The Tensiometer for columns, remote locations, limited access - 1/4 in (6mm) Dia. sensor

Laboratory research in soil columns, in tight corners, or near the soil surfaces cannot be done with a large inflexible standard tensiometer. The Model 2100F Solmoisture Probe is a specialized unit designed for investigation of soil suction in such small regimes. Ideal for laboratory work such as measuring soil suction values at various levels in soil columns. In getting measurements near surface conditions with minimal disturbance or in places where the readout must be remotely located. The Solmoisture Probe has a tiny porous ceramic cup is 0.25" (6 mm) in diameter and 1" (2.5 cm) long and attaches to the tensiometer body via a 6 ft. (1.8 m) length of Nylon tubing, which will cause minimal disturbance in the soil. A 1/16 in (3.81 mm) OD. filler tube is also incorporated to allow for easy filling. A 1/4 in.-20 bolt is located at the bottom of the readout tree for easy mounting. The measuring range for soil suction is from 0 – 100 cb, read on the stainless steel cased, hermetic sealed readout gauge. The 2100F will also accept a pressure transducer (optional) when results are required for automated purposes and need to be stored in a data logger.

SPECIFICATIONS:
- 2100F1 SOILMOISTURE PROBE , with Vacuum Gauge, 8” L x 5” W x 3” H (20.32 cm L x 12.7 cm W x 7.62 cm H) Weight: 0.86 lbs. (0.39 kgs)
- 2100F1 SERIES can be modified to meet any special requirement for remote reading ask about out special services.

ACCESSORIES:
- 5301-B.5 Tensiometer Transducer, Vacuum, Atm to -7 psi, 4-20 MA, (0-50 cbar)
- 5301-B1 Tensiometer Transducer, Vacuum, Atm to -14.5 psi, 4-20 MA, (0-100 cbar)
- 5302 Tensiometer Transducer, Vacuum, Atm to -14.5 psi, (0-100 mV)

A good tensiometer can save thousands of dollars in preventing over watering or under watering both causing damage to a commercial grower. “A good tensiometer is the irrigation schedulers alarm clock.” For researchers it’s a matter of accuracy and longevity to carry out numerous field plots. The 2710ARL when used with an accurate soil suction curve for their soils can produce a perfect crop year after year at minimal costs in pump time and water use. The Model 2710ARL Tensiometer is a precision but rugged, versatile, and inexpensive instrument, which provides a direct measurement of soil water tension. The heavy walled 1/4 in (6.35mm) of durable butyrate tubing 7/8 in. (2.22 cm) OD with screw cap is designed to allow for easy replacement of the ceramic cup, o-ring sealed dial gauge, and use of addition of extension tubes. Easy and time tested readout gauges hermetically sealed in a stainless steel case with vent access to assure precision readings. The tensiometer is available in a variety of lengths, ranging from 6 inches (15 cm) to 60 inches (1.5 m). Series 0240 Insertion Tools can be used for coring a hole in the soil to accept these units. The Model 2710K1 Service Kit, available separately, is used to refill and maintain the tensiometer.

SPECIFICATIONS:
- 2710ARL06 SOILMOISTURE TENSIOMETER 6" SIZE (15 cm), 0.63 lbs. (0.28 kgs)
- 2710ARL12 SOILMOISTURE TENSIOMETER 12" SIZE (30 cm), 0.78 lbs. (0.35 kgs)
- 2710ARL18 SOILMOISTURE TENSIOMETER 18" SIZE (45 cm), 0.90 lbs. (0.40 kgs)
- 2710ARL24 SOILMOISTURE TENSIOMETER 24" SIZE (60 cm), 1.02 lbs. (0.46 kgs)
- 2710ARL36 SOILMOISTURE TENSIOMETER 36" SIZE (90 cm), 1.29 lbs. (0.58 kgs)
- 2710ARL48 SOILMOISTURE TENSIOMETER 48" SIZE (120 cm), 1.55 lbs. (0.70 kgs)
- 2710ARL60 SOILMOISTURE TENSIOMETER 60" SIZE (150 cm), 1.81 lbs. (0.82 kgs)

ACCESSORIES:
- 2790K1 SERVICE KIT (includes 2005G2 hand pump, 2034 blue fluid, Tensiometer service cap, neoprene tubing and special filler bottle) (kgs)
- 0240L30 7/8" INSERTION TOOL, 30 inch (76 cm) length 1.0 lbs. (0.5 kgs)
- 0240L54 7/8" INSERTION TOOL, 54 inch (137 cm) length, 1.9 lbs. (0.8 kgs)
- 0240L78 7/8" INSERTION TOOL, 78 inch (198 cm) length, 2.9 lbs. (1.3 kgs)
Jet Fill Tensiometers, fastest, most reliable - considered gold standard of Tensiometers

Jet-Fill's revolutionary changes brought new standards of quality and performance to the industry when first introduced. Today they still are the premier Tensiometer in a field, now filled with numerous mediocre and cheap knock-offs, many not lasting a single season. The Jet-Fill was designed for years of service, easy replacements if it's ever needed. The high quality of the design, manufacture and materials used provide unusual long term savings through their years of use. In the sciences it's the precision, repeatability from unit to unit, field proven ruggedness and their very fast reaction time. Whether your using tensiometers to manage irrigation scheduling, monitor sampling conditions, or in crop field plots there's no other instrument than a Jet-Fill. The Model 2725ARL series Jet Fill Tensiometer features the handy Jet Fill reservoir with push-button convenience assuring minimal disturbance and a ultra fast fills. Constructed from heavy walled 1/4 in (63.5mm) of durable butyrate tubing 7/8 in. (2.22 cm) OD, it's 3 in. (7.62 cm) long replaceable high flow ceramic tip provides the fastest sensitivity to soil suction changes available. The replaceable, O-ring sealed, 3 in. (7.26 cm) diameter readout gauge is hermetically sealed in a stainless steel case, with convenient access venting giving years of accurate and precise data. The Jet Fill Reservoir holds additional 70 ml of water for replacing water used by the unit in prolonged high suction values. Our "gold standard" Jet-Fill Tensiometers are available in a variety of lengths, ranging from 6 inches (15 cm) to 60 inches (1.5 m). Series 0240 Insertion Tools can be used for coring a hole in the soil to accept these units.

SPECIFICATIONS:

2725ARL6 JET FILL TENSIOMETER, 6" SIZE (15 cm) 0.76 lbs. (0.3 kgs)
2725ARL12 JET FILL TENSIOMETER, 12" SIZE (30 cm) 0.80 lbs. (0.4 kgs)
2725ARL18 JET FILL TENSIOMETER, 18" SIZE (45 cm) 1.03 lbs. (0.4 kgs)
2725ARL24 JET FILL TENSIOMETER, 24" SIZE (60 cm) 1.15 lbs. (0.5 kgs)
2725ARL36 JET FILL TENSIOMETER, 36" SIZE (90 cm) 1.42 lbs. (0.6 kgs)
2725ARL48 JET FILL TENSIOMETER, 48" SIZE (120 cm) 1.68 lbs. (0.7 kgs)
2725ARL60 JET FILL TENSIOMETER, 60" SIZE (150 cm) 1.94 lbs. (0.8 kgs)

ACCESSORIES:

0240L30 7/8" INSERTION TOOL, 30 inch (76 cm) length 1.0 lbs. (0.5 kgs)
0240L54 7/8" INSERTION TOOL, 54 inch (137 cm) length 1.9 lbs. (0.8 kgs)
0240L78 7/8" INSERTION TOOL, 78 inch (198 cm) length 2.9 lbs. (1.3 kgs)

Simply the best portable Tensiometer measurements for Field or Lab

If you need to know the soil suction values at multiple depths, have diverse locations, and demand a quick response, with accurate values there’s nothing better than a 2900F Quick Draw. The Soilmoisture 2900F1 Quick Draw Tensiometer is designed for portable field or lab use. It responds quickly and equilibrates rapidly with the immediate soil tensions providing accurate measurements many times in less than a minute. The specialized Null Knob provides a "bracket" technique allowing one to deduce or interpolate the final tensional value in a few seconds to a few minutes depending on soil type and conditions. Constructed from heavy duty brass, nickel plated, with interior micro tubing to eliminate fluctuations in readings due to temperature changes. Large, hermetically sealed 3in (7.62 cm) dial gauge provides 1cb reading precision. Comes with carrying case for 2900, Coring Tool and Clean Out Rod. The Soil Coring Tool is first used to core an access hole to the desired depth of measurement. The Quick Draw is then inserted into the access hole and the ceramic sensing tip is now in contact with the soil. The Null Knob is used to bracket above actual value (gauge value drops as water is pulled from the soil), then it's set below actual value (gauge value rises as the water is removed from the Quick-Draw). Done several times it's "bracketed to a solution" the final value. The coring tool, cleaning tool, and tensiometer are then returned to the carrying case for transportation and storage. An accessory kit is also provided, which contains a replacement ceramic sensing tip, O-rings, screwdriver, and allen wrench. Gauge shown to display face readout, comes ready for vertical viewing.

SPECIFICATIONS:

2900F1L12 QUICK DRAW SOILMOISTURE PROBE, 12-INCH LENGTH (30 cm) 2.30 lbs. (1.04 kgs)
2900F1L18 QUICK DRAW SOILMOISTURE PROBE, 18-INCH LENGTH (45 cm) 2.70 lbs. (1.22 kgs)
2900F1L24 QUICK DRAW SOILMOISTURE PROBE, 24-INCH LENGTH (60 cm) 3.35 lbs. (1.51 kgs)
The kit that makes tensiometer servicing easy and quick

The 2791K1 formally 2710K1 is a handy and useful addition to any tensiometer. The kit provides all the essentials for servicing a tensiometer. Kit includes a 2005G2 vacuum hand pump, 2034 blue fluid algaecide, a service cap & neoprene tubing for vacuum hand pump attachment, 16 oz.(473 ml) polyethylene filler bottle with tube cap (for insertion into tensiometer for filling), small re-calibration screw driver, and 12 sheets of monthly tensiometer reading logs. The 2790K2 has all the same items as the 2790K1 with the inclusion of the 2790U1 Tensiometer Filling Fixture show below.

SPECIFICATIONS
2790K1 TENSIONIOMETER SERVICE KIT, without 2790U1 Tensiometer Filling Fixture
12” L x12”W x 4”H (30 L x 30 W x 10 H cm), Weight 1.5 lbs. (0.68 kgs)
2790K2 TENSIONIOMETER SERVICE KIT, with Tensiometer Filling Fixture
12” L x12”W x 4”H (30 L x 30 W x 10 H cm), Weight 1.7 lbs. (0.77 kgs)

2790U1 TENSIONIOMETER FILLING FIXTURE
Filling and evacuating a Soilmoisture Tensiometer even made easier

When you need to service at the beginning of a season or simply in the initial prep you want to fill and evacuate the unit in one easy step. The 2790U1 Fixture allows one to do just that. Fill the fixture with water place it over a tensiometer or Quick Draw and apply a vacuum air bubbles into the reservoir and water goes out to fill the unit. Could not be easier.

SPECIFICATIONS
2790U1 TENSIONIOMETER FILLING FIXTURE 9”L x 1”W x 1”H(22.9 cm X 2.5 cm X 2.5 cm)
Weight 0.115 lbs (0.052 kgs)

0240 TENSIONIOMETER INSERTION TOOL
Making installation of the 2700 series Tensiometers easier

The Insertion Tool series can make the installation of the 2700 Series Tensiometers a lot easier and correct. The tools make a 7/8” (2.2 cm) diameter hole, which ensures good hydraulic contact between the tensiometer and the soil. The 0240 Insertion tools are available in different lengths and a “must have” for proper installation of your tensiometers.

SPECIFICATIONS:
0240L30 INSERTION TOOL, 30” (76 cm) length 1 lbs. (0.59 kgs)
0240L54 INSERTION TOOL, 54” (1.3 m) length 2 lbs. (0.90 kgs)
0240L78 INSERTION TOOL, 78” (2 m) length 3 lbs. (1.36 kgs)