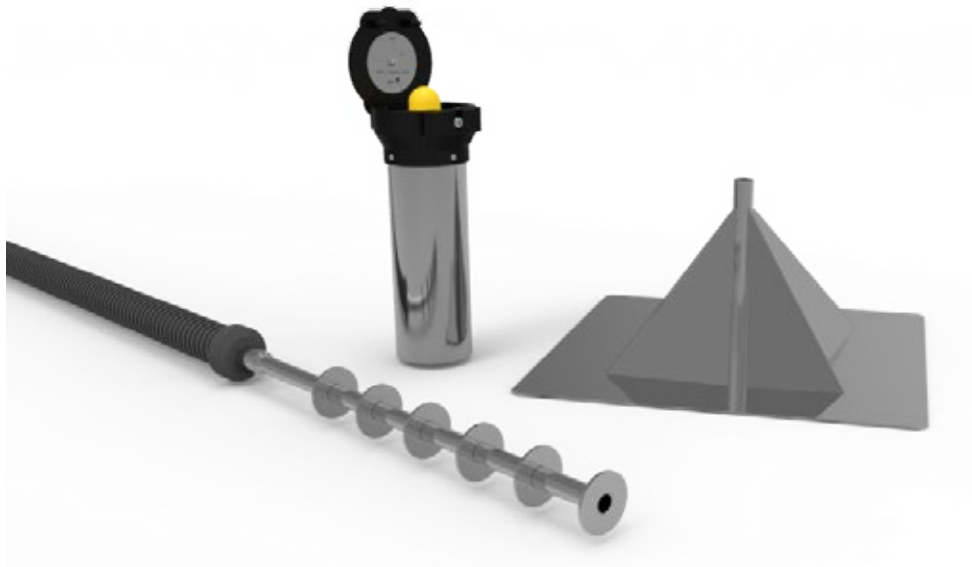


D100

— **FIXED
EXTENSOMETERS**

SETTLEMENT
GAUGES





FIXED EXTENSOMETERS

Fixed extensometers are usually defined as devices placed in embankment fill or inside borehole for monitoring of settlement or heave between two points without use of a removable probe.

Either the Settlement Platform and the Tell-Tale extensometer are based on a riser settlement rod which is respectively connected to a plate buried at the embankment foundation level or grouted inside borehole as a deep benchmark in a firm soil.

Optical levelling measurements to the top of the riser rod provide precise monitoring. Electrical transducer can be used for remote readings without the need of survey crew.

APPLICATIONS

- Settlement below embankments in soft ground
- Direct measurements of ground surface settlement or heave
- Monitoring deformation around underground excavation

FEATURES

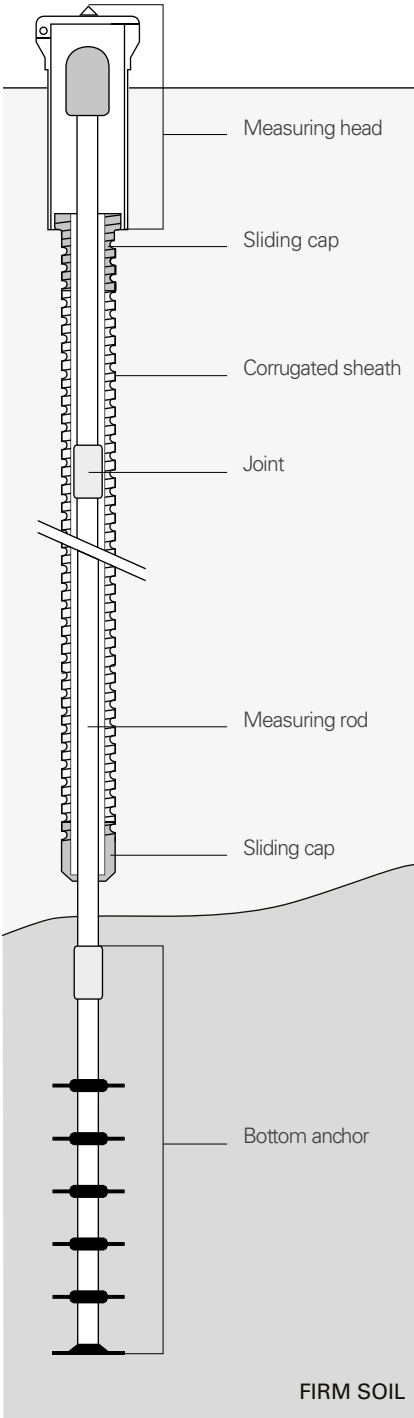
- Providing deep datum for determination of absolute settlement
- Rugged and simple to install
- Automatic reading available with displacement transducer option



Meet the essential requirements of the EMC Directive 2014/30/UE

TELL-TALE (TT) EXTENSOMETER

Tell-tale extensometer is a single point extensometer which is typically used for precise monitoring of ground surface settlement or heave. It consists of a galvanised steel bottom anchor to which a riser measuring rod is attached. Anti-friction corrugate sheath is placed around the riser rod. Optical levelling measurements to the top head of the riser rod provide a record of ground settlement. Sliding caps at the top and at the end of the junction between riser rod and corrugate pipe prevent downdrag forces on the rod.



	MEASURING ROD OD100A200G0	CORRUGATED SHEATH OD111PV5500
Outer diameter	25 mm	55 mm (nominal)
Section length	2000 mm	supplied in roll
Type of junction	external couplings (M25 thread)	continuous (self-screwing connection)
Material	galvanised steel	PVC

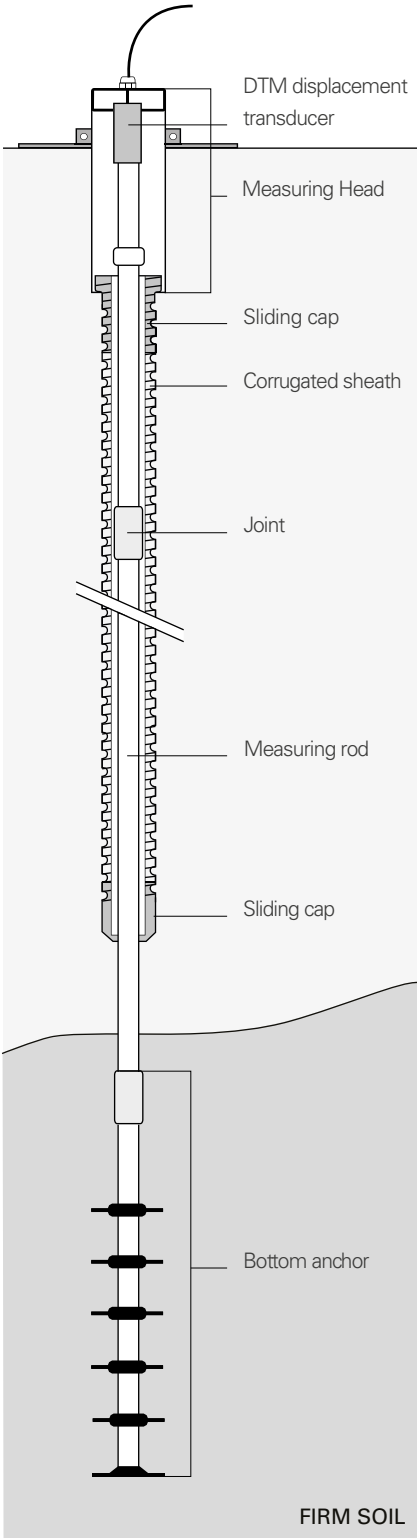
	MEASURING HEAD OD100TT01G0	BOTTOM ANCHOR OD100TT60G0
Description	Protective cap and leveling pin for topographic surveying	Grouting bottom reference anchor
Outer diameter	102 mm	60 mm
Length	550 mm	600 mm
Material	galvanised steel and PVC	galvanised steel



Tell - tale measuring head without survey pin

ELECTRICAL TT EXTENSOMETER

Tell tale (TT) extensometers can be equipped with DTM electrical displacement transducer in order to automatize the readings and allow remote monitoring through automatic data logger.



	MEASURING ROD OD100A200G0	CORRUGATED SHEATH OD111PV5500
Outer diameter	25 mm	55 mm (nominal)
Section length	2000 mm	supplied in roll
Type of junction	external couplings (M25 thread)	continuous (self-screwing connection)
Material	galvanised steel	PVC

	BOTTOM ANCHOR OD100TT60G0	MEASURING HEAD OD100TTEL1G
Description	Grouting bottom reference anchor	Protective cap ready for DTM displacement transducer
Diameter	60 mm	102
Length	600 mm	400-650-1150
Material	galvanised steel	galvanised steel

DTM DISPLACEMENT TRANSDUCER	ODTM0AE0250	ODTM0AE0500	ODTM0AE01000
Nominal range	250 mm	500 mm	1000 mm
Accuracy Pol MPE ⁽¹⁾	± 0.15 % FS		
Repeatability	< 0.08 mm		
Signal output	4-20 mA (current loop)		
IP class	IP68 up to 2 MPa		

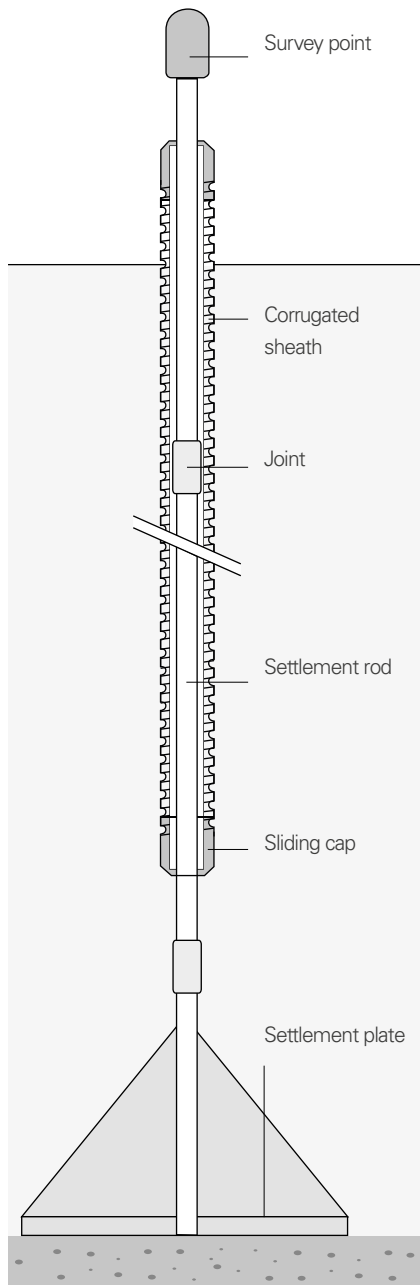
(1) - MPE is the Maximum Permitted Error on the measuring range (FSR). In the Calibration Report, the accuracies of the gauge are calculated using both linear regression (≤ Lin. MPE) and polynomial correction (≤ Pol. MPE)



Tell - tale bottom anchor for datum reference

SETTLEMENT PLATFORM

Settlement platforms are typically used for monitoring settlement below embankments on soft ground. They consist of a galvanised steel square plate to which a riser settlement rod is attached. An anti-friction corrugate sheath is placed around the riser rod. Sliding caps at the top and at the end of the junction between riser rod and corrugate pipe prevent downdrag forces on the rod. Topographic leveling of the top survey point provide a record of plate elevations.



SETTLEMENT ROD OD100A200G0

Outer diameter	25 mm
Section length	2000 mm
Type of junction	external couplings (M25 thread)
Material	galvanised steel

CORRUGATED SHEATH OD111PV5500

Outer diameter	55 mm (nominal)
Section length	supplied in roll
Type of junction	continuous (self-screwing connection)
Material	PVC

SETTLEMENT PLATE OD100B050G0

Dimensions	500 x 500 x 240 mm
Material	galvanised steel

SURVEY POINT OD100T150G0

Dimensions	OD 40 mm, 50 mm long
Material	brass



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