CENTERING DEVICE ZS

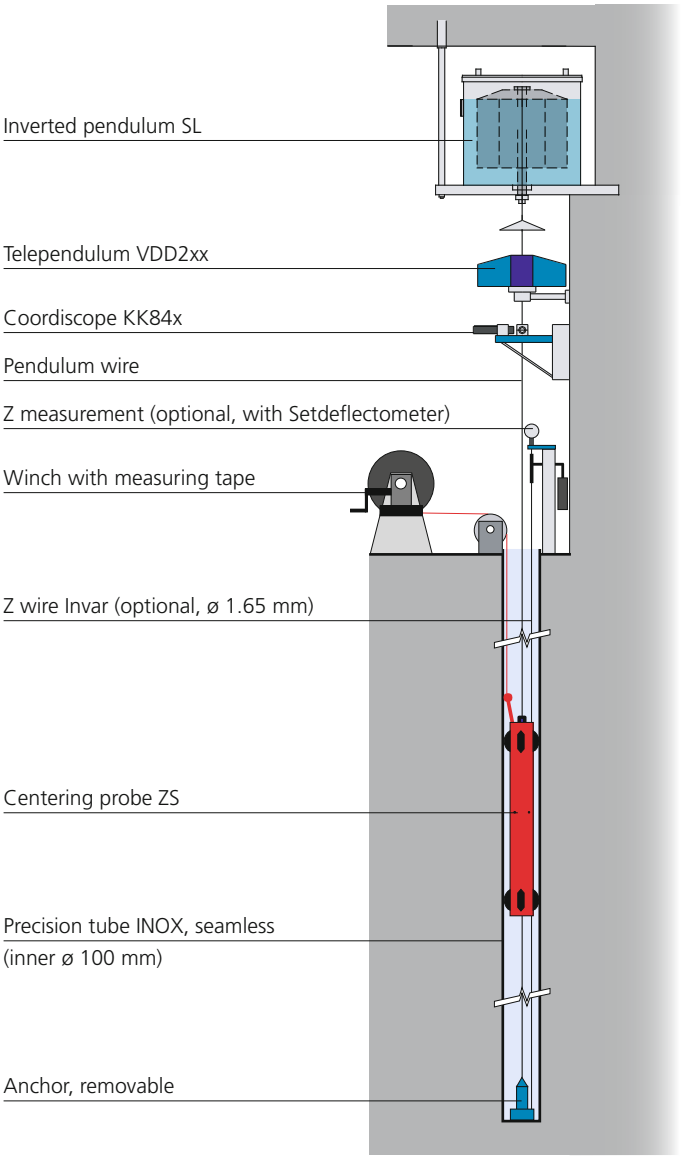
Application

The Centering Device ZS is used to measure the horizontal displacement along an inverted or direct plumb line borehole related to the plumb wire.

Description

For the measurement the centering probe which is fixed at a measuring tape is lowered into the plumb line tube by means of a winch. At the desired measuring depths, the centering probe is stopped. At each measuring point the plumb wire is exactly centered in the middle of the piping. At these positions the measurement can be done manually with a coordiscope KK84x or automatically with a telependulum VDD2xx.

Optionally the Z-displacement (vertical) can be measured between the anchor and the upper end of the plumb line tube by using a second wire (Invar). The measurement can be done manually with a setdeflectometer at the tension device of the Z wire.



Technical data

Type	ZS
Bore hole	special drilling method
Tubing	seamless precision INOX tubes (1.4301 or 1.4404) with smooth surface, inner ø 100 mm no mismatch at the tube joints fully grouted between tube and rock vertical deviation max. ±5 mm
Centering probe	length 583 mm weight 6.5 kg
Measuring tape	INOX, 100 m with 1 cm scale
Measurement	contactless, manually with Coordiscope KK84x contactless, automatically with Telependulum VDD2xx
Stabilizing time	2–5 min (acc. to wire length between centering probe and pendulum float resp. weight)
Precision *	≤ 0.5 mm

* System accuracy depending on tube quality, tube condition and environmental influences.