



EASY INSTALLATION
EASY MEASUREMENTS AT VARIOUS DEPTHS
CUSTOMIZABLE SPACING BETWEEN SENSORS

The multi-level vibrating wire piezometer is perfect for measuring pore pressures at various depths beneath a single surface location.

Description

The **PW-ML** multi-level piezometer consists of multiple piezometers connected to a single communication cable, which is in turn connected to the data acquisition system (SENSLOG) or readout (MB-3TL).

A typical installation of the multi-level piezometer utilizes a direct grouting installation so that only the multi-level piezometer string and a grout injection tube are needed to complete the installation. Once the grout has hardened, the piezometers are isolated from one another, allowing precise measurements of pore water pressure changes at various depths.

The multi-level piezometer allows the customer to define sensor spacing along the readout cable providing precise depth control based on site specific requirements. Junctions between each piezometer and the main cable are reinforced using epoxy resin for a waterproof and durable seal.

Key Features

- Perfect for measuring pore water pressure at various depths for a same location
- Quick, reliable and reduction of installation costs
- Quick and durable installation
- Customizable spacing between each sensor
- Excellent reliability over a long period of time
- High resolution and accuracy
- Wide choice of measuring ranges
- Rugged stainless steel

Applications

- Hydraulic structures
- Retaining walls
- Embankments
- Dams

Specifications

| PERFORMANCE | |
|------------------------|---|
| Range | 0.2, 0.35, 0.5, 0.75, 1, 1.5, 2, 3, 5 MPa |
| Accuracy ¹ | ± 0.1% F.S. |
| Linearity ¹ | < ± 0.5% F.S. |
| Resolution with MB-3TL | 0.025% F.S. (min.) |
| Thermal drift | ± 0.1% F.S. / °C |
| Thermistor | 3 kΩ (see model TH-T) |
| Cable | IRC-241 |
| PIEZOMETER MODEL | |
| | PWS |
| Length | 200 mm |
| Outside diameter | 19 mm |
| Housing material | Stainless steel |
| Filter | Stainless steel, ~ 50 µm, ~ 10 kPa, low air entry pressure Ceramic, ~ 1 µm, ~ 450 kPa, high air entry pressure |

¹ Specifications achieved in laboratory conditions

Ordering Information

| PART NUMBER | DESCRIPTION | PLEASE SPECIFY |
|---------------|---------------------------------------|---|
| FR-1100G50100 | Sleeve for sensor's tight connections | Number of piezometers per chain (max. 6 with temperature, 12 without temperature) |
| FR-1100DPWS | PWS piezometer | Measuring range for each sensor Distance from the ground for each sensor Filter type (stainless steel or ceramic) |
| CA-IRC241 | 11.7-mm O.D., 12 shielded pairs cable | Total length of the cable, including enough length to reach readout or logger) |
| FR-1356050100 | Readout unit | MB-3TL or SENSLOG |

Optional Accessories

- Data acquisition system
- Junction box