

Inclinometer Casing QJ (Quick Joint)

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Overview



Geosense® QJ Inclinometer Casing is a quick connecting casing, precision extruded from ABS, with four precise keyways formed at 90 degrees which allow accurate installation of portable and in-place inclinometers.

The quick connecting joint makes it faster and easier to install than traditional glue & socket inclinometer casing with external couplers and does not require any special tools or tapes. On deep installations the time saving is very significant.

It can be used in boreholes, fill material, cast into concrete or attached to structures and is designed to move with the ground, material or structure to provide inclination information over a period of time.

As the casing is designed to deform with movement of the ground or structure the useful life of the casing ends when the continued movement of the casing causes deformation of shear so that the inclinometer probe can no longer be placed into the casing. Larger casing generally ensures a longer life.

Where vertical settlement or heave is anticipated to be greater than 2% it is recommended to use telescopic sections to eliminate axial load on the casing which would cause excessive buckling.

A full range of accessories including bottom and top caps, anchors and groutable anchors are available and can be used in conjunction with magnetic targets for combined inclinometer/magnetic extensometers.

APPLICATIONS

For use with inclinometer systems for monitoring stability & movement of:

- Slopes
- Embankments
- Diaphragm & sheet piled walls
- Deep foundations
- Tunnelling operations
- Piles
- Pre-loads
- Deep excavations

FEATURES

- Low spiral
- Fast installation
- No rivets, tape or glue
- Minimises standing time
- Flush connection
- Available in 3 & 1.5 metre lengths
- Made from 100% virgin ABS plastic
- Simple to install & use
- Fully compatible with all probe types
- 70mm diameter
- Telescopic sections available
- Can be combined with magnetic targets

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Specifications

CASING SPECIFICATIONS

Material	100% virgin ABS (Acrylonitrile-butadiene-styrene)
Groove spiral	< 0.3°/3m
Collapse resistance	~ 2000kPa
Joint strength	186 Kgf
Torque	26Nm
Bend rating	2.6kN
Maximum temperature	+80°C
Colour	Orange (other available on request)

CASING DIMENSIONS

Outside diameter	70mm
Inside diameter	59mm
Length (effective)	1.5 & 3 metre

TELESCOPIC SECTION

Outside diameter	83mm
Inside diameter	59mm
Telescopic range	150mm
Length	500mm

WEIGHTS

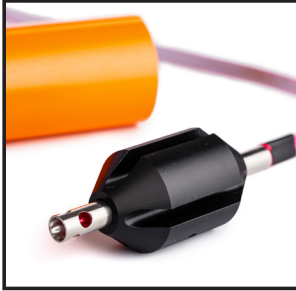
Casing	1.27kg/m
Telescopic section	1.6kg
Top cap	20g
Bottom plug	168g

ACCESSORIES

Standard Anchor	70mm
Grout Anchor	70mm
Grout Cap	70mm

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Casing Accessories



ACCESSORIES

Casing Accessories include, above from left, Reed Switch Probe Centraliser & Tape Guide, Top & Bottom Caps and Suspension Clamps. Also available: Repair Coupling & Alignment Tool.



ANCHORS

Inclinometer Casing Anchors are fixed to the bottom of the casing prior to installation to prevent uplift, usually due to buoyancy forces of water or grout. As soon as the anchor exits the bottom opening of the drill rod/borehole, the spring-loaded arms of the anchor are automatically extended to grip the borehole wall.

A Grouting version of the anchor is available and Magnetic Targets can also be integrated.

ORDERING INFORMATION

Diameter

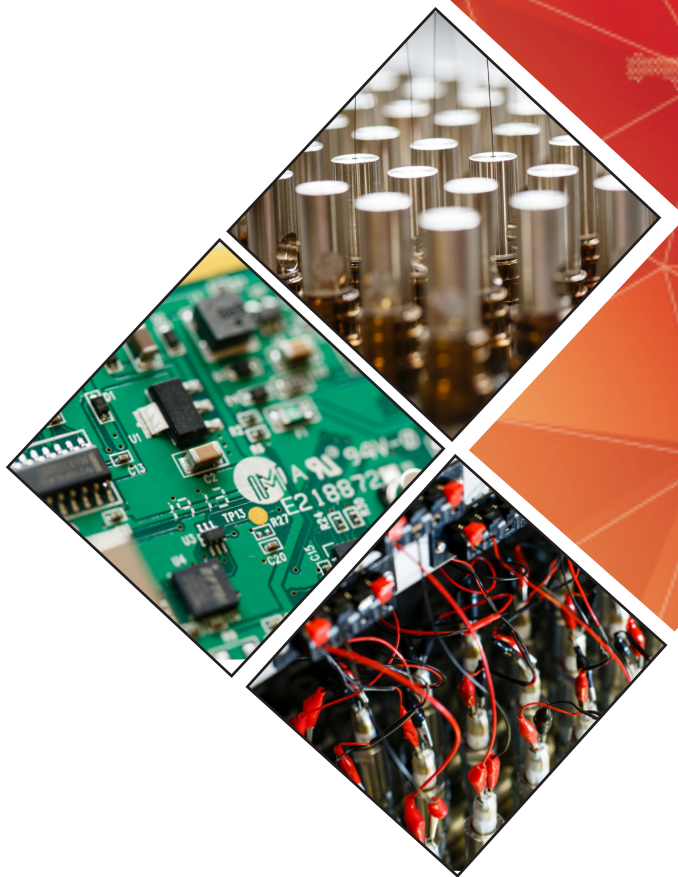
Length

Telescopic sections

Bottom cap

Top cap

Anchor type



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