



DATASHEET

OPEN STANDPIPE PIEZOMETER

MODEL EPP-10SP



INTRODUCTION

Ground water table monitoring has assumed great significance in view of depleting ground water reserves. The basic measurement of ground water level can be done by Open Standpipe or constructing observation wells.

FEATURES

- Reliable, Rugged, easy to install and economical.
- Accurate, simple to read, and proven technology.
- Can be installed after the construction of the structure/dam is completed by drilling a proper bore hole at the desired location to the original depth.
- Stand pipe of durable heavy duty PVC construction.
- Flat cable used in water level sounder is high tensile, virtually non-expandable, water proof and corrosion resistant.
- The water level sounder is portable, light weight and easy to carry.
- Locking arrangement provided.

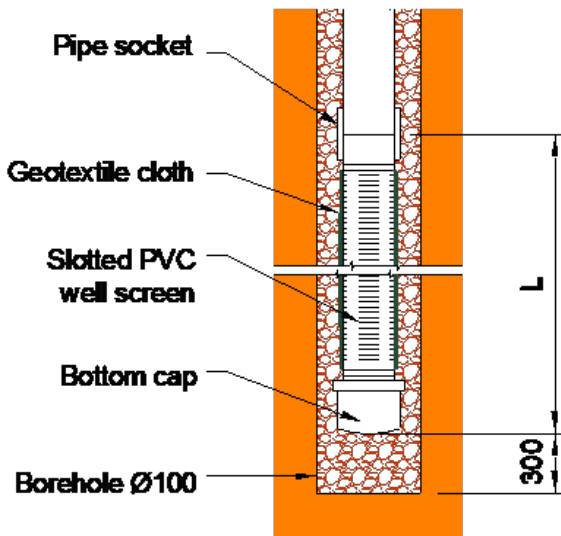
APPLICATION

- Ground water level measurement in boreholes near dams, rivers, high rise buildings, farm houses, factories, institutes and residential areas.
- Ideal for simple ground water level monitoring.



Observation wells are vertical pipes with a slotted section at the bottom typically installed in boreholes with a seal at the surface to prevent surface water from entering the borehole. The depth to the water level is measured by lowering the water level measurement probe into the pipe.

The model EPP-10 SP standpipe is used for measuring ground water level and its variation with time. The Encardio-rite model EPP-10SP standpipe piezometer consists of a pipe that is sealed along its entire length and installed in a borehole such that it must be open to water flow at bottom and open to atmosphere at the top. The intake is a slotted pipe covered with geo-textile material.



DESCRIPTION

The standpipe consists of a series of PVC stand pipes, 50 mm o.d., 44.5 i.d., 3 m length with an inbuilt socket for jointing. The intake point of the standpipe consists of a PVC slotted pipe, 1 m long, 50 mm o.d., covered with geo-textile. Bottom end of slotted pipe is plugged with a suitable PVC cap.

OPERATING PRINCIPLE

The standpipe is set in a bore hole, which is drilled into the soil/foundation to a pre-determined depth to intercept ground water. The slotted pipe is connected by a socket to same diameter plastic stand pipes extending to the surface. The borehole is filled with pea gravel. The top of borehole is sealed with cement bentonite plug. Ground water seeps into the stand pipe through the slotted end and attains a level equal to ground water. This level is determined by an electrical sounding device model EPP-10/6 lowered from the surface.

A plate hinged cover with locking arrangement is available for mounting at top of the standpipe. The locking arrangement has a universal key and a dust protection cap. Figure on next page gives typical assembly and installation layout of the EPP-10SP standpipe.

ORDERING CODE:

EPP-10SP-L-Y [L= length of slotted pipe, Y= No. of stand pipes]

EPP-10/6-L-X [L= length, X = unit (m or ft)]

SPECIFICATIONS

EPP-10SP Stand Pipe

Porous tip (L)	PVC slotted pipe, 50 mm o.d., covered with geo-textile
Standpipe (Y)	50 mm o.d., 44.5 i.d., 3 m length PVC pipe with an inbuilt socket for jointing

EPP-10/6 Water level sounder

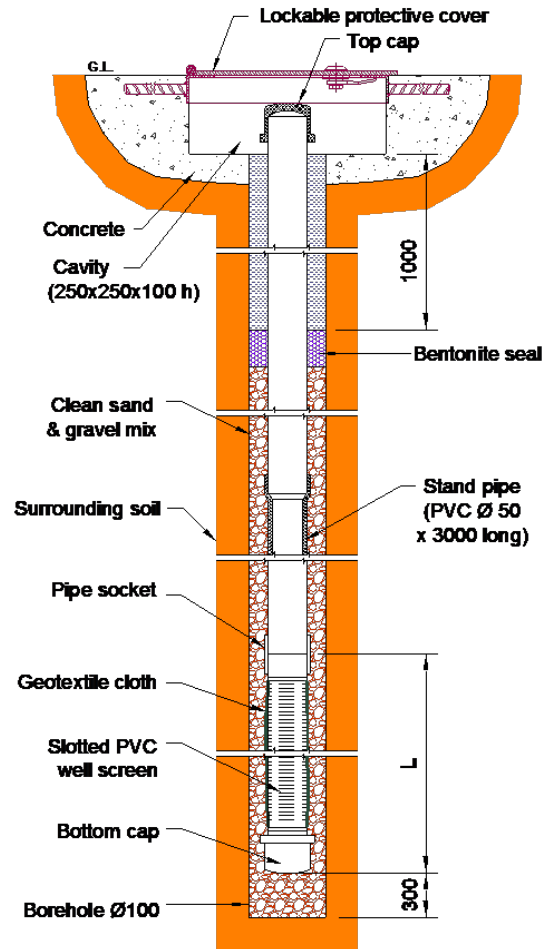
Length 'L' (m)	30, 50, 100, 150, 200, 300
Resolution	1 mm standard
Length 'L' (ft)	50, 100, 150, 300, 500
Resolution	0.1" standard
Cable/Tape	High tensile virtually non-expandable, non-stretch, PE insulated flat steel tape
Tape/Cable Size	10 mm wide x 2 mm thick
Probe	Stainless steel 12.7 mm dia.
Power Supply	9 V PP-3 size battery
Audio Signal	Sound buzzer
Visual Signal	Green LED light signal

EPP-10/6 Water level sounder

The model EPP-10/6 water level sounder is designed to measure the elevation of ground water in boreholes, stand pipes and wells. It is robust, light weight and convenient to use. The water level sounder probe is lowered from the surface with the help of the connecting flat cable for taking observations. The length of the cable is commensurate with the depth up to which the observation is required to be made. The unit is battery operated complete with an on-off switch, buzzer, LED for power on and signal, flat cable connected to a probe, winding reel and carrying handle.



The probe gives sound and light signal when water in the borehole/well makes a contact with the tip. The moisture resistant electronics and standard 9 V PP-3 size batteries are housed in a hub on the cable reel. The hub can be easily removed to replace the battery or check the electronics without disassembling the entire cable reel.



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