

Automatic Density Meter

test method

Density is a fundamental physical property that can be used in conjunction with other properties to characterize the quality of crude oils, light and heavy fractions of petroleum and petroleum products. The test method covers the determination of the density or relative density of crude oils, petroleum distillates and viscous oils that can be handled in a normal fashion as liquids at test temperatures between 15 and 35°C.

specifications

Conforms to the specifications of:

ASTM D891; D1250, D4052, D5002, D5931;

ISO 12185 DIN 51757; IP 365

Measurement Ranges:

Density: 0 to 3 g/cm³

Temperature: 0°C to 100°C (controlled via Peltier)

Pressure: 0 to 10 bars

Measurement Modes: Continuous, Single, Multiple

Measurement Technique: Mechanical Oscillating U-Tube

Measurement Time: 30 to 60 seconds after thermal equilibrium

Accuracy:

K86200: Density: 0.00005 g/cm³

Temperature: 0.02°C

K86201: Density: 0.0001 g/cm³

Temperature: 0.03°C

K86250: Density: 0.00001 g/cm³

Temperature: 0.01°C

Repeatability:

K86200: Density: 0.000005 g/cm³

Temperature: 0.01°C

K86201: Density: 0.00001 g/cm³

Temperature: 0.02°C

K86250: Density: 0.000002 g/cm³

Temperature Selectable: 0.001°C

ordering information

catalog no. description

K86200 Automatic Density Meter, Model A

K86201 Automatic Density Meter, Model B

K86250 Automatic Density Meter, Model C

accessories

K86202 21 CFR Part 11 Option

K86203 Refractometer Control Module

K86204 Heated Interface Attachment

K86206 Bar Code Scanner - USB

K86207 Fluke Hart Thermometer

Consists of handheld digital thermometer, temperature probe and calibration certificate



K86200 Automatic Density Meter

Resolution:

K86200: Density: 0.00001 g/cm³

Temperature: 0.01 C

K86201: Density: 0.0001 g/cm³

Temperature: 0.01 C

K86250: Density: 0.000001 g/cm³

Temperature: 0.001 C

Minimum Sample Volume: less than 1 ml, approximately

Wetted Materials: Borosilicate glass, Teflon (PTFE, ECTFE)

Display: 10.4 inch diagonal, 800-600 pixels, color, Flat Panel Monitor with Resistant Touch Screen Interface, 200 bit brightness, gasketed for spill protection.

Air Supply: Integrated Air Compressor for U-Tube drying

Communication Interface:

Touch Screen User Interface

5 – USB Ports

1 – Cat. 5 Port

2 – RS232 Ports

Keyboard, Bar Code Scanner,

Mouse, Network Capabilities

Video and Magnification: Video assisted view of cell, capable of approximately 10X magnification

Automatic Bubble Detection: Automatically warns operator of bubbles

Internal Memory: 8 GB Non-removable Compact Flash

Electrical Requirements

85 to 260 VAC; 48 to 62 Hz 150- 200 Watts

Dimensions l x w x h, cm

46.61 cm (L) x 29.97 cm (W) x 35.30 cm (H)

Shipping Information

Shipping Weight: 50 lbs. (23 kg)