ku-pF APPARATUS SP & MP10



AUTOMATED DETERMINATION OF THE UNSATURATED CONDUCTIVITY k_u AND THE WATER POTENTIAL CURVE pF

- Fully automatic laboratory instrument for determining the hydraulic conductivity k_u and the water tension curve (pF) of soil sample rings using the evaporation method. Available as a single place (SP) or multi place (MP10) model with up to 10 soil samples.
- Continuous data collection with minimal supervision
- Compatible with UGT soil sample rings with a volume of 250 cm^3 and a cross-sectional area of 41 cm^2



- The soil sample rings have holes spaced exactly 3 cm apart for inserting the tensiometers
- Minimal soil disturbance thanks to the UGT Tensio 130's exceptionally small ceramic tip
- High-precision weighing technology
- Automatic taring the scale between weighings
- Compact design with a microcomputer and integrated data logger housed in the enclosure
- Easy to use thanks to a removable mounting cone with integrated electric coupling between the carrier basket and the support arm
- Includes UGT software for control and analysis
- The built-in data logger and microcomputer allow for operation without a PC; a PC connection is required only for maintenance, starting tests, and reading data
- Comes with a wide range of accessories for MP10
- Designed for determining saturated hydraulic conductivity using the UGT Hood-Permeameter

KU-PF SP (SINGLE PLACE)



For individual samples.

KU-PF MP10 (MULTI PLACE)



For batch testing of up to 10 soil samples at a time.

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TECHNICAL DATA

PARMETERS	SPECIFICATIONS	
BASIC DEVICE	KU-PF SP	KU-PF MP10
No. of samples / meas. positions	1	1 … 10
Dimensions L x W x H	30 x 45 x 40 cm	100 x 70 x 40 cm
Weight	ca. 13 kg	ca. 40 kg
Material	Housing: Sheet steel, powder-coated	
	Support arm: Aluminum, powder-coated	Rotary star with support arms: Aluminum, powder-coated
Protection class	IP 40	
Operating temperature	+5 … +40 °C	
MEASUREMENT POSITIONS		
Data collection cycle time	1 … 4 min	10 … 40 min
Carrier basket	- For soil sampling rings with an internal volume of 250 cm³, internal diameter Ø72 mm, height 61 mm - Two Tensio 130 units each, supplied with transport/storage tubes - 2-channel measurement processor unit - Weight: approx. 440 g per carrier basket	
Tensio 130 Laboratory tensiometer	- Tension range: 0 … >85 kPa ±0.3 kPa - Ceramic cup: Ø6 × 20 mm, with screw adapter - Measurement takes place during weighing	
Sieve plate	One perforated sieve plate per carrier basket (approx. 44 g) for saturation during sample preparation	
BUILT-IN DATA LOGGER		
Interface	RS-232 interface (115200 baud)	
Storage capacity	Up to 840 days	
POWER SUPPLY		
Supply voltage	230 V	
Power consumption	1.2 A	
FEATURES	- Stepper motor drive for automatic sample positioning - Weighing table with lifting mechanism - Integrated data logger with control functionality for autonomous test operation and measurement data storage	

PRECISION LABORATORY SCALE	SPECIFICATIONS
Dimensions L x W x H	193 x 262.5 x 84.5 mm
Weighing surface	Ø150 mm
Measurement range	0 … 3,200 g
Resolution	0.01 g
Net weight	~3 kg

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