**Science with Passion** 

KNALER

# **KNAUER** Product Range



ANALYTICAL HPLC/UHPLC SYSTEMS HPLC/UHPLC COLUMNS PREPARATIVE HPLC SYSTEMS FPLC SYSTEMS MULTI-COLUMN CHROMATOGRAPHY (SMB) DOSING AND METERING PUMPS OSMOMETRY









## **Analytical HPLC/UHPLC systems**

Efficient and adaptable - with ULDC option

KNAUER AZURA® liquid chromatography instruments are designed to support and facilitate your work. Whether doing routine analysis or demanding separation tasks, AZURA systems are the right tool to overcome your analytical challenges. Choose between different gradient forming technologies and maximum flow rates to find the best configuration for your task. A large variety of detectors is available.

#### **Preparative HPLC systems**

**Customized purification** 

AZURA preparative systems are the perfect solution for frequently changing separation tasks - from milligram to kilogram scale. These prep HPLC systems combine flexibility and reliability. The systems can be configured freely choosing different materials, flow rates, valves, and detectors. Due to the flexible design of the devices, parts like pump heads or flow cells can be easily exchanged. All components of the compact system e.g. can be integrated into the pilot-scale system.

#### **FPLC systems**

The flexible FPLC platform for protein purification

The AZURA FPLC with its biocompatible/metal-free components is the perfect choice for any protein purification task. Multiple functionalities such as automatic sample injection via autosampler, column switching, buffer and sample selection, as well as fraction collection enable the user to automate purification processes. A large range of different detectors make your target molecules visible. Different flow rates and compatibility to columns from all vendors offer maximum flexibility.

# Multi-column chromatography (SMB)

Continuous separation for higher productivity and purity

Simulated moving bed chromatography is increasingly applied as a separation technique in the pharmaceutical industry, production of fine chemicals and in the field of bioengineering. SMB is a method in process chromatography that enables substance mixtures to be continuously separated and extracted in two fractions. By repeated use of the SMB process each partial fraction can be separated into a further fraction – down to binary substance mixtures. It's efficiency is significantly higher than batch chromatography, through better utilization of the column stationary phase.

## High pressure pumps for dosing and HPLC

Compact and reliable

Exchangeable pump heads made of stainless steel, titanium, or ceramic provide a maximum of flexibility and easy maintenance. Models with electronic compensation drive offer very low pulsation. AZURA dosing pumps are available for state-ofthe-art HPLC, and for lab-scale purification tasks up to 1000 ml/ min. A pump especially useful and reliable for column packing is our pneumatic pump.

## **High pressure switching valves**

Universal hightech drive

KNAUER valves are designed for a wide range of chromatographic and dosing applications. Flexibility is provided by a choice of different materials and sizes. Valves are driven either manually or automatically through a valve drive.

#### **Chromatography Data Systems**

Choose your software drivers and control software

KNAUER modules can be controlled via various CDS. Above that, Mobile Control is the right solution as control software if you need a basic, easy-to-use, and cost-effective software for your LC system.

#### **Freezing point osmometer**

Determination of osmolality of aqueous solutions

KNAUER is one of the pioneers in the field of osmometry and has been known for its reliable and user-friendly instruments for many decades.

The freezing point osmometer K-7400S allows the easy and fast determination of the osmolality of various aqueous solutions. The proven technology of freezing point determination in combination with the robust and intelligent design of the device allows reproducible measurements.

Would you like a pump or a detector with your own design and logo? We are an established **OEM** partner! For more info visit **www.knauer.net/oem** 

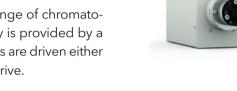














# **About KNAUER**

Based in Berlin, KNAUER is a medium-sized company that has been serving the sciences since 1962. We develop and manufacture scientific instruments of superior quality for liquid chromatography and other laboratory tasks. The product range includes systems and components for analytical HPLC/UHPLC, preparative HPLC, fast protein liquid chromatography (FPLC), multi-column chromatography/simulated moving bed (SMB), as well as equipment for dosing and osmometry.

# Sustainability & ecological commitment

We are committed to protecting the environment for ourselves and our children. KNAUER contributes to the conservation of a healthy environment by basing our work on an environmental management system according to DIN EN ISO 14001. The KNAUER quality management system according to DIN EN ISO 9001 makes sure that we continuously manufacture products in the best quality possible. As a family business with around 160 employees, KNAUER focuses on sustainability and takes responsibility for our future.

#### Some of our ecological activities:

- The regular creation of an input and output balance for the determination and evaluation of energy and resource flows
- Environmentally friendly product development, energy-efficient production, and shipping with biodegradable packaging materials and reusable packaging with local suppliers
- Fixed specifications for the development of new products according to ecological aspects such as low solvent consumption, repairability, and longevity of the products
- Complete modernization of the company building included thermal insulation, new windows, electric blinds, and a green rooftop, which resulted in a 50% heating energy saving

- 100 % green electricity and generation of solar power with our photovoltaic system on the roof
- Guidelines for business travel from an environmental, economic, and social perspective
- Tips and instructions for clients to reduce solvent consumption during instrument use
- Environmentally compatible working and manufacturing of HPLC instruments and accessories, e.g. by using energy-efficient working equipment and reducing the use of solvents and harmful substances
- A life cycle assessment to optimize the manufacturing process and concentrate on electricity saving components

## Sustainability: #KNAUERforFuture

Many KNAUER employees have good ideas for sustainability, and so we all get better together every year. We would like to inspire YOU to implement sustainability in many areas of your company too. May these short videos keep you entertained and invite you to act! **www.knauer.net/sustainable** 

#### KNAUER

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