

INCLINOMETER CASING MODEL GEO-LOK



GENERAL DESCRIPTION

The GEO-LOK inclinometer casing is used to house inclinometer probes that measure either lateral movement and deformation of soil, rock and structures when installed in near vertical boreholes, or settlement when installed in horizontal boreholes or trenches. Applications include:

- Monitoring of landslide
- Monitoring of dam and embankment performances
- Monitoring of movement in retaining walls, diaphragm walls, sheet piles and laterally loaded piles
- Measuring of ground movement due to tunneling
- Monitoring of settlement in landfills, tank foundations and embankments

TECHNICAL DESCRIPTION

GEO-LOK inclinometer casings are made of ABS pipes with four orthogonal grooves running longitudinally along its inside surface with a spiral control of less than $1/3^\circ$ per 3 meters of casing. When installed in a borehole, one set of grooves is aligned in the anticipated direction of movement. The grooves act as guides for the wheels of the inclinometer probe, maintaining the orientation of the probe as it traverses the casing.

The proprietary joints of the GEO-LOK inclinometer casing require no glue, rivets or shear wires to connect adjacent sections of pipe. The joints are made by pushing two sections of pipe together and rotating the pre-installed locking collar. The coupling ensures that the grooves of adjacent sections of pipe are aligned to form a continuous track for the inclinometer probe. O-rings at the joint prevent the ingress of water and grout.

Spiral surveys may be performed on deep installations, or where high accuracy is critical. Spiral data allows inclinometer data to be corrected for twisting of the casing that may occur during installations.



FEATURES

- **Simple assembly and disassembly without glue, rivets or shear wires**
- **High strength: casings have high tensile, collapse, bending and torque strength, which make them reliable and precise**
- **Machine-broached grooves**
- **Compatible with all inclinometer and settlement probes**

SPECIFICATIONS

Casing OD	70 mm / 85 mm
Casing ID	59 mm / 72 mm
Coupling OD	72 mm / 87 mm
Groove control (spiral)	< 1/3° / 3 m

TELESCOPIC SECTION

OD	73 mm / 89 mm
Length, fully extended	791 mm
Length, fully compressed	639 mm

WEIGHT

70 mm casing (1.5 m / 3 m)	1.79 kg / 3.42 kg
85 mm casing (1.5 m / 3 m)	2.25 kg / 4.81 kg
70 mm telescopic section	0.76 kg
85 mm telescopic section	1.04 kg

ACCESSORIES

- Telescopic section
- Grout valve (quick connect or gasket type)
- Protective lockable steel cap for casing
- Top and bottom caps
- Bottom cap spider anchor



GEO-LOK casing, 85 mm and 70 mm OD

ORDERING INFORMATION

Please specify:

- 1.5 m or 3 m inclinometer casing
- Accessories