

Model 102

Coaxial Cable Water Level Meter

The Solinst Model 102 Water Level Meter has been designed for measuring groundwater levels, especially in small diameter tubes and piezometers. The cable has a heavy duty jacket and stainless steel inner conductor for strength.

For situations where highly accurate measurements or speed of reading is more important the Model 101 Flat Tape Water Level Meter is also available.

Operating Principles

The Model 102 Water Level Meter uses a 9V battery and a small diameter probe on narrow coaxial cable.

When the probe enters water the electrical circuit is completed, sending a signal back to the reel where a light and clearly audible buzzer are activated.

The water level is then determined by taking a reading off the cable at the top of the borehole, casing or tube and by accounting for the distance from the point of measurement to the nearest marking on the cable.

Features

- Narrow** - 6 mm probe excellent for use in ID 10 mm flexible tubing
- Low Cost** - Fewer markings allow a lower cost. For closer markings see Model 101.
- Long Life** - Rugged, free-standing reel
 - Strong, flexible coaxial cable
 - Replacement probes, cables and parts
- Optional** - Carrying bag with shoulder strap

Probes

Stainless steel with a Teflon® tip and stainless steel weights, with extra weights available. Recessed tip is designed to minimize signals in cascading water

- P1** 1/4" dia. x 1.5" long (6.4 mm x 38 mm) with 12 weights weighing 70 g
 - suitable for accessing narrow diameters
- P2** 3/8" dia. x 1.5" long (10 mm x 38 mm) with 10 weights weighing 160 g.
 - heavier probe for situations where weight is more important than size.

**Reel**

The high quality reel has an easy access battery drawer, an excellent brake, convenient carrying handle and a sturdy, stand-alone design. It has been ergonomically designed to be comfortable in use and stable when placed on the ground. It has an on/off sensitivity switch, battery test button, self-rotating winding handle, a light and a buzzer.

The sensitivity control allows the buzzer to be turned off while in cascading water, or when lowering to the bottom of a well. It ensures a clear signal in both high and low conductivity conditions. The transistorized, waterproof circuit board which powers the unit is located in the hub.

Lengths and Measurement Options

Stock lengths are:

30m, 100m, 150m, 250m, and 300m.

Other lengths are also available.

The coaxial cable has a tinned copper braided shield for flexibility and a stranded stainless steel central conductor for strength. The cable jacket is of heavy duty polyethylene for durability.



Markings are at 1 m intervals. The markers are chemically bonded to the cable to prevent them from moving.

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