

FORCE TENSIOMETER – K20

SPECIFICATIONS



Product group specifications**K20****Force measurement**

| | |
|-------------------|----------------------------|
| Maximum load | 50 g |
| Resolution | 100 µg |
| Precision | 100 µg |
| Measurement rate | 5 Hz |
| Adjustment | automated, external weight |
| Adjustment weight | CP0501: 20 g ¹⁾ |

Sample stage

| | |
|-------------------------|------------------------------|
| Travel distance | 90 mm |
| Simple platform | yes |
| Thermostated jacket | 70 mm (100 mm) ¹⁾ |
| Integrated sample stage | yes |

Drive

| | |
|---------------|------------------|
| Travel speed | 2.4 to 14 mm/min |
| Type of motor | DC motor |

Software

| | |
|---------|-------------|
| LabDesk | data logger |
|---------|-------------|

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/m ³ |
| Resolution | 1 kg/m ³ |
| Precision | ±3 kg/m ³ |

¹⁾ optional

General specifications**K20****Temperature control ¹⁾**

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

Temperature measurement

| | |
|-----------------|-----------------------------|
| Range | -20 to 150 °C |
| Resolution | 0.1 °C |
| Precision | ±0.2 °C |
| Accuracy | ±0.5 °C |
| External sensor | sample liquid ¹⁾ |

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 | 100 to 240 VAC |
| Power consumption | 40 W |
| Frequency | 47 to 63 Hz |

Interfaces

| | |
|----|----------------|
| PC | USB 2.0, RS232 |
|----|----------------|

