The "EC3000" is perfectly suited for analytical HPLC and for a wide range of clinical applications. Automatic functions make the detector ideal for routine analysis. Various operation methods make it easy to optimize measuring parameters for research applications.

The detector is ideal for detecting aromatic alcohols and amines present in indole derivatives, mercaptans, vitamins, and purine derivatives.

The basic design contains a classical three-electrode circuit with automatic programmable flow cell purification.

All measurement and cell programs can be combined, programmed, and saved as desired. The residual current compensation is carried out with an autozero or programmable offset. Depending on the type of application, other options can be realized such as saving baselines to determine gradient correction or automatic determination of the optimum potential in the auto-increment mode.

Extensive self-tests upon instrument installation and an automatic autozero function at every start-up guarantee stable and reliable unattended routine analysis.

KNAUER's amperometric detector with a thin layer cell and three-electrode circuit is designed for high-precision reliable analysis.
# Specifications and Technical Data

## Detection:
- Amperometric with a three-electrode circuit

## Flow Cell:
- **Working Electrode:** glassy carbon in Kel-F, optional: Ag, Au, Cu, Ni, Pt in Kel-F
- **Auxiliary Electrode:** high-tensile stainless steel
- **Reference Electrode:** silver/silver chloride, refillable
- **Diaphragm:** base stable zirconia
- **Cell Volume:** 1.5 µl with 30 µm distance mask, optional 0.75 µl with 15 µm spacer or 2.5 µl with 50 µm spacer
- **Materials:** stainless steel, PTFE, PEEK, zirconia, glassy carbon, Kel-F

## Electronics:
- **Working Potential:** 0 up to ±2.00 V
- **Measuring Range:** ±10 pA up to 20 µA
- **Autozero Range:** up to ±50 µA
- **Manual Offset:** up to ±50 µA
- **LCD Display:** all relevant measuring data is simultaneously displayed
- **Filter:** 5 Hz to 0.05 Hz (0.2 to 50 s)
- **Inherent Noise:** <0.3 pA
- **Purification Potential:** 0 to ±2.00 V
- **Purification Duration:** 1 to 100 s
- **Purification Cycle:** 1 to 10 cycles each
- **Measuring Program:** 0 to 99
- **Analog Output:** ±1 V per measuring range
- **Power Supply:** 12 V DC 2 A

## Dimensions and Weight:
- **Dimensions:** 260 x 160 x 510 mm (W x H x D)
- **Weight:** 8.1 kg

## Ordering Information
- **Article:** A1085
- **ClinLab® Amperometric Detector, Model EC3000, flow cell included**