Chemilab

LABORATORY ANALYSIS: LAB Analysis Equipment

LAB Analysis Equipment Catalogue LAB Analysis Equipment

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^oC 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

Repeatability, s.d.Typical Measuring time per sampleDensity:DMA 45001 x 10^{-5} g.cm ³ DMA 50001 x 10^{-6} g.cm ³ DMA 4500: approx. 30 secondsTemperature:DMA 45000.01°CDMA 50000.001°CDMA 5000: approx. 40 secondsMeasuring temp.: 0° C to 90° C (32 to 194° F)Pressure range:0 to 10 bars (0 to 150 psi)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:2Overvoltage category: II	Measuring range: 0 to 3 g/cm^3	Materials in contactwith the sample:PTFE, borosilicate glass
DMA 5000 $1 \times 10^{-6} \text{ g.cm}^3$ DMA 4500 $3 0 \text{ seconds}$ Temperature:DMA 4500 0.01°C DMA 5000 $3 0 \text{ seconds}$ DMA 5000 0.001°C DMA 5000: $approx. 40 \text{ seconds}$ DMA 5000 0.001°C Sample throughput: $10 \text{ to } 30/\text{hr}$ Measuring temp.: 0°C to 90°C ($32 \text{ to } 194^{\circ}\text{F}$)Dimensions (L x W x H): 440 x 315 x 220 mrPressure range: $0 \text{ to } 10 \text{ bars } (0 \text{ to } 150 \text{ psi})$ Weight: $approx. 21 \text{ kg}$ Environmental conditions (EN61010) [indoor use]Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500Fuses: Glass tube fuses 5 x 20 mm;Pollution degree:2Covervoltage category: IIFuses: Glass tube fuses 5 x 20 mm;	Repeatability, s.d.	while the sample. If IT L, bolosificate glass
Temperature:DMA 45000.01°CDMA 5000:approx. 40 secondsDMA 50000.001°CDMA 5000:approx. 40 secondsMeasuring temp.:0°C to 90°C (32 to 194°F)Dimensions (L x W x H): 440 x 315 x 220 mrPressure range:0 to 10 bars (0 to 150 psi)Weight:approx. 21 kgEnvironmental conditions (EN61010) [indoor use]Ambient temp.: + 15 to + 35°C (+59 to + 95°C)Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500Pollution degree:2Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500	Density: DMA 4500 $1 \times 10^{-5} \text{ g.cm}^3$	Typical Measuring time per sample
DMA 50000.001°CSample throughput:10 to 30/hrMeasuring temp.:0°C to 90°C (32 to 194°F)Dimensions (L x W x H): 440 x 315 x 220 mrPressure range:0 to 10 bars (0 to 150 psi)Weight:approx. 21 kgEnvironmental conditions (EN61010) [indoor use]Measuring temp.: + 15 to + 35°C (+59 to + 95°C)Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500Pollution degree:2Power: S0 I as tube fuses 5 x 20 mm;	DMA 5000 1 x 10^{-6} g.cm ³	DMA 4500: approx. 30 seconds
Measuring temp.:0°C to 90°C (32 to 194°F)Sample throughput:10 to 30/hrPressure range:0 to 10 bars (0 to 150 psi)Dimensions (L x W x H): 440 x 315 x 220 mrPressure range:0 to 10 bars (0 to 150 psi)Weight:approx. 21 kgEnvironmental conditions (EN61010) [indoor use] Ambient temp.: + 15 to + 35°C (+59 to + 95°C) Air humidity: 10 to 90% relative humidity, non-condensing.Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500Pollution degree:2 Covervoltage category: IIFuses: Glass tube fuses 5 x 20 mm;	Temperature: DMA 4500 0.01 ^o C	DMA 5000: approx. 40 seconds
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Pressure range: 0 to 10 bars (0 to 150 psi) Weight: approx. 21 kg Environmental conditions (EN61010) [indoor use] Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500 Ambient temp.: + 15 to + 35°C (+59 to + 95°C) Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500 Pollution degree: 2 Pollution degree: 2 Overvoltage category: II Fuses: Glass tube fuses 5 x 20 mm;	Measuring temp.: $0^{\circ}C$ to $90^{\circ}C$ (32 to $194^{\circ}F$)	Dimensions (L x W x H): 440 x 315 x 220 mm
 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 Power: 50 VA; mains voltage according to technical data shield on rear of the DM 4500/500 Fuses: Glass tube fuses 5 x 20 mm; 	Pressure range: 0 to 10 bars (0 to 150 psi)	
Overvoltage category: II	Ambient temp.: $+ 15 \text{ to} + 35^{\circ}\text{C} (+59 \text{ to} + 95^{\circ}\text{C})$ Air humidity: 10 to 90% relative humidity,	technical data shield on rear of the DMA
Amt of sample in the measuring cell: approx 1 ml	Pollution degree: 2 Overvoltage category: II	Fuses: Glass tube fuses 5 x 20 mm; DIN 41662; 230 V, T 800 mA