INCLINOMETER CASING

GEOKON®

MODEL 6600

Model 6600 Inclinometer Casing

APPLICATIONS

The GEOKON® Model 6600 casing is used for all commercially available inclinometer probes to help monitor:

- Embankments
- Slopes
- Rock cuts
- Foundations
- Excavation walls
- Piles
- Coffer dams
- Landfills

INTRODUCTION

The Model 6600 Inclinometer Casing is intended for use with all commercially available inclinometer probes to monitor the stability of embankments, slopes, rock cuts, foundation and excavation walls, piles, etc. The casing sections are designed to be assembled quickly and easily, using self-aligning couplings which incorporate a Quick-Lock connection. It is suitable for installation in boreholes and piles, set into concrete, or attached to structures.

OPERATING PRINCIPLE

The Model 6600 casing sections are coupled to the required length and grouted inside boreholes or fixed to the surface of piles or sheet piling. The casing and couplings have grooves spaced at ninety-degree intervals, which fit the wheels of the inclinometer probe thus maintaining the orientation of the probe as it is traversed up and down the casing. The probe accurately measures the change in the angle of tilt, from the vertical, at spacings along the casing. These incremental changes are added together to give a profile of the casing. Changes in the profile become a measure of the stability of the body or structure in which it is installed. The casing can also be used with in-place inclinometers, which are particularly well suited for real-time automatic monitoring.

ADVANTAGES & LIMITATIONS

Model 6600 Inclinometer casing is manufactured from ABS plastic, a material which offers excellent dimensional stability, corrosion resistance, and low temperature impact resistance.

Casings and couplers are self-aligning and are machined to ensure consistent alignment of the internal guide grooves.

The Quick-Lock connection can be helpful during cold weather installations where it may be difficult to achieve glued connections.

The connections also allow for disassembly, if necessary, but they are not designed for recurrent assembly-disassembly.

Telescoping sections are available for use in applications where settlement or heave may occur.

Although the casing is thermally stable it should not be used where temperatures may exceed 80 °C.

Casing repair is simple and achieved with the use of a repair coupler and an alignment tool.

CASING SPECIFICATIONS

Casing ID	58 mm (2.28")
Casing OD	70 mm (2.75")
Casing Length	3 m (10'), 1.5 m (5')
Coupling OD	75 mm (2.95")
Bottom Plug OD	72 mm (2.83")
Material	ABS plastic[1]
Collapsing Pressure	15 bar (217 psi)
Groove Spiral	<0.2 degrees/m (0.06 degrees/ft)
Temperature Range	–20 to 80 °C (–4 to 176 °F)
Weight	1.06 kg/m (0.71 lbs/ft)

[1]Density: 1.0 (±0.1) g/cm^3 | Tensile strength: 40 MPa | Breaking Elongation: 20% | Elastic Modulus: 2700 MPa

TELESCOPING CASING SPECIFICATIONS

Telescoping Section OD	85 mm (3.35")
Compressed Length	3 m (10')
Extended Length	3.2 m (10.5')
Range	152 mm (6")
Weight	4.35 kg (9.6 lbs)

ORDERING INFORMATION

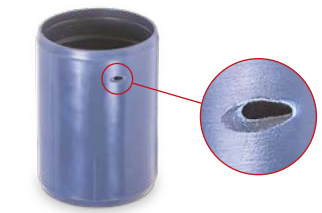
6600-1-10: Quick-Lock inclinometer casing, 70 mm (2.75"), 3 m (10') length
6600-1-5: Quick-Lock inclinometer casing, 70 mm (2.75"), 1.5 m (5') length
6600-1B: Bottom Cap (note: requires ABS cement, local supply)
6600-1C: Repair Coupler (note: requires ABS cement, local supply)
6600-1T: Top Cap
6600-1TS: Telescoping Section, 3 m (10') length × 152 mm (6") range
6600-2: Quick-Lock coupling wire, 3 mm (0.115") Ø, 300 mm (12") length. One required per coupling.
6600-2A: Casing Anchor. To prevent bouyant uplift during installation.
6600-2RT: Reconnect Alignment Tool
6501-5: Inclinometer casing tape kit
6501-6-4: Inclinometer casing protective housing. 100 mm (4") galvanized steel pipe with lockable cap. For use with 70 mm (2.75") casing.

COMPONENTS

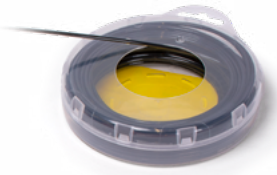
Model 6600-1-10: Quick-Lock ABS Inclinometer Casing

Model 6501-6-4: Casing Protective Housing

Model 6600-1TS: Telescoping Section



Model 6600-1C: Repair Coupler



Model 6600-2: Quick-Lock Coupling Wire

Model 6600-2A: Casing Anchor

Model 6600-2RT: Reconnect Alignment Tool

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GEOKON
48 Spencer Street
Lebanon, NH 03766 • USA

www.geokon.com
e: info@geokon.com
p: +1 · 603 · 448 · 1562

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