

DMA 38 : precision density meter with built-in thermostat / Anton Paar K.G.

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Precision
Density Meter

DMA 38

with built-in thermostat



Accuracy: $\pm 0.001 \text{ g/cm}^3$

AD PAAR

MICROCOMPUTER CONTROLLED
DENSITY METER
with built-in solid state thermostat

DMA 38

MEASURING PRINCIPLE
PAAR mechanical oscillator method

20 YEARS OF EXPERIENCE in design of density meters led to a very user friendly instrument: it's smartness minimizes the possibility of errors.

OPERATION of the instrument is supported by a built-in microcomputer. It takes care for sample temperature and correct calibration.

THE NEW DESIGN is easy to use showing how to calibrate and calling for recalibration if it has been overlooked.

APPLICATION

- determination of true density and density related values
- concentration measurement (e.g. in food, beverage, photo, pharmaceutical, cosmetic, polymer, nuclear and petrochemical industries)
- quality control (e.g. in pharmaceutical and general chemical industry)

FEATURES AND BENEFITS

- built-in solid state thermostat
 - temperature is controlled by a built-in microcomputer
 - temperature readout is available for calculation and calibration
 - no problems with external thermostat baths
 - the internal thermostat saves space on lab bench
- minimum sample size (0.7 ml)
- In addition to true density the instrument can display any density related magnitude in physical units. A large variety of customized options is available from stock.
- SP3 sample changer (optional) allows automatic operation

SPECIFICATIONS

Measuring range:	0. . . 3 g/cm ³
Accuracy:	$\pm 1 \times 10^{-3}$ g/cm ³
Sample size:	approx. 0.7 ml
Sample temperature range:	+15. . . +40 °C
Precision of internal thermostat:	± 0.1 °C
Temperature equilibrium time:	0.5. . . 3.5 min
Typ. test or cycle time:	1. . . 8 min
Pressure:	up to 10 bars (150 psi)

Digital display reads

two magnitudes: true density and any other (also non-linear) density related value (customized programming)

Digital data output: Two RS 232 C, the DMA 38 can be interfaced to an external PC (IBM compatible) and/or printer

Dimensions: 280 x 210 x 270 mm

Weight: approx. 10 kg

Patents: Austrian patent No. 260662, Germany patent No. 1648953, British patent No. 1189083, French patent No. 1579521, US-patent No. 3523446, further patents in pending.

Specifications subject to change without notice.

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Instruments for - density/concentration - preparation for electron microscopy
- rheology - fibre testing
- X-ray structure analysis - medical equipment
- preparation for trace analysis - astronomy ... and others

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