

Product information

Modular Dosing System · MoDoS



Description

The Modular Dosing System (MoDoS®) from HNP Mikrosysteme is a tailor-made pump system for continuous delivery in fine chemical and pharmaceutical production. MoDoS® is synonym for a design concept and a modular component system, forming the base for the concept development of a customized pump module. The manufacturer-independent selection of the sensors for flow, pressure, temperature, among others is based on the given process parameters. MoDoS® expands the system boundary from pump towards pumping system. Actuators are supplemented by measurement and control technology, and offered as a complete solution for process-reliable pumping in the low flow range.

Advantages

- Ready-to-use unit
fully equipped and assembled system in a rigid framework
- Modular system of components
individually equipped with micro annular gear pump, filters, sensors (e.g. flow, pressure, temperature) valves, fluid connections
- Chemical resistant materials
material combinations from stainless steel / hard metal to alloy C22 / ceramics, optional titanium
- High process stability
mass or volume flow controlled micro annular gear pumps
- Standard fluidic interfaces
screw-in fittings or aseptic µ-Clamp
- Local controller
integrated controller allows stand-alone mode as well as integration into external process control systems
- Open design
easy access and exchange of all components

Applications

- Micro process technology
- Fine chemistry
- Pharmaceutical industry
- Mini plant technology

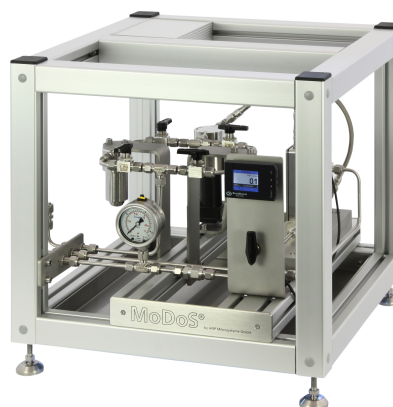
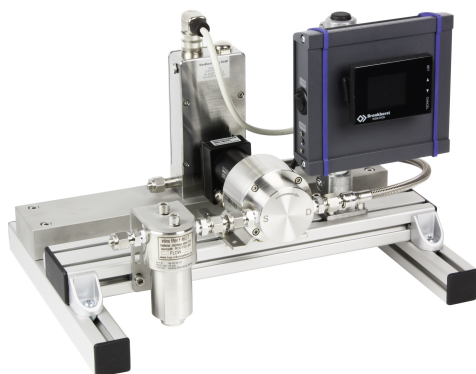
Technical data

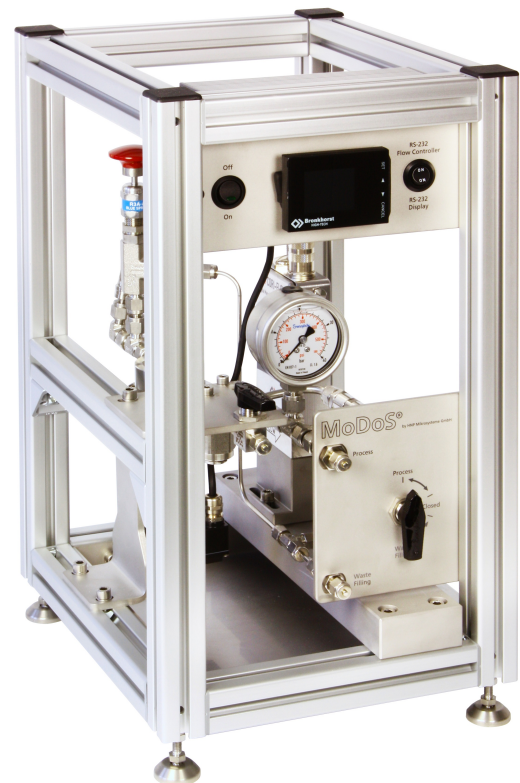
Pumps	Micro annular gear pumps of hermetic inert and high performance series for volume flows from 0.003 to 1152 ml/min at differential pressures up to 80 bar *
Filter	Filters in stainless steel, alloy C22, PTFE or glass *
Mass flow controllers	Measurement principal Coriolis, thermic, ultra sonic *
Fluid connection	1/4"-28 UNF, 1/8" NPT, 3/8" NPT *
Liquid temperature range	-20 ... +150 °C (-4 ... 302 °F) *
Viscosity range	0.3 ... 1,000 * mPas
Wetted parts	Material combinations: stainless steel / hard metal, alloy C22 / ceramics, optional titanium *
Power supply	24 V DC, 240 V AC, 400 V AC *
Display	Mass flow *
Controller and interfaces	Mass flow control with touch display, potentiometer, 0-10 V, 0(4)-20 mA, RS-232, CAN-Bus *
Remarks	* depending on the components selected

Notice

Even if single parameters are within the indicated performance range of technical data, certain parameter combinations may not be achievable. Single parameters may exceed their indicated performance range under adequate circumstances. For detailed evaluation please contact HNP Mikrosysteme. Actual performance may vary. Specifications are subject to change without notice.

Versions and examples





Patents and trademarks

Micro annular gear pumps (and housings) are protected by assigned patents: EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 001 041 B4; CN 103 348 141 B; US 10,012,220 B2; CN 103 732 921 B; US 9,404,492 B2; US 6,520,757 B1.

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