

Inclinometer Casing XC (External Coupler)

Precision extruded from ABS, with four precise keyways formed at 90 degrees which allow accurate installation of portable and in-place inclinometers. Standard joints are made by using external couplers which are glued to each end of the casing



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Overview



Geosense® XC (External Coupler) Inclinometer Casing is precision extruded from ABS, with four precise keyways formed at 90 degrees which allow accurate installation of portable and in-place inclinometers.

Standard joints are made by using external couplers which are glued to each end of the casing. Telescopic sections are riveted together to allow movement during settlement and sealed with mastic and tape to prevent the ingress of water and grout.

Advantages of the XC Inclinometer casing is that it can be cut and re-joined on site allowing maximum flexibility and makes any damage easily repairable.

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 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

Can be cut & repaired on site

Available in 3 & 1.5 metre lengths

Made from 100% virgin ABS plastic

Fully compatible with all probe types

70 mm 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	710 Kgf	
Torque	525Nm	
Bend rating	2.6kN	
Maximum temperature	+80°C	
Colour	Natural (other available on request)	

CASING DIMENSIONS

Outside diameter	70mm	87mm
Inside diameter	62mm	80mm
Length (effective)	3 & 1.5 metre	3 & 1.5 metre

STANDARD COUPLER DIMENSIONS

Outside diameter	77mm	95mm
Inside diameter	70mm	87mm
Length	160mm	190mm

TELESCOPIC COUPLER DIMENSIONS

Outside diameter	77mm	
Inside diameter	70mm	
Length	400mm	
Telescopic range	±75mm	

WEIGHTS

Casing	2.66kg/m	3.18kg/m
Top cap	48g	64g
Bottom plug	70g	90g
Standard coupler	136g	236g
Telescopic coupler	400g	380g

INSTALLATION ACCESSORIES

Rivets, sealing tape (1 roll per 6 couplings), mastic and solvent cement (1 tin per 20 joints) available.

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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.

ORDERING INFORMATION

Diameter

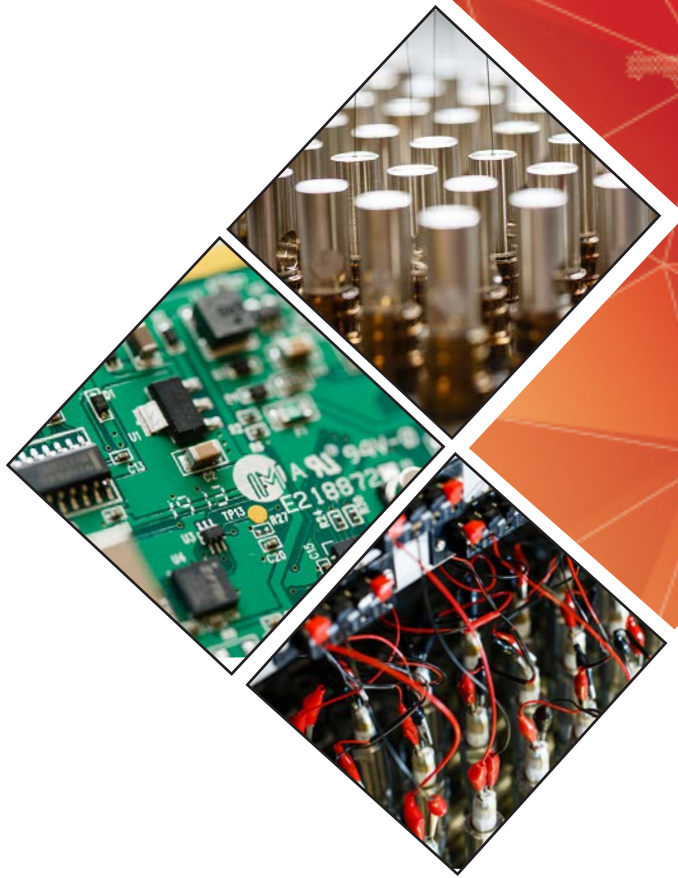
Length

Telescopic sections

Bottom cap

Top cap

Anchor type



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V1.9 6/2023