
STANDPIPE PIEZOMETERS

Models CP1 and CP15

APPLICATIONS

The CP standpipe (or Casagrande) piezometer is used to measure pore-water pressure and water level in permeable soils in many geotechnical applications:

- Stability of slopes
- Performance of dams and embankments
- Effectiveness of ground improvement techniques
- Effect of construction on surrounding structures
- Drawdown due to dewatering and pump tests
- Seepage through earth structures

DESCRIPTION

The CP standpipe piezometer is a filter element that is attached to a riser pipe. When installed as a piezometer, the filter is located in a sand intake zone at the location where pore-water pressure is to be monitored. A bentonite pellet or chip seal is placed over the sand intake zone and the remaining borehole is backfilled with grout.

A monitoring well installation consists of a filter-element attached to a riser, backfilled with sand to within a few meters of the ground surface. A bentonite seal at the surface prevents runoff water flowing into the monitoring well.

The CP1 consists of a porous plastic filter inside a perforated rigid PVC body. The CP15 is a crush resistant porous plastic filter. Both piezometers are used with rigid PVC riser pipes.

Water enters the riser until the water pressure inside the filter equals the water pressure in the soil. A water level indicator can be then used to measure the depth of water.

The CP15 can be used in combination with the PWS piezometer if continuous monitoring is needed.



Models CP1 and CP15

FEATURES

- Excellent long-term reliability
- Simple readings
- Very economical
- Easy installation
- Permeability test

SPECIFICATIONS

| PIEZOMETER TIPS | CP1 | CP15 |
|-----------------|--|---|
| Type | Porous plastic | Porous plastic |
| Length | 350 mm | 150 mm to 600 mm |
| Diameter | 19 mm | 38 mm |
| Fitted adaptors | 20 mm pipe female socket welded coupling | For rigid PVC standpipe 19 or 25 mm diameter model CP15 |
| Filter | Plastic, ~50 µm, ~10 kPa low air entry | |

STANDPIPE, FLEXIBLE TUBING & ACCESSORIES

Rigid PVC standpipe, 19 mm (3/4") or 25 mm (1") nominal diameter, for CP15

Tefl on tape for sealing threaded joints

PVC cement for bonding PVC pipe to filter

Silica sand

Pressure gauge for artesian conditions (uplift pressure measurement)

Cap: plain, slip-fit, vented

ORDERING INFORMATION

Please specify:

- Model
- Length, diameter, adapters
- Standpipe diameter
- Accessories