



**HIGH RELIABILITY
PNEUMATIC PIEZOMETER
FOR LONG TERM MONITORING**

Rugged, Stable and Accurate FPC-2 pneumatic piezometer suitable for use in both short term and long term monitoring program

Description

The **FPC-2** pneumatic piezometer consists of a thin flexible diaphragm on which is applied the fluid pressure. During readout this pressure is balanced by an externally applied nitrogen gas pressure. The readings are obtained when the external gas pressure is equal to the porewater pressure acting on the reverse side of the diaphragm. The volume change associated with pressurization of the diaphragm is extremely small and consequently the response time is very low, even in low permeability soils as clays.

The design and the materials (brass or stainless steel) used in the construction of the **FPC-2** make it particularly suitable for use in both short- and long-term monitoring programs where ruggedness, stability and reliability are required. An integrated filter on the input gas line prevents the entry of foreign particles into the piezometer.

FPC-2 pneumatic piezometers are available with low-air or high-air entry filters. Two models are available: model **FPC-2** for borehole installation and model **FPC- 2D** to be pushed into soft soil.

Key Features

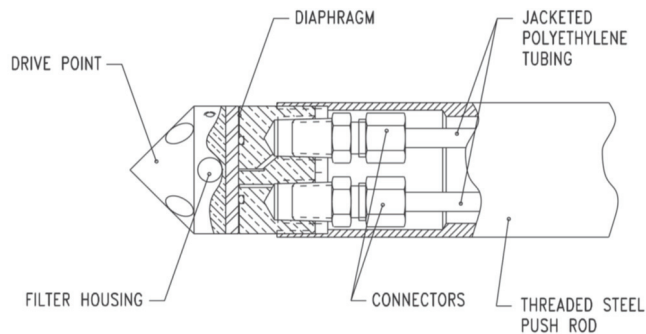
- Available in brass or stainless steel
- Quick-release connectors available
- High resolution and accuracy
- Short response time
- Excellent stability
- Highly reliable

Applications

- Retaining walls, piles, culverts and tunnel linings
- Foundations (seepage and uplift)
- Embankments and backfill
- Natural and cut slopes
- Waste disposal sites
- Excavations
- Dams

Specifications

Range	0–1000 kPa (standard) 0–3500 kPa (high pressure)
Accuracy	
PR-20 readout	±0.25% F.S. of pressure gauge
PR-20D Readout	±0.25% F.S. of pressure transducer
Diaphragm volumetric displacement	<0.01 cm ³
Standard construction	Brass, stainless steel (optional)
Filter	Plastic, ~50 µm, ~10 kPa low air entry (standard) Stainless steel, ~50 µm, ~10 kPa low air entry Ceramic, ~1 µm, ~450 kPa high air entry
Twin tubing	2 polyethylene tubes (ID: 2.5 mm, OD: 4.7 mm) under a PVC jacket
Optional	2 nylon 11 tubes (ID: 3.2 mm, OD: 6.3 mm) under a polyethylene jacket
Dimensions	
Outside diameter	32 mm
Length	28 mm (FPC-2), 52 mm (FPC-2D)



Ordering information

Please specify:

- Model
- Measuring range
- Filter type

Optional Accessories

- Quick-connect and plug set for twin tubing
- Junction and switching box
- Push-rod adapter for the FPC-2D; please specify thread type
- Readout instruments: PR-20, PR-20D