



## KNF Launches FM 50 Series for High-Precision Liquid Metering

**January 21, 2025 – KNF has introduced a new series of OEM liquid diaphragm pumps. The FM 50 is designed to offer high precision and reliability for demanding applications.**

### Enhanced Accuracy and Customization

The FM 50 series enhances liquid metering accuracy and customization, utilizing advanced pump drive technology for easy system integration and durability. The pumps deliver a flow rate of 100-500 ml/min with a setpoint accuracy of  $\pm 2\%$  and maintain a linear flow rate even under varying conditions, with a back pressure of up to 1 bar.

### Advanced Motor Technology

The FM 50's motor allows for control via voltage or PWM signal, with standard settings providing 100 ml/min at 1 V or 20% PWM and 500 ml/min at 5 V or 100% PWM. The motor can be factory-parameterized to meet specific customer requirements, including a 2-point calibration for customized flow characteristics.

### Versatile and Reliable

The FM 50's polypropylene head, combined with EPDM or PTFE diaphragms and EPDM or FFKM valves, ensures safe transfer of most liquids. The pump is leak-tight, self-priming, and run-dry safe, making it suitable for transferring and metering fluids in medical devices, diagnostic and analytical instruments, inkjet technology, cleaning and disinfection, and food and beverage applications.

### About the KNF Group

KNF is the technology leader in the field of diaphragm pumps. Its portfolio includes OEM, process and laboratory solutions for gas, liquid and vacuum applications in the medical, inkjet, gas analysis, food and chemical industries. Founded in Germany in 1946, the family-owned group has 24 locations worldwide and employs more than 900 people. With its highly customizable solutions, combined with global presence and deep local market expertise, KNF provides cutting-edge pump solutions for the most demanding applications.

<https://knf.com/>



The new KNF FM 50 series is ideal for demanding liquid metering applications. *Photo credit: KNF*



This illustration shows the change in flow (l/min) as a function of the input signal (PWM or control voltage). Depending on the desired control characteristics, customers can modify the standard parameterization (black). Within a certain range (blue area), customer-specific pump characteristics (example in green) can be defined. This is done using two points that define the linear function. *Photo credit: KNF*