

# Settlement Probes for Inclinerometer Casing

## Applications

Settlement probes are used with telescoping inclinometer casing to identify the zones and magnitude of settlement in the ground surrounding the casing. Typical applications include:

- Monitoring settlement in foundations, and embankments.
- Monitoring for settlement caused by construction of tunnels and other underground openings.
- Monitoring settlement to increase the accuracy of inclinometer data.

## Operation

The operator connects the probe to a survey tape and lowers the probe into the inclinometer casing. When the probe reaches the approximate depth of the first coupling, the operator pulls up, causing the arm of the probe to catch on the bottom edge of the casing section.

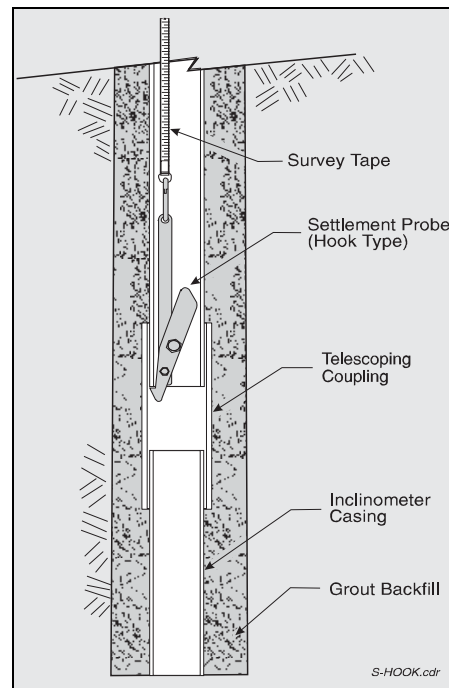
The operator notes the depth and then repeats the procedure for the next section of casing. When the probe contacts the bottom of the casing, a mechanical action locks the arm in the closed position so it can be withdrawn.

Settlements are calculated by comparing the current depth of each casing section with its initial depth.



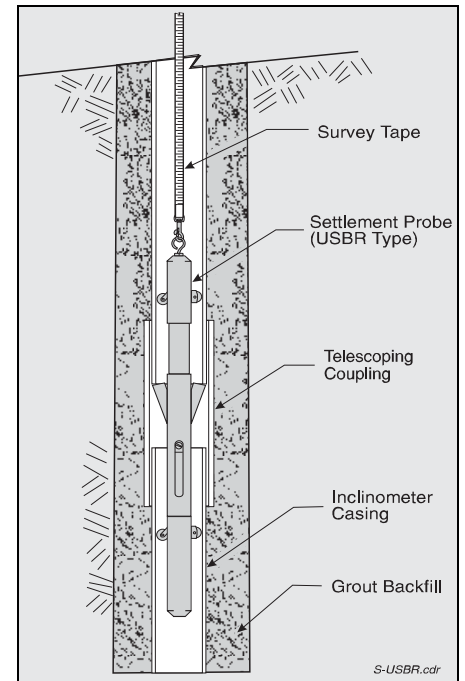
## Hook-Type Probe

The hook-type settlement probe has a swing-out contact arm or hook and works to depths of 30 m (100 ft).



## USBR-Type Probe

The USBR-type probe has two spring-loaded arms and guide wheels that keep the probe centered in the casing.



**HOOK-TYPE SETTLEMENT PROBE****Hook-Type Probe . . . . .50800100**

Compatible with 70 mm (2.75") or larger inclinometer casing that has telescoping sections or couplings. Includes carabiner for connecting probe to survey tape. Does not include survey tape.

**Weight:** 0.4 kg (0.9 lb).**Size:** 300 mm (11").**Materials:** Nickel-plated steel.**USBR-TYPE SETTLEMENT PROBE****USBR-Type Probe . . . . . 50801000**

Compatible with 70mm (2.75") or larger inclinometer casing that has telescoping sections or couplings. Includes carabiner for connecting probe to survey tape. Does not include survey tape.

**Weight:** 3.5 kg (7.8 lb).**Size:** 43 x 660mm (1.75 x 26").**Materials:** Aluminum, stainless steel.