

## LEWA diaphragm pumps for liquid-process- chromatography in the pharmaceutical industry



*LEWA gradient mixer with precise stroke adjustment for high-pressure liquid chromatography (100 bar)*

The different downstream processes are increasingly taking a key role in the production of pharmaceutical and bio-technological products and fine chemicals. For years LEWA has supplied metering pumps and metering systems for chromatographic separation processes on an industrial scale. These pumps and systems have proven excellently due to the precise, reproducible metering accuracy, the wide adjusting range and the high product quality. Among others they are used for the following processes:

### **Low- and medium-pressure chromatography**

- e.g. preparative liquid and column chromatography, normal and reversed phase chromatography and ion exchange chromatography

### **High pressure chromatography**

- high-pressure liquid chromatography (HPLC)
- preparative counter-current chromatography with supercritical carbon dioxide SFC (supercritical fluid chromatography)

Here LEWA supplies metering- and process diaphragm pumps as well as complete metering systems, e.g. gradient mixers for the production of gradients or customized chromatography systems, which are designed exactly according to customer requirements.

### The outstanding advantages of the LEWA pumps are

- high-precision flows (gradually resp. linearly adjustable)
- precisely reproducible positioning accuracy (0.01%)
- very wide, reproducible adjusting range
- very high availability and reliability
- standard pump head material 1.4571 (316Ti)  
other materials are available
- hermetically tight
- inline cleanable (CIP), venting optional
- hygienic pumps available (wetted parts are electro-polished,  
ASME-BPE, EHEDG-certified)
- ex protection
- design for clean room installation
- complete skid design with all process relevant accessories for integration  
into chromatography installations available
- comprehensive documentation for qualification and validation
- FAT (Factory Acceptance Test) and SAT (Site A.T.) for systems
- worldwide, qualified after sales service

The excellent product properties, decades of experience and the extensive know-how of the technical global market leader make LEWA a reliable partner in industrial liquid chromatography.



**LEWA**  
pumps + systems

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