GEO-LOK inclinometer casings are made of ABS pipes and are fitted with proprietary joints that require no glues, rivets, or shear wires to connect adjacent sections of pipe.

**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° 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 threaded 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 installation.

**Key Features**

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

**Applications**

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

www.smartec.ch
## Specifications

### CASING
- **Length**: 1.5 m / 3 m
- **OD**: 70 mm / 85 mm
- **ID**: 59 mm / 72 mm
- **Coupling OD**: 72 mm / 87 mm

### 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

### GEOLOK CASING 70mm - 2.75"
- Spiral: ≤1/3° per 3m
- Load rating: 680kg, 1500 lbf
- Collapse rating: 17 bar, 245 psi
- Temperature rating: -30 to 80°C

### GEOLOK CASING 85mm - 3.34"
- Spiral: ≤1/3° per 3m
- Load rating: 680kg, 1500 lbf
- Collapse rating: 13 bar, 190 psi
- Temperature rating: -30 to 80°C

## Ordering Information

Please specify:
- Casing length & diameter
- Top and bottom caps

## Optional Accessories

- Telescopic sections
- Protective lockable steel cap for casing
- Plug grout valve with quick connect & optional anchor (1 hydraulic coupling socket required)