

RST Pneumatic Piezometers have an unsurpassed record for long term stability and reliability in over 50,000 world-wide installations. RST Pneumatic Piezometers 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.



C108 Pneumatic Readout with RST Pneumatic Piezometers

## FEATURES

Over 25 years of proven, long term reliability and accuracy.

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.

## FUNCTIONS

Assessing performance and investigating stability of earth fill dam embankments.

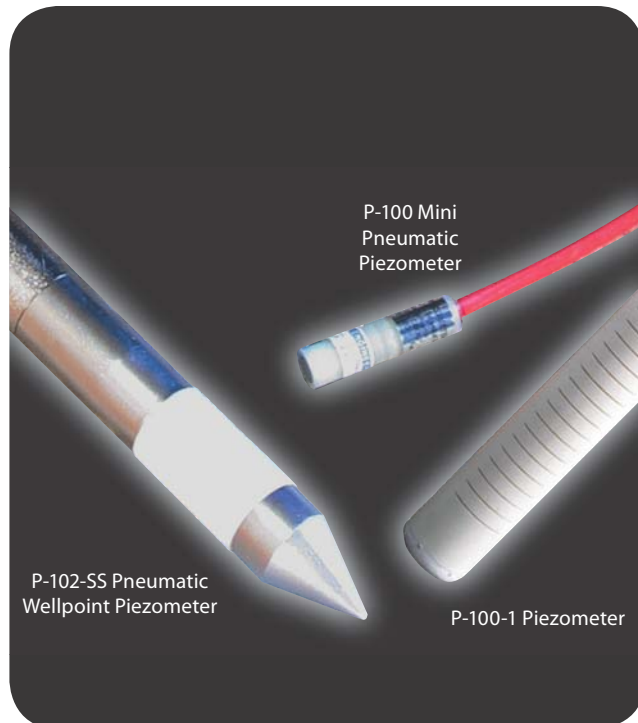
Slope stability investigations.

Monitoring water levels in wells and standpipes.

Monitoring pressures behind retaining walls and diaphragm walls.

Monitoring pressures during fill or excavation.

Monitoring pore pressure in land reclamation applications.



P-100 Mini  
Pneumatic  
Piezometer

P-102-SS Pneumatic  
Wellpoint Piezometer

P-100-1 Piezometer

Specifications may change without notice. PPB0001D



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**PNEUMATIC PIEZOMETERS**

The RST Instruments Management System is certified to ISO 9001:2000



## OVERALL SPECIFICATIONS

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 C-106 readout
Repeatability	±0.35 kPa / ±0.05 psi
Range	0-2000 kPa / 0-200 psi with standard C-106 readout and T-102 tubing
Linear Range	21-2000 kPa / 3-200 psi with standard C-106 readout and T-102 tubing
Max Range	0-14,000 kPa / 0-2000 psi

## ACCESSORIES (Specify when ordering)

C108 Pneumatic Readout
Terminal stations
Filter fabric installation socks
Bentonite pellets
Optional armoured tubing
Splice kits
Riser pipe

## ORDERING INFORMATION (Specify when ordering)

Model
Quantity
Tubing Length (per piezometer)
Range
Accessories
Number of channels (per terminal station)

## P-100 MINIATURE SPECIFICATIONS

Description	The model P-100 is a general purpose piezometer incorporating a 50 micron stainless steel filter. This instrument 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 <sup>2</sup> / .151 in. <sup>2</sup>
Applications	General purpose miniature. Multiple installations are possible even in small boreholes.
Part Number	PP0001

## P-100-1 STANDARD SPECIFICATIONS

Description	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 <sup>2</sup> / 21 in. <sup>2</sup>
Applications	Recommended general purpose type. Casagrande enclosure for added mechanical protection and increased filtration.
Part Number	PP0011

## P-102-SS WELLPOINT SPECIFICATIONS

Description	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.
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 <sup>2</sup> (7.9 in. <sup>2</sup> )
Applications	Push-in piezometer for soft clays, organic and fine grained cohesion less soils.
Part Number	PP0025

## P-104 & P-104D HIGH AIR ENTRY SPECIFICATIONS

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	<table border="1"> <tr> <td>Model: P-104</td> <td>4.06 cm X 9.34 cm long (1.60 in. X 3.68 in. long) Filter area: 97.29 cm<sup>2</sup> / 1508 in.<sup>2</sup></td> <td>Part Number PP0041</td> </tr> <tr> <td>Model: P-104-D</td> <td>2.54 cm X 6.68 cm long (1.0 in. X 2.63 in. long) Filter area: 1.99 cm<sup>2</sup> / .308 in.<sup>2</sup></td> <td>Part Number PP0042</td> </tr> </table>	Model: P-104	4.06 cm X 9.34 cm long (1.60 in. X 3.68 in. long) Filter area: 97.29 cm <sup>2</sup> / 1508 in. <sup>2</sup>	Part Number PP0041	Model: P-104-D	2.54 cm X 6.68 cm long (1.0 in. X 2.63 in. long) Filter area: 1.99 cm <sup>2</sup> / .308 in. <sup>2</sup>	Part Number PP0042
Model: P-104	4.06 cm X 9.34 cm long (1.60 in. X 3.68 in. long) Filter area: 97.29 cm <sup>2</sup> / 1508 in. <sup>2</sup>	Part Number PP0041					
Model: P-104-D	2.54 cm X 6.68 cm long (1.0 in. X 2.63 in. long) Filter area: 1.99 cm <sup>2</sup> / .308 in. <sup>2</sup>	Part Number PP0042					
Applications	For use in negative pore pressure measurements or in unsaturated soils. * Requires specialized installation techniques. Contact RST for details.						

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