

INCLINOMETERS & PENDULUMS







S151



QUICK JOINT INCLINOMETER CASING

Sisgeo QJ casing is an alternative to the traditional inclinometer tubes, mainly designed for earth-fill and rock-fill dams, and deep borehole applications.

QJ tube offers simple and fast installation, consistent joint and deeper tube grooves. O-rings prevent ingress of grout or water.

The fitted-at-factory coupling and the alignment keys assure a perfect grooves continuity.

Telescopic section and a variety of settlement rings for either borehole and embankment installations permit to combine inclinometer and settlement measurements in one borehole.

APPLICATIONS

- Earth-fill and rock-fill dams
- Deep borehole installations
- Landslides
- Diaphragms and retaining walls
- Embankments
- Deep excavations
- Tunneling

FEATURES

- Simple assembling, no rivets, tape or glue required
- Fast installation reducing costs and drilling-rig stand-by
- Heavy duty, suitable for extreme installations
- High precise and deep tube
 grooves
- Available a special settlement
 plate for rock-fill dams

Meet the essential requirements of the EMC Directive 2004/108/EC



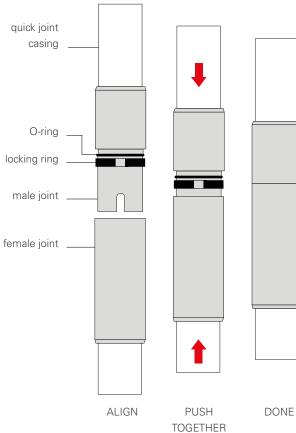


TECHNICAL SPECIFICATIONS

	MODEL 0S151107000	MODEL 0S151MT0700
Description	Standard QJ section	QJTelescopic section 75 mm gap (3″)
Tube outer diameter	70 mm (2.75″)	70 mm (2.75")
Tube inner diameter	59 mm (2.32")	59 mm (2.32")
Tube groove ID	63 mm	63 mm
Overall section lenght	3100 mm	500 mm
Overall diameter	84 mm	84 mm
Thickness	5.5 mm	5.5 mm
Material	ABS (Acrylonitrile Butadiene Styrene)	ABS (Acrylonitrile Butadiene Styrene)
Colour	white/red	white/red
Spiral (1)	< 0.6° / 3 meter	-
Collapse test (2)	15 bar	15 bar
Temperature (max 1 hour)	+80°C (176 °F)	+80°C (176 °F)
Max working load (3)	> 500 Kg	> 500 Kg

(1) During manufacturing particular attention is paid to minimise the spiral of the casing grooves and to machine the couplings. (2) Test was performed in a water pressure chamber with empty casing sealed at the two ends. (3) Pulling test is performed on a two QJ tube sections jointed together under a thrusting machine.

ASSEMBLY SEQUENCE

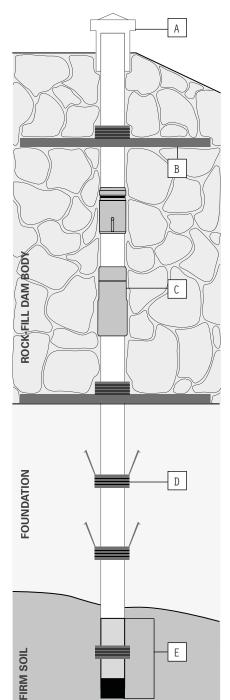


75 mm 500 mm

QJ TELESCOPIC SECTION







LOCKABLE TOP CAP OS1OOCH1000

Lockable protective cap with survey pin permits topographical surveying in order to define and check the borehole coordinates. It also provides temporary fixing for 0S1CSU10000 pulley and cable stop during manual inclinometer measurements.

SPIDER MAGNET RING S131AF6000⁽¹⁾

BRS magnet ring with 3 nylon springs for borehole installation. Ring ID 71 mm Ring OD 95 mm Max. spring span 300 mm

A. LOCKABLE TOP CAP

- B. PLATFORM TARGET
- C. QJ TELESCOPIC SECTION
- D. Spider magnetic ring
- E. QJ DATUM REFERENCE

ABS QJ TOP CAP OS151TS7000

Simple top cap to prevent tube clogging with topographic survey point

SPARE KIT FOR QJ OS151KIT000

This kit includes No.10 "O" rings and No.10 locking rings

PLATFORM TARGET OS151AR80RC

Platform magnet target designed for rockfill dams. Material: stainless steel Platform area: 900x300 mm Platform thickness: 30 mm Hole ID: 83 mm

QJ DATUM REFERENCE OS151DR7000

It provides bottom datum point in borehole for inclino-settlement column.

ABS QJ BOTTOM CAP OS151TF7000

Bottom cap with femal quick joint coupling for fast column assembling

REPAIRING KIT FOR QJ OS151KITROO

It includes No.5 female joints, No.5 male joints, No.7 "O" rings and No.7 locking rings

EMBANKMENT RING S131AR6000⁽¹⁾

BRS magnet ring with circular settlement plate for embankment installation. Ring ID 71 mm Ring OD 95 mm Plate OD 300 mm

MAGNET RING S131AM6000⁽¹⁾

BRS simple magnet ring for borehole installation. Ring ID 71 mm Ring OD 95 mm

Inclino-settlement columns with QJ casing are a cost-effective solution when inclinometer and settlement measurement are required. A typical application is in rock-fill dams thank to QJ extreme robustness and availability of magnet platform target. The columns are composed by QJ casings with a number of magnet rings/platforms; telescopic sections are provided for columns where big settlements are expected with consequent damage of the casings. Measurements are perfomed with removable inclinometer system and portable settlement probe C121 model.

(1) Magnet ring shall be installed on the casing during production.

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ADDITIONAL SUPPORT

SISGEO offers on-line assistance service to the Customers in order to maximize the performance of the system and training on the correct use of the instrument/readout.

For more information contact mail: assistance@sisgeo.com