

## 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/cm<sup>3</sup>

**Repeatability, s.d.**

**Density:** DMA 4500 1 x 10<sup>-5</sup> g.cm<sup>3</sup>  
DMA 5000 1 x 10<sup>-6</sup> g.cm<sup>3</sup>

**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 4500/500

**Fuses:** Glass tube fuses 5 x 20 mm;

DIN 41662; 230 V, T 800 mA