

# Standpipe Piezometer

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## Overview



Simple and economic measurement of groundwater pressures in soil and rock can be carried out using Casagrande type piezometers.

Geosense® piezometers are made up of low air entry porous plastic or ceramic elements which are connected to standpipe tubing and lowered into a predrilled borehole. Alternative types may be driven or pushed into soft soil.

Where Casagrande type piezometers are being installed then the porous element is surrounded by filter sand and a Bentonite seal placed above this response zone.

Water level measurements are normally taken using a water level meter (dip meter) or in the case of artesian pressure a Bourdon pressure gauge is attached to the top.

### APPLICATIONS

- Monitoring of dams, reservoirs & embankments
- Slope stability
- Groundwater levels for dewatering & drainage
- Groundwater sampling
- Permeability testing
- Contaminated soil monitoring

### FEATURES

- Economic
- Simple to install
- Simple to use
- Variable filters
- Variable Material
- Can be used for artesian pressure

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## Specifications

### POROUS PLASTIC ELEMENT

|                |                        |
|----------------|------------------------|
| Material       | HDPE                   |
| Mean pore size | 60 microns             |
| Permeability   | $3 \times 10^{-4}$ m/s |
| Porosity       | 35%                    |

### POROUS CERAMIC ELEMENT

|                |                        |
|----------------|------------------------|
| Material       | Alumo Silicate         |
| Mean pore size | 60 microns             |
| Permeability   | $3 \times 10^{-4}$ m/s |
| Porosity       | 45%                    |

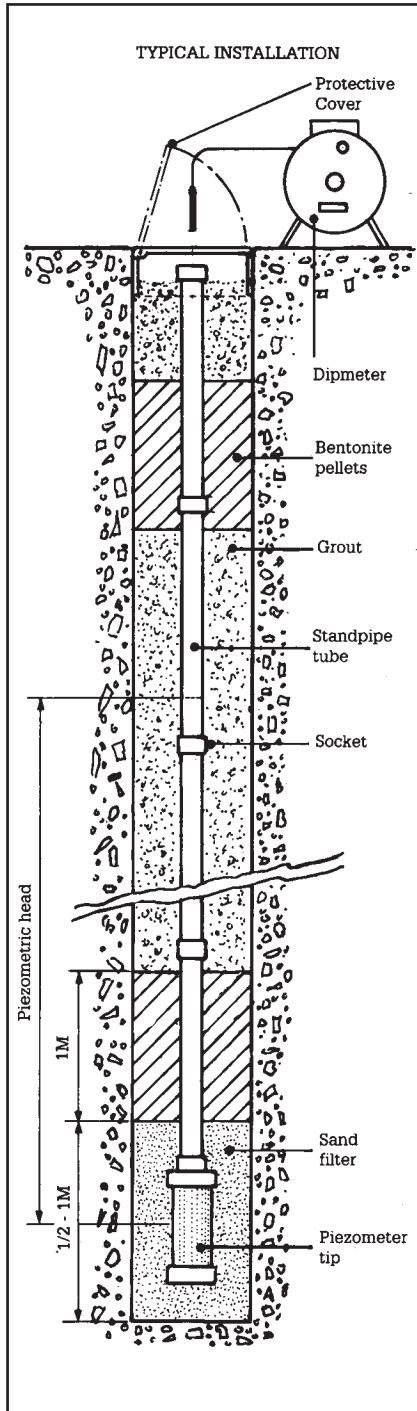
### PIEZOMETER TIP

| Description         | Diameter mm | Length mm |
|---------------------|-------------|-----------|
| Plastic porous      | 27          | 320       |
| Plastic porous      | 27          | 1000      |
| Drive-in galvanised | 27          | 400       |
| Drive-in galvanise  | 26          | 1000      |
| Ceramic             | 50          | 200       |
| Ceramic             | 50          | 310       |



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## Accessories



### TUBING & ACCESSORIES

Standard piezometer tubing is supplied threaded 3/4" BSP or plain for gluing and is coupled together using separate BSP sockets.

Alternative options include flush threading and sizes up to 2" which are used mainly for open standpipe piezometers.

Tubing is available in high strength ABS, PVC or galvanised steel for drive-in piezometers in 1 and 3 metre lengths.



### ACCESSORIES

Bourdon gauges

Adaptors

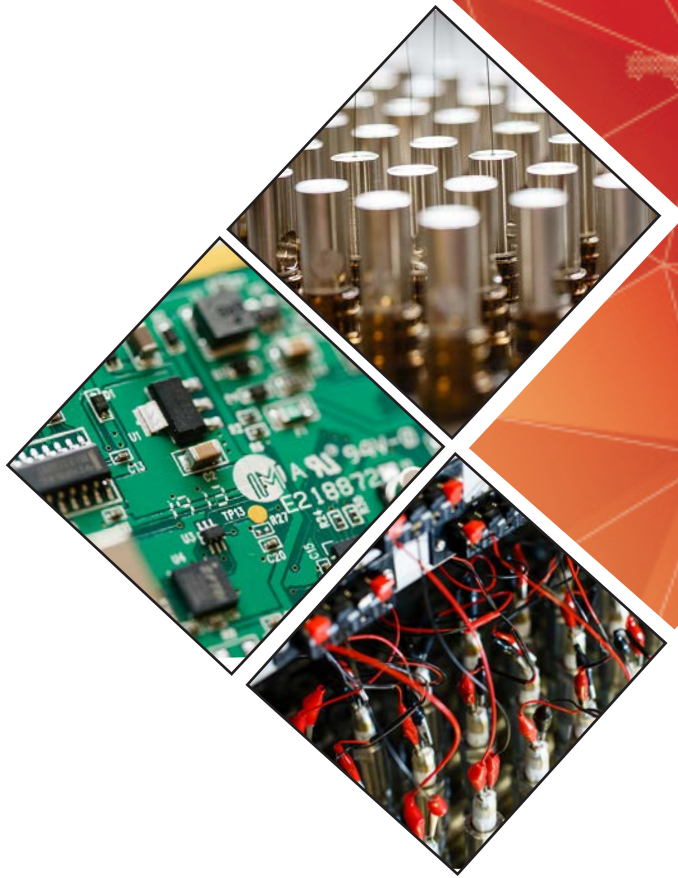
Caps

Dip meters

Bentonite pellets

Protective covers





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