



# Spiral Sensor for inclinometer casing OG330

## Technical Features

The OTR Spiral Indicator system is designed for measurements the torsion of inclinometer tubes in aluminum or ABS from 45 to 75 mm inner diameter. The system allows to display the deviation to the north of the guide in which it is inserted the probe. The Spiral Indicator allows to perform a normal measurement inclinometer through two MEMS sensors mounted on board. It can be used directly with a laptop and allows to enter data spiral in data processing software. The measure of the torsion can be performed on 1, 2 or all 4 guides the inclinometer tube depending on the accuracy required (normally 1 guide is enough). The probe step is 0.5 meters and the measurement can be performed with a step of 0.5, 1, 1.5 meters depending on the required specification.

## Applications

The spiral probe controls the orientation of the inclinometer. If the piping is not perfectly installed, the orientation of the probe inside the inclinometer casing can vary. This could cause inaccuracy in data reduction.

The Spiral Indicator monitors and measures the variation of the direction of the probe (torsion tube inclinometer). The actual azimuth position can be obtained at very step and can be used to process data.

## Uses

The measure with the Spiral Indicator system is recommended when:

- the installation of the pipe inclinometer is very deep
- inclinometer readings indicate the presence of a movement in a suspect direction
- when it is required a very accurate measurement
- when installation of inclinometer casing has been problematic

## Related Instrumentation



- Extenso-Inclinometers
- NTC Thermistors
- Stainless Steel rope
- Suspension Head
- Mounting accessories
- Manual readout Geotester
- Datalogger D400-D800-D1600-D3200
- OtrMonitoring web site



## Technical Specifications



|                      |                                                        |
|----------------------|--------------------------------------------------------|
| Compass              |                                                        |
| Accuracy             | 0.8° RMS                                               |
|                      | 1.2° RMS                                               |
|                      | 1.5° RMS                                               |
| Working Principle    | Triaxial Magnetometer                                  |
| Compass Sensor       | 3-axis magnetic compass with auto-compensation of tilt |
| Inclinometric Sensor | MEMS                                                   |
| Compass Full scale   | 0...360°                                               |
| Range                | A $\pm 180^\circ$ / B $\pm 85^\circ$                   |
| Measure Resolution   | 10'000 sen $\propto$                                   |
| Power Supply         | 6-9 Vdc                                                |
| Probe's Body         | Stainless Steel, D 30 mm                               |
| Probe's Step         | 50cm                                                   |
| Current              | 60mA                                                   |
| Wheels holder Arm    | 650 N Brackable                                        |
|                      | *software on dedicate app                              |

## Codes & Part Numbers

P/N 2022300  
P/N 2022301

Spiral sensor, digital compass, inclinometer  
Software & Cable for compass calibration