



FROM LEFT: P-102-SS Pneumatic Wellpoint Piezometer
P-100-1 Piezometer
P-100 Mini Pneumatic Piezoemter

The C109 Pneumatic Readout is used for monitoring all pneumatic transducers, including Piezometers and Total Earth Pressure Cells.



	PRODUCT CATEGORY:
	PIEZOMETERS + TRANSDUCERS

Pneumatic Piezometers

RST Pneumatic Piezometers monitor pore water pressure in geotechnical applications where stability levels are critical, such as in embankments and slopes.

They utilize a direct reading pneumatically operated diaphragm, making operation simple while ensuring long term stability and high accuracy at a low cost. Employing the lowest (0.002 cc) displacement available, measurements can be made under essentially zero volume change conditions. Time lag problems are minimized, and accuracy improved.

RST Pneumatic Piezometers are assembled to client specified length, tested, calibrated, and ready to install.

> APPLICATIONS

Assessing performance and investigating stability of earth fill dam embankments.

Slope stability investigations.

MONITORING OF:

Water levels in wells and standpipes.

Pressures behind retaining walls and diaphragm walls.

Pressures during fill or excavation.

Pore pressure in land reclamation applications.

> FEATURES

Years of proven, long term reliability and accuracy since 1977.

Lowest displacement pneumatic piezometer available.

Low cost.

No internal metal parts.

All piezometer components are non-metallic corrosion resistant nylon.

Flow or non-flow methods supported.

Compatible with most brands of readouts.

In-line filtered quick couplers.

Remote readings via flexible direct burial tubing avoids construction obstacles.

> BENEFITS

✓ **Increase Safety**

✓ **High Accuracy**

✓ **Increase Productivity**

✓ **High Reliability**

✓ **Immediate Delivery**

✓ **Custom Options**



Pneumatic Piezometers



PRODUCT CATEGORY:
PIEZOMETERS + TRANSDUCERS

SPECIFICATIONS + ORDERING

GENERAL SPECIFICATIONS	
ITEM	DESCRIPTION
Sensitivity	0.1% F.S.
Displacement	0.002 cc
Materials	Nylon 12 with EP diaphragm
Accuracy	±0.25% F.S.
Standard Resolution	1 kPa / 0.1 psi or 0.1 kPa / 0.01 psi with C109 readout.
Repeatability	±0.35 kPa / ±0.05 psi
Range	0-2000 kPa / 0-200 psi with standard C109 readout and T-102 tubing
Linear Range	21-2000 kPa / 3-200 psi with standard C109 readout and T-102 tubing
Max Range	0-14,000 kPa / 0-2000 psi

P-100 MINIATURE: SPECIFICATIONS	
ITEM	DESCRIPTION
PP0001	The model P-100 is a general purpose piezometer incorporating a 50 micron stainless steel filter. It is capable of monitoring pore pressure from 0-2000 psi (0-14,000 kPa). The P-100 combines the features of high accuracy and reliability, small size, low cost, and extremely low displacement, with the ability to be constantly monitored.
Dimensions	1.59 cm X 6.30 cm long (.625 in. X 2.48 in. long). Filter area: .974 cm ² / .151 in. ²
Applications	General purpose miniature. Multiple installations are possible even in small boreholes.

P-100-1 STANDARD: SPECIFICATIONS	
ITEM	DESCRIPTION
PP0011	The model P-100-1 consists of a P-100 transducer encapsulated in a slotted PVC, sand filled, Casagrande type piezometer body. This body employs a protected 70 micron porous plastic filter, in addition to the 50 micron stainless steel filter in the P-100.
Dimensions	3.35 cm X 22.8 cm long (1.32 in. X 9.0 in. long). Filter area: 133 cm ² / 21 in. ²
Applications	Recommended general purpose type. Casagrande enclosure for added mechanical protection and increased filtration.

ORDERING	
ITEM	PART #
P-100 Miniature	PP0001
P-100-1 Standard	PP0011
P-102 Wellpoint	PP0025
P-102 Wellpoint CPT	PP0025-CPT
P-104 High Air Entry	PP0041
P-104-D High Air Entry	PP0042
Pneumatic Tubing (2" x 3/16")	PP0100

P-102 WELL POINT: SPECIFICATIONS	
ITEM	DESCRIPTION
PP0025	The P-102 wellpoint encloses a sealed P-100 transducer in an all stainless piezometer tip designed to withstand the rigors of push in installations. As an improvement over small disc filters, the large 40 micron poly filter is directly connected to the soil, and is removable for pre-saturation prior to installation. The first 1.5 m (5 ft.) length of drive pipe is semi-flushed coupled to aid in self-sealing. Standard thread connection is 1 1/4 in. NPT. Alternate threads such as CPT are optional (PP0025-CPT).
Dimensions	Drive point: 29.85 cm X 2.54 cm (11.75 in. X 1 in.) Adapter pipe (steel): 122.55 cm X 3.18 cm (48.25 in. X 1.25 in.) Overall length: 1.52 m (5 ft.) Filter area: 51 cm ² (7.9 in ²)
Applications	Push-in piezometer for soft clays, organic and fine grained cohesion less soils.

Pneumatic Tubing Splice Kit (2" x 3/16")	PP0170
P100 Pneumatic Piezo with 7.5m tubing	PP1025
P100 Pneumatic Piezo with 15m tubing	PP1050
P100 Pneumatic Piezo with 25m tubing	PP1075
P100 Pneumatic Piezo with 30m tubing	PP1100
P100 Pneumatic Piezo with 45m tubing	PP1150
P100 Pneumatic Piezo with 60m tubing	PP1200
P100-1 Pneumatic Piezo with 7.5m tubing	PP2025
P100-1 Pneumatic Piezo with 15m tubing	PP2050
P100-1 Pneumatic Piezo with 25m tubing	PP2075
P100-1 Pneumatic Piezo with 30m tubing	PP2100
P100-1 Pneumatic Piezo with 45m tubing	PP2150
P100-1 Pneumatic Piezo with 60m tubing	PP2200

P-104 AND P-104-D HIGH AIR ENTRY: SPECIFICATIONS	
ITEM	DESCRIPTION
Description	The P-104 series of pneumatic piezometer consist of 1 Bar high air entry, 1 micron ceramic filters. The P-104 filter is easily removed for saturation prior to installation. Alternate air entry values available.
Dimensions: P-104	4.06 cm X 9.34 cm long (1.60 in. X 3.68 in. long) Filter area: 97.29 cm ² / 1508 in. ²
Dimensions: P-104-D	2.54 cm X 6.68 cm long (1.0 in. X 2.63 in. long) Filter area: 1.99 cm ² / .308 in. ²
Applications	For use in negative pore pressure measurements or in unsaturated soils. * Requires specialized installation techniques. Contact RST for details.

STOCK LENGTHS!



Contact RST for Details

ACCESSORIES	
C109 Pneumatic Readout	Optional armoured tubing
Terminal stations	Splice kits (see part number in Ordering Info below)
Filter fabric installation socks	Riser pipe
Bentonite pellets	

Additional info to be mentioned at time of ordering:
Tubing Length (per piezometer)
Range
Accessories
Number of channels (per terminal station)