

Standpipe Piezometer

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



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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	3×10^{-4} m/s
Porosity	35%

POROUS CERAMIC ELEMENT

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

PIEZOMETER TIP

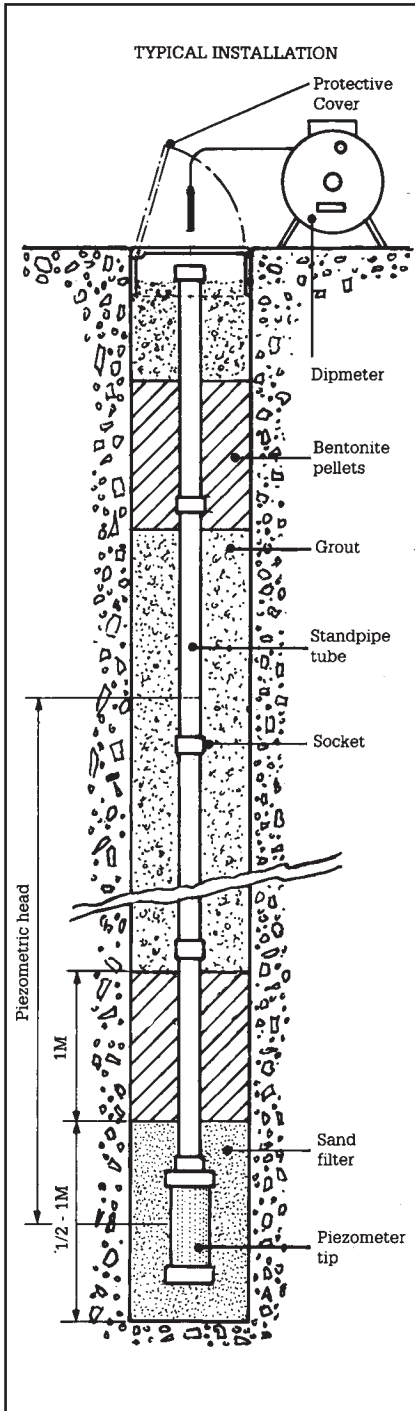
Description	Diameter mm	Length mm
Plastic porous	27	320
Plastic porous	27	1000
Drive-in galvanised	27	400
Drive-in galvanised	27	1000
Ceramic	50	200
Ceramic	50	310



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Accessories

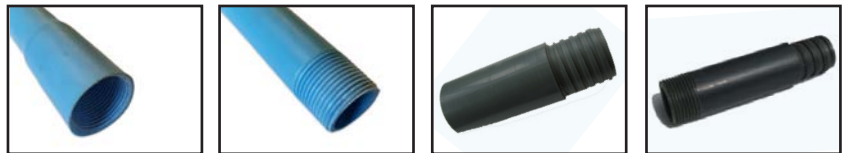


TUBING & ACCESSORIES

Standpipe piezometer tubing is supplied standard with blown ends BSPM one end and BSPF the other end.

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

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



ACCESSORIES

Bourdon gauges

Adaptors

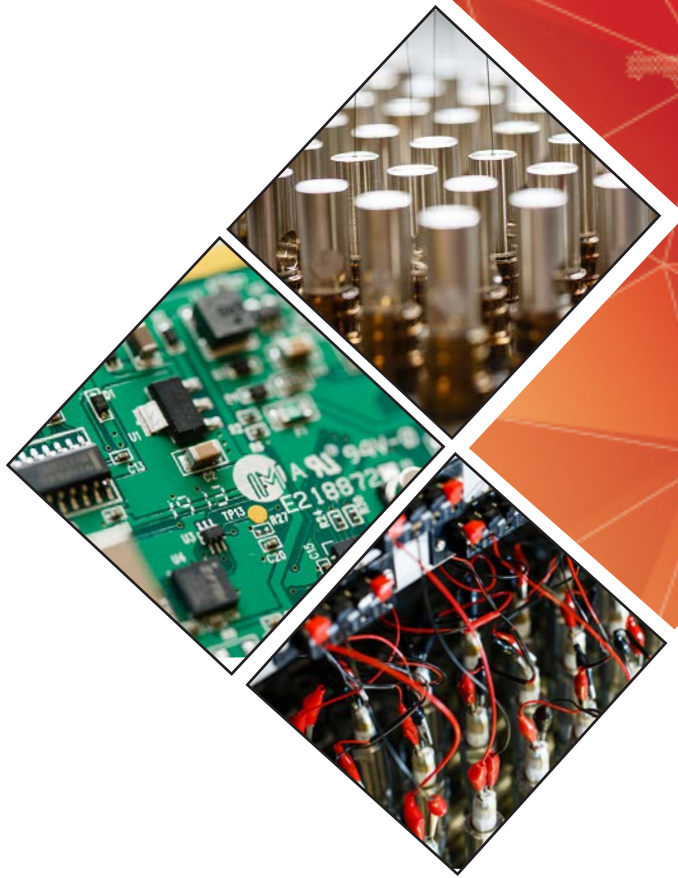
Caps

Dip meters

Bentonite pellets

Protective covers





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