

Data sheet

ACE A Breathalyzer



Description

The ACE A breathalyzer is an easy to use alcohol measuring device with electrochemical sensor. The device measures the alcohol concentration in the air breathed and calculates the blood alcohol concentration from it.

This device provides test results with a measuring tolerance of $\pm 0.075\%$ (per mil) at the reference value of 1.00 per mil and 25°C ambient temperature. The measuring unit ‰ (per mill) = basic setting in the EU.

The measurement results determined in per mille are displayed as a 3-digit numerical value with 2 decimal places and can be interpreted 1:1 (e.g. the display shows the value 0.36 = 0.36 per mille). Measured values in % BAC are displayed as a 4-digit number with 3 decimal places.

The electrochemical sensor integrated in the alcohol tester can be calibrated. To maintain the measuring accuracy of this instrument and the sensor warranty, we recommend regular calibration. You can send the instrument to the service address www.alkomat.net for calibration. The instrument will continue to function without calibration, but will become less accurate.

Breath tests should be performed using clip-on mouthpieces (a new mouthpiece should be used for each test for hygienic reasons and to avoid false readings).

The device should only be used in accordance with the instructions in the user manual. All measured values determined by this breathalyzer are always for reference only and are not legally binding!

The advantages of the ACE A

- One-button operation (switching on and off, display of already completed measurements, everything is done by using only one button)
- The control knob can be reached with the thumb by right- and left-handed people
- Large, illuminated, three-digit LCD display
- The measurement result is displayed in per mill [‰] to two decimal places
- Display of warnings about flow (air flow), readiness for measurement and battery alarm
- After the measurement, the device switches off automatically or you switch off the device manually by pressing the start button

Target groups

Private persons from young to old: The ACE A is the perfect companion at parties and events and an ideal breathalyser for the price-conscious user who nevertheless expects reliable results.

Scope of delivery

- 1 Electrochemical breathalyzer ACE A
- 2 AAA batteries (1.5V)
- 3 Mouthpieces
- 1 Quick start guide (in German & English)
- 1 Operating manual (multilingual)

Technical data*

Sensor	Fuel Cell Sensor
Accuracy	+/- 0.075‰ with reference to 1.00‰ at 25°C (‰ = default setting) OR +/- 0.0075% BAC (Blood Alcohol Concentration) with reference to 0.100% BAC at 25°C OR +/- 0.0375mg/l with reference to 0.50mg/l at 25°C
Detection Range	0.00 up to 4.00‰ (per mill = default setting) OR 0.000 up to 0.400% BAC (USA) OR 0.00 up to 2.00mg/L (UK)
Warm-up Time	Within 15 - 20 seconds at 0.5‰, it may vary depending on the value of per mill / BAC which was measured
Dimension	109 x 51 x 18mm (L x W x H)
Weight	84g (battery included)
Power Supply	2 pieces of 1.5V AAA Alkaline batteries (= energy for up to 1000 tests)
Working Temperature	5°C to 40°C
Storage Temperature	0°C to 40°C
Calibration	Every 12 months or after 500 tests. For a calibration service you can send the device to ACE Instruments (see www.alkomat.net).

* The technical data are subject to change without prior notice for functional improvements.