Force Tensiometer

K20

Specifications

Product group specifications	K20
Force measurement	
Maximum load	50 g
Resolution	100 µg
Accuracy (plate method calibration)	-0.1/+0.2 mN/m
Measurement rate	5 Hz
Adjustment (optional)	automated, external weight
Adjustment weight	20 g
Sample stage	
Travel distance	90 mm
Simple platform	yes
Thermostat jacket (optional)	70 mm
Integrated sample stage	yes
Drive	
Travel speed	2.4 to 14 mm/min
Type of motor	DC motor
Software	
LabDesk (optional)	data logger
Software languages	
	English, German

Measurement specifications	K20
Du Noüy ring	
Results	surface tension (SFT)/interfacial tension (IFT)
Range	1 to 999 mN/m
Resolution	0.01 mN/m
Correction methods	Harkins-Jordan, Zuidema-Waters, linear correction, no correction
Wilhelmy plate	
Results	surface tension (SFT)/interfacial tension (IFT)
Range	1 to 999 mN/m
Resolution	0.1 mN/m
Rod method	
Results	surface tension (SFT)/interfacial tension (IFT)
Range	1 to 999 mN/m
Resolution	0.2 mN/m
Liquid density	
Range	1 to 2200 kg/m³
Resolution	1 kg/m³
Precision	±3 kg/m³

General specifications	K20
Temperature control (optional)	
Type	liquid
Range	-10 to 130 °C
Flow-through thermostat	optional
Temperature measurement (optional)	
Range	-20 to 150 °C
Resolution	0.1 °C
Precision	±0.2 °C
Accuracy	±0.5 °C
External sensor	sample liquid
Housing and peripherals	
Built-in bubble level	yes
Windshield doors	yes
Control panel	integrated
Display	320 × 240 px
Environment	
Operating temperature	15 to 30 °C
Humidity	without condensation
Instrument dimensions	
Footprint	270 mm × 350 mm (W × D)
Height	430 mm
Weight (without accessories)	11 kg
Power supply	
Voltage (AC)	100 to 240 V
Power consumption	40 W
Frequency	47 to 63 Hz
Interfaces	
PC	USB 2.0, RS232