

BUBBLE PRESSURE TENSIOMETER – BP100

SPECIFICATIONS



Product group specifications**BP100****Pressure measurement**

Maximum pressure	3000 Pa
Precision	0.05 %
Accuracy	1.3 %
Measurement rate	20 kHz

Sample stage

Travel distance	>110 mm
Simple platform	optional
Thermostated jacket	70 mm (100 mm) ¹⁾

Drive

Resolution	16 nm
Travel speed	0.1 to 500 mm/min
Type of motor	brushless DC servo motor

Software

LabDesk	bubble pressure
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Measurement specifications**BP100****Bubble pressure**

Results	dynamic surface tension vs. surface age	dynamic surface tension at constant surface age
Surface tension range	10 to 100 mN/m	
Resolution	0.01 mN/m	
Precision	1%	
Surface age range	5 to 200000 ms	

Adsorption/diffusion

Results	adsorption constant	diffusion constant
Models	Ward & Tordai	Joos & Rillaerts

¹⁾ optional

General specifications**BP100****Sample dimensions**

Minimum recommended sample volume	15 mL ²⁾
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Temperature control

Type	liquid
Range	-10 to 130 °C
Flow-through thermostat	optional

Temperature measurement

Range	-10 to 130 °C
Resolution	0.01 °C
Precision	±0.05 °C
Accuracy	±0.5 °C
Internal sensor	sample stage
External sensor	sample vessel ¹⁾

Housing and peripherals

Built-in bubble level	yes
Glass windshield doors	yes
Stainless steel measuring compartment	yes
Control pad	yes

Environment

Operating temperature	15 to 30 °C
Humidity	without condensation

Instrument dimensions

Footprint	300 mm × 390 mm (W × D)
Height	585 mm
Weight (without accessories)	13 kg

Power supply

Voltage	100 to 240 VAC
Power consumption	40 W
Frequency	47 to 63 Hz
Compressed air	100 to 400 kPa ¹⁾

Interfaces

PC	USB 2.0
Auxiliary	RS232
Thermostat	quick lock fittings
External gas ¹⁾	quick lock fittings

¹⁾ optional²⁾ sample vessel SV23 recommended

