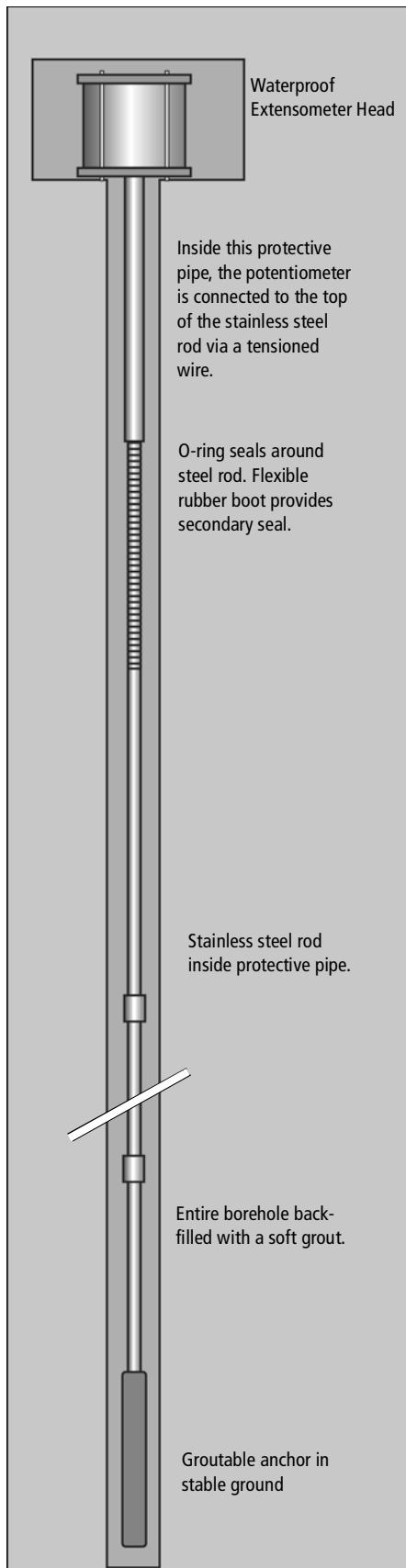


# Settlement Extensometer



## Application

The settlement extensometer is used to monitor large settlements below fills.

## Operation

The extensometer consists of an anchor, a stainless steel rod inside protective pipe, and a potentiometer inside a waterproof head.

A borehole is drilled down to competent ground. The anchor and rod are installed downhole. The borehole is then backfilled with a soft grout.

A small excavation is made for the head. The head is then attached to the rod, tested, and then embedded in the small excavation.

The head and signal cable should be protected by at least six inches of hand-compacted sand.

Signal cable from the extensometer is then connected to a data logger.

As the ground settles with the placement of fill material, the head moves downward. The potentiometer inside the head measures take-up of a tensioned wire and transmits the measurement to the data logger.

## SPECIFICATIONS

Settlement Extensometer . . . . .51807400

Waterproof extensometer head only. Signal cable, rod and protective pipe are ordered separately.

**Sensor type:** Potentiometer with 4-20mA output signal. Power source is a nominal 12v.

**Range:** 25 inches.

**Resolution:** 1 in 5000 with Campbell CR10 data logger.

**Linearity:**  $\pm 0.2\%$  FS (0.050").

**Repeatability:**  $\pm 0.015\%$  FS.

**Rod Type:** 1/4 inch stainless steel.

**Sensor Housing:** PVC, 8 x 10 x 10".

