

# 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
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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 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

**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