

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
Thermostat jacket		70 mm
Drive		
Resolution		16 nm
Travel speed		0.1 to 500 mm/min
Type of motor		brushless DC servo motor
Software		
LabDesk		bubble pressure
Software languages		
German, English		

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 200 000 ms

Adsorption/diffusion

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

General specifications

BP100

Sample dimensions

Minimum sample volume	15 mL; sample vessel SV23 recommended
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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 (optional)	sample vessel

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 (AC)	100 to 240 V
Power consumption	40 W
Frequency	47 to 63 Hz
External gas supply (optional)	100 to 400 kPa

Interfaces

PC	USB 2.0
Auxiliary	RS232
Thermostat	quick couplings
External gas (optional)	quick couplings