

DENSITY/SPECIFIC GRAVITY/CONCENTRATION METER

The DMA 4500/5000 is the first oscillating U-tube density which measures highest accuracy in wide viscosity and temperature ranges.

A unique reference oscillator, in addition to the U-tube oscillator, provides extraordinary long-term stability and makes adjustments at temperatures other than 20°C virtually unnecessary.

By measuring the damping of the U-tube's oscillation caused by the viscosity of the filled-in sample, the DMA 4500/5000 automatically corrects viscosity related errors.

Two integrated Pt 100 platinum thermometers provide the highest accuracy of temperature control, and are traceable to national standards.

The automatic SH-1 or SH-3 sample handling unit is another option for density meters DMA 4500/5000.

Some software features like temperature scan and adjustment at high density or viscosity are only available in the DMA 5000.



DENSITY METER

Specification

Measuring range: 0 to 3 g/cm³

Repeatability, s.d.

Density: DMA 4500 1 x 10⁻⁵ g.cm³
DMA 5000 1 x 10⁻⁶ g.cm³

Temperature: DMA 4500 0.01°C
DMA 5000 0.001°C

Measuring temp.: 0°C to 90°C (32 to 194°F)

Pressure range: 0 to 10 bars (0 to 150 psi)

Environmental conditions (EN61010) [indoor use]

Ambient temp.: + 15 to + 35°C (+59 to + 95°C)

Air humidity: 10 to 90% relative humidity,
non-condensing.

Pollution degree: 2

Overvoltage category: II

Amt of sample in the measuring cell: approx 1 ml

Materials in contact

with the sample: PTFE, borosilicate glass

Typical Measuring time per sample

DMA 4500: approx. 30 seconds

DMA 5000: approx. 40 seconds

Sample throughput: 10 to 30/hr

Dimensions (L x W x H): 440 x 315 x 220 mm

Weight: approx. 21 kg

Power: 50 VA; mains voltage according to technical data shield on rear of the DMA 4500/5000

Fuses: Glass tube fuses 5 x 20 mm;

DIN 41662; 230 V, T 800 mA