VISIBILITY MEASUREMENTS

You will return to the contents of P1 SOIL by clicking the pictogram

13.49 Sludge blanket detector

The microprocessor controlled sludge blanket detector determines the degree of turbidity of fluids by means of the transmission method with a light source and photocell. The less red light reaches the photocell the more turbid the fluid is.

The sludge blanket detector is available complete with sensor, cable, a weather resistant carry holster with shoulder strap and battery charger.

The robust sensor has a sensitivity of between 0 and 5000 ppm. The graphic display has a resolution of 20 blocks divided over three colors in order to quickly read the degree of turbidity of the layer the probe penetrates at that moment. If the turbid water layers are reached an audio signal can be heard. This audio signal is pulsing in less turbid water and continuous in very turbid water.

The cable has a marking every 50 cm in order to determine the depth. The standard cable length is 7 meter (can be extended optionally up to 50 meter).

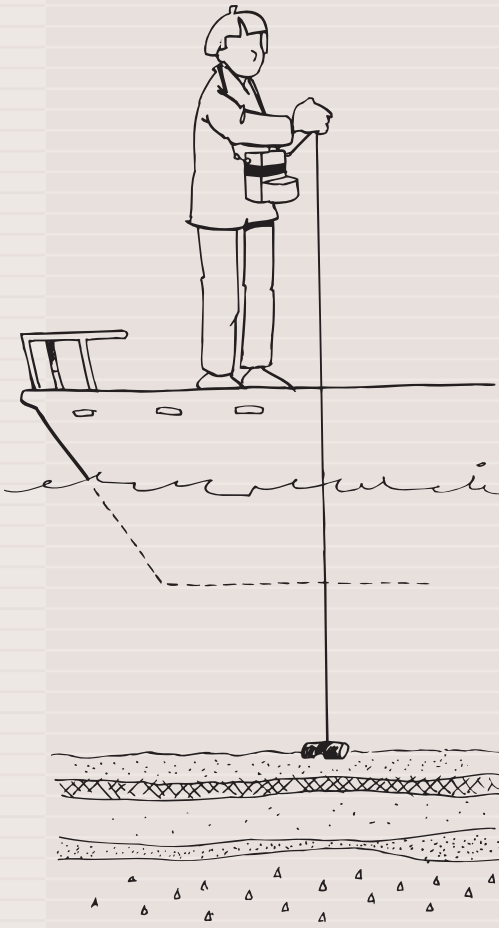
Applications

- The determination of the depth of various layers of sediment before and during the sampling procedure of water bottoms.
- Determination of the position of various layers of sedimentation in settling-basins or tanks.

13.50 Visibility disc according to Secchi

The visibility disc according to Secchi is a simple, although not very accurate, means of determining the visibility depth. The visibility disc is lowered into the water with a wire. When the disc is no longer visible in the water, a reading of the depth is made by means of the marks on the rope. The disc is lowered another 0.5 meter and is pulled up slowly.
The second reading is done when the disc becomes discernible. By taking the arithmetic mean from both readings the visibility depth is determined.

Determination of the depth position of the most recent layer of sediment.



Sludge blanket detector with graphic display

Probe with lightsource and sensor

Visibility disc according to Secchi

BENEFITS

13.49 Sludge blanket detector

- Ergonomic design, light weight and compact.
- Measuring results directly available.
- Clear graphic display.
- Integrated audio signal.
- Easy to use.
- Accurate determination of the position of various layers.
- Low power consumption.

Eijkelkamp Agrisearch Equipment

www.eijkelkamp.com

VISIBILITY MEASUREMENTS

13.51 Sediment level stave

The sediment level stave is part of a standard set for measuring the depth of a sediment layer as far down as 4 metres. The set comprises 4 sediment measuring rods of anodic aluminium with screw couplings. The rods are 1 m long and have a diameter of 25 mm. The sediment measuring rods are marked out in 5 cm markings. The set also includes an elbow fitting for the measuring rods so that depth measurements in the sediment can be taken at an angle. A stainless steel grid and core point make it possible to probe the lower boundary of the sediment layer. The set is presented in a carry bag.

- For determining the depth at the top of the sediment layer at the bottom of the water.
- Allows pricking through to more solid ground underneath.
- Elbow joining piece makes it possible to work from the edge.
- Standard set: 4 metres, bag, elbow fitting, sediment and core point.
- Can be extended to 7 m.

Sediment level stave set

Art.no.	Description	Qty. in set
P1.48	**Visibility measurements**	
	For measuring the depth of the sediment under water we offer three solutions.	
13.49	**Sludge blanket detector, bargraph display with integral audible alarm. Measuring principle: transmission method with light source + photocell. Sensitivity: 0 to 5000 ppm ab. Complete with sensor + 10 m cable. Supplied in carry holster; incl. battery charger**	
13.50	**Visibility disc according to Secchi, Ø 200 mm, white. Incl. 3 m weir, withdistance markings every 20 cm**	
13.51	**Sediment level stave, standard set to measure the sediment level to a depth of 4 m, incl. transport bag**	
**13.51.01	Sediment level stave, length 1 m, anodized aluminium with screw thread connection, Ø 25 mm, graduation in half dm	4
**13.51.02	Breakpoint for sediment level stave, hinged part to measure the sediment layer square	1
**13.51.03	Grid, stainless steel, 15x15 cm, to scan the sediment layer	1
**13.51.04	Core point to scan the lower boundary of the sediment layer	1
**17.08.21	Transport bag for 12 half ranging poles or sediment level stave, made of canvas reinforced with leather.	1
	Note: Research and sampling of the sediment can be executed in many different ways. Depending on depth and the desired accuracy we supply the following possibilities. For more information we refer to the relevant catalogue pages.	
01.09.SA	Piston sampler, set for sampling to a depth of 5 m	
01.09.SB	Dividable piston sampler set, for sampling to a depth of 5 m, with piston tubes 50, 100 and 150 cm length	
04.23.SA	Sediment core sampler type Beeker, rod operated, with closable cutting head and piston. Standard set forsampling and discharging core samples, length 1 m, in bucket or jars. Suitable for sampling submerged soils to a depth of 5 m of very watery sediment to non-consolidated sand.	

Art.no.	Description	Qty. in set
04.23SB	Sediment core sampler type Beeker, rod operated, with closable cutting head and piston. Comprehensive set for sampling and discharging core samples, length 1 m or1.5 m, in bucket or jars and to transport and divide in subsamples with water pressure. Suitable for sampling submerged soils to a depth of 5 m of very watery sediment to non-c onsolidated sand.	
04.09	Peat sampler, standard set for sampling to a depth of 10 m.	
12.40	Liquid layer sampler, rod operated. Standard set	
12.41	Liquid layer sampler, cable operated, standard set	
12.42	Multisampler, rod operated, standard set, for sampling to a depth of 5 m	