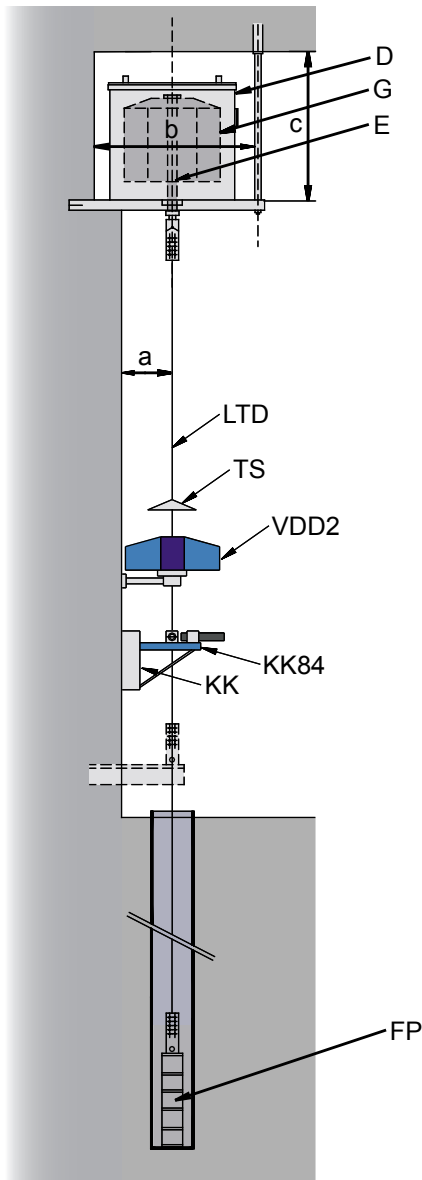




INVERTED PLUMB LINE SL

APPLICATION

The inclination as well as the horizontal displacement of above and below ground structures, as well as of production plants, is of decisive importance for the evaluation of their behaviour and stability. A plumb installation can act as reference axis, from which the displacements observed at different levels can give the deflection line.



Inverted plumb line SL30, SL100, SL200

A plumb line installation can be manufactured either as a normal plumb line or as an inverted plumb line, for which the wire is fixed at its upper or lower end respectively. Depending on whether this fixation is on the structure itself or in the foundation rock, either the inclination of the structure itself, or also its displacement relative to an external reference point can be determined.

A combination of the two types of installation gives the maximum information. For a dam for instance, a plumb line anchored on the crest yield the inclination and deflection line relative to the crest, whilst a float line, or inverted pendulum, fixed deep in the foundation rock, gives the movement relative to the surrounding rock.

DESCRIPTION

An inverted pendulum system consists of the plumb reference point FP, the plumb wire LTD, the float G with float rod E in the float vessel D.

For manual measuring a Coordiscope KK84 (N or D) is used. The contactless remote measuring instrument Telelot VDD2E can be installed for permanent surveillance.



INVERTED PLUMB LINE SL

TECHNICAL DATA

Type	SL 30-75	SL 100-100	SL 200-150
Uplift	300N	1000N	2000N
Plumb wire	Ø 1mm	Ø 2mm	
Max. wire length (C)	60m	>60m	>150m
Meas. range (A)	75mm	100mm	150mm
Measurement with	B	B	B

Explanations

- A Without moving the damping vessel
- B Coordiscope, Telelot all types
- C The maximum possible plumb wire length is mainly influenced by two factors:
 1. Measuring method with or without touching the wire
 2. Air current in the plumb pit or generally in the building