 mm	—
Length	150 mm	—
Borehole diameter	25 mm	12.5 mm
Borehole length	180 mm	60 mm

ACCESSORIES

- Carrying case
- Spare tape
- Reference points and anchors

ORDERING INFORMATION

Please specify:

- Length of tape
- Accessories