

Model 1100

The HMA Geotechnical Pneumatic Piezometer has been designed to monitor pore water pressure within earthen masses.

APPLICATIONS

Pore water pressure, using the Pneumatic Piezometers, can be measured in both saturated and partially saturated soils within embankments, compacted fills and boreholes. The Pneumatic Piezometers can, therefore, be used to assess stability, permeability, hydrological aspects of water supply and underground construction such as tunnelling.



FEATURES

- Operates over large pressure range
- Long term stability
- High sensitivity
- Small in size
- Delivered ready for installation
- Corrosion free construction
- High resolution
- Low cost installation
- Does not require pre-saturation of filter
- Low diaphragm displacement

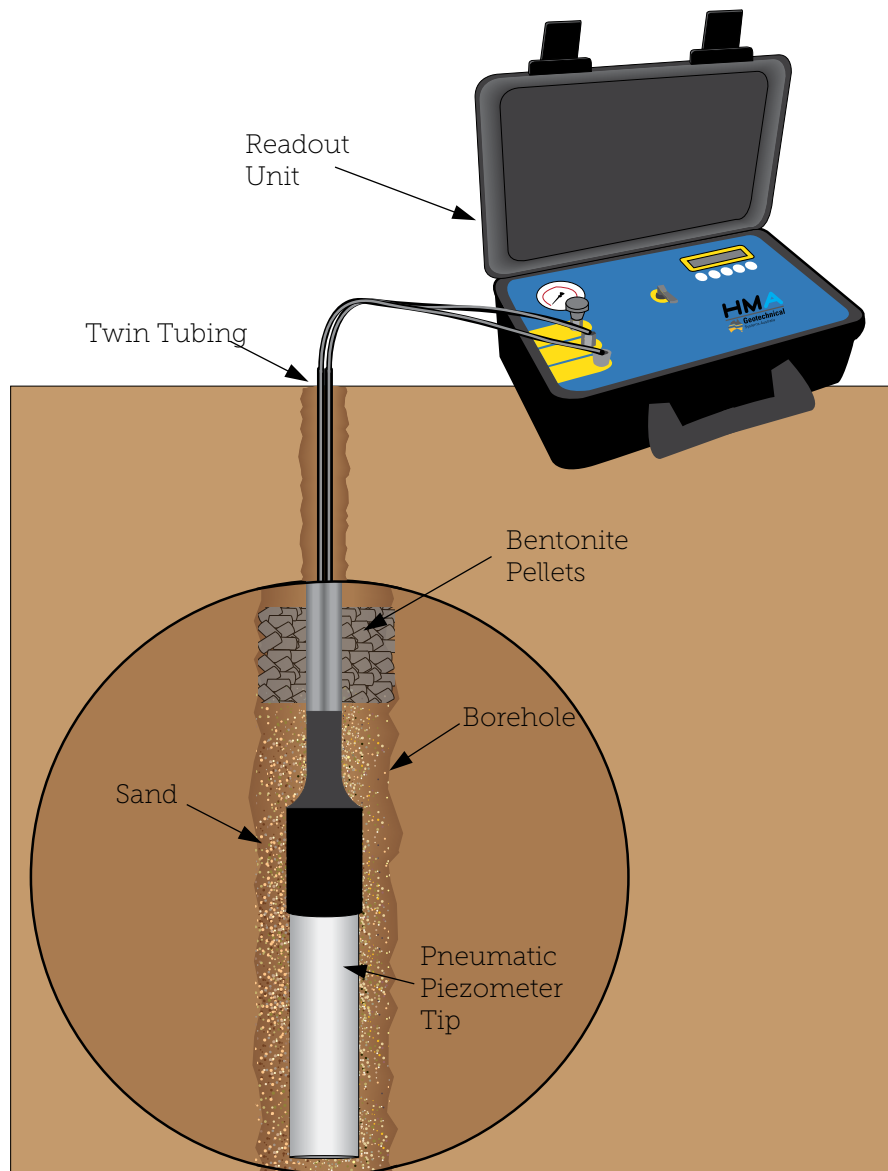
OPERATING PRINCIPLE

Geotechnical Systems Australia Pneumatic Piezometers operate on the principle of pressure equilibrium. Each Pneumatic Piezometer contains a rubber diaphragm upon which the pore water applies pressure. In order to measure the pore water pressure, pneumatic pressure is applied to the reverse side of the rubber diaphragm until equilibrium is reached. Once the diaphragm is in a state of equilibrium, the pressure is read using a Pneumatic Readout (Model 9115).

ANCILLARY EQUIPMENT

To read the pore water pressure applied to the Pneumatic Piezometer, a Pneumatic Readout (Model 9115) is connected via a quick connect fitting. If a Pneumatic Piezometer is to be driven into the ground, brass push in tips can be attached (upon request) to the Piezometer. If many Pneumatic Piezometers are to be read, a Terminal Box acting as a junction would be recommended. The Terminal Box enables all Pneumatic Piezometers to be easily and quickly read at one location.

Pneumatic Piezometer



SPECIFICATIONS

Pressure Range	0-1400 kPa
Resolution	Equivalent to Readout
Accuracy	±0.4 kPa
Operating Temperatures	0°C to +60°C
Weight	10g
Maximum Tube Length	200 m
Filter	50 µm
Dimensions	Ø16 mm x 63 mm L

ORDERING INFORMATION

When ordering HMA Geotechnical Pneumatic Piezometers, please specify the length of twin tubing (allow 5% extra) and specify whether or not male or female quick connect fittings, readout box, brass push in tips, or terminal box options are required. For any special requirements, please contact the HMA Geotechnica Head Office.

Note: HMA Geotechnical is continually improving its products and processes, information contained within this brochure is subject to change without notice

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