

PipeJet™ Evaluation Kit

Getting started with PipeJet™ technology

The PipeJet™ technology enables the contact-free dosage of small amounts of liquids in the range from a few nanoliters up to some microliter. Key element of the technology is an elastic pipe with a well-defined inner diameter that is squeezed with high dynamics by a piezo stack actuator. By this displacement the liquid is driven out through the end of the pipe as a free jet. The dosed volume is independent of the viscosity or the surface tension over a wide range.

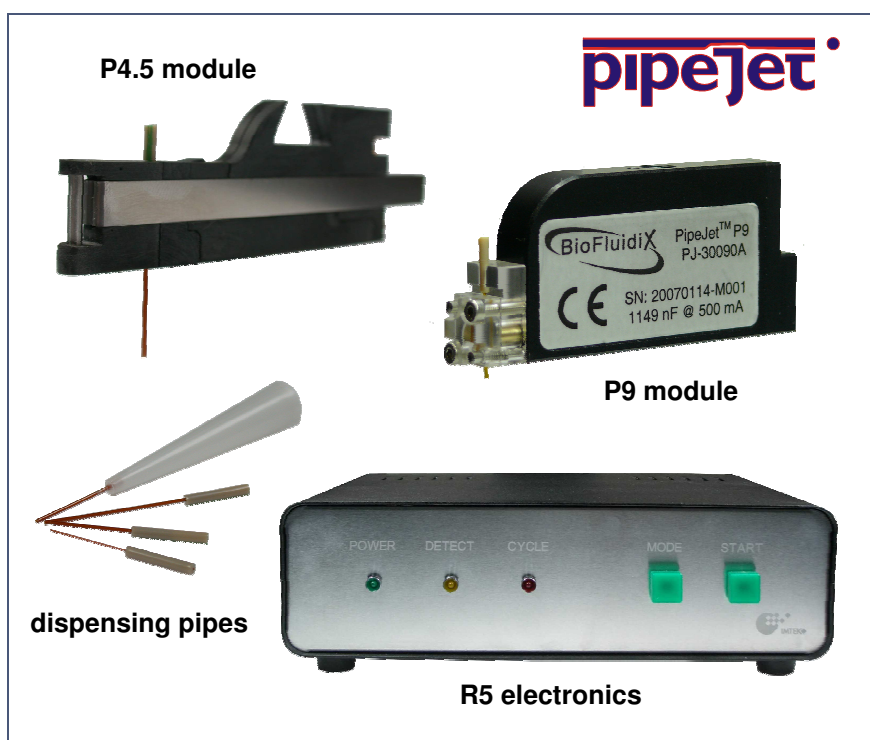
The PipeJet™ Evaluation Kit contains all necessary material to get started with PipeJet™ technology. Whether you need a single channel dispenser for scientific experiment, for integration in an existing automation system, for designing a production machine or for evaluating PipeJet™ technology as OEM component in your own product: The PipeJet™ Evaluation Kit contains everything to set up a nanoliter dispenser with the unique PipeJet performance at once.

The PipeJet™ Evaluation Kit comes with reservoirs, tubing material, pipes of different lengths, accessories, PipeJet™ module P4.5 or P9, control electronics R5, software and a detailed manual with pictures and hints for trouble shooting. With the purchase of each PipeJet™ Evaluation Kit a one day hands-on training at BioFluidix is included free of charge. This training helps our customers to fully exploit the potential of this exciting dispensing technology and to share our know-how on micro dispensing.

BioFluidix offers free dispensing tests to any seriously interested customers before purchase of an Evaluation Kit to validate liquid compatibility and to prove the dispensing performance with any liquid. Please contact our sales and service staff for offers and to select the appropriate PipeJet™ for your application.

PipeJet™ - Specifications

Dosage range:	5 nl - 100 nl adjustable (single shot volume, range depends on tube type)
Dosage frequency:	Typically 50 Hz (at 50 nl)
Pitch	4.5 mm (type P4.5) or 9 mm (type P9)
Viscosity range:	1 – 1000 mPas (dependent on tube dimensions)
Surface tension range:	30 mN/m – 76 mN/m
Precision / Accuracy:	< 5 nl / < 10 nl (including tip to tip variation)
Tested Media:	Aqueous solutions, solvents, DMSO, beads, cells, PEG, THF, Acetonitril, Ethanol, Methanol ...



Electronics R5 - Specifications

Electrical output	Voltage control 0 to 150 V @ load currents up to 8 A / unload currents up to 1 A, timing precise to 1 µs
Control parameters	Load / unload current, shot frequency, shot number
Software / Communication	Simple GUI, Windows DLL, human readable protocol
Interfaces	RS232 or USB (on request) for communication, time shift able TTL trigger in/out
Power supply	90 - 250 V AC, 50 / 60 Hz, 1 A

Contact	BioFluidix GmbH		2008 / 01
	Georges-Koehler-Allee 106	phone: + 49 761 203 7282	web: http://www.biofluidix.com
	79110 Freiburg; Germany	fax: + 49 761 203 7284	e-mail: info@biofluidix.com