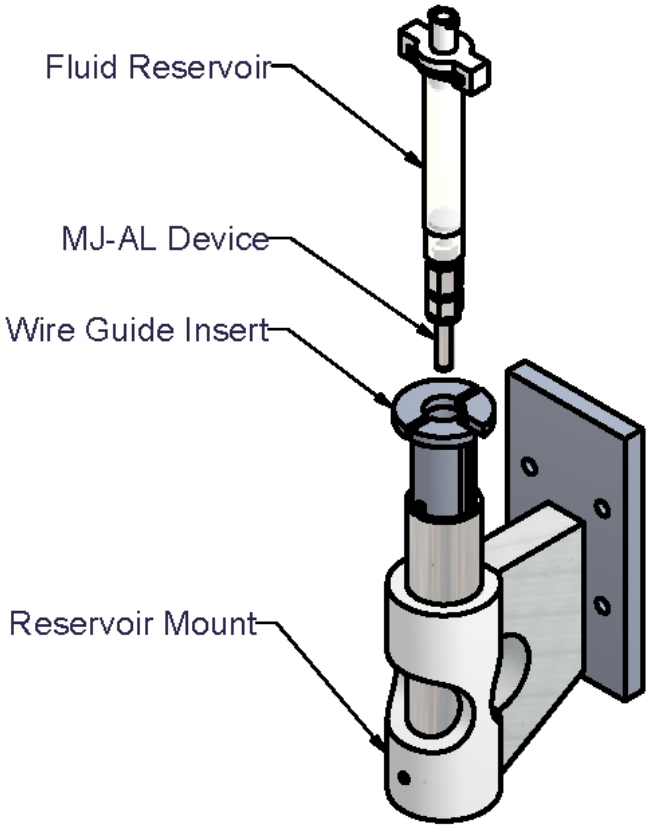
Product Description



The PH-41 is a cartridge style, low-temperature drop-on-demand printhead. It is designed for dispensing fluids at room temperature, or optionally up to 50°C. The reservoir attaches directly to the dispensing device, forming a replaceable assembly that allows quick change out and storage, permitting multiple fluids to be printed without having to clean or disassemble the printhead. An integrated filter enhances reliability.

A broad range of materials can be dispensed using the PH-41, including bioactive, optically active, sensor, and other materials. Drop volumes ranging from 5 pL to as high as 0.5 nL have been dispensed.

Standard Features

MJ-AL dispensing device, filter, and reservoir form replaceable cartridge assembly for quick change out and storage, simplifying printing of multiple fluid; all parts cleanable / reusable ; 2.5 mL capacity polypropylene reservoir, unused fluid recoverable; 0.5ml minimum load volume; integrated, replaceable / removable 5µm stainless steel mesh filter ; compatible with Jetlab® II, and Jetlab® 4 family.

Available Options

MJ-AL devices available in orifice diameters 10-80µm; filter material and pore size selectable; optional heater element & thermocouple for operation to 50°C.

Ordering Information

PH-41 & PH-41H

Cartridge style, low temperature drop-on-demand printhead. Includes one polypropylene reservoir. H for heated option.

MJ-AL-01-xxx

Low-temperature device with Luer fluid fitting, xxx denotes orifice diameter in microns. Includes 5µm stainless steel mesh filter element.

Support Equipment

The PH-41 may be combined with a fluid reservoir and the following components and subsystems to create a functional subsystem.

CT-M3-02

JetDrive™ III controller, including command set and Windows based stand-alone control program, JetServer™. Includes built in strobe delay & level 02 firmware (complex waveforms).

CT-PT-21

Pressure / Thermal Controller with one manual pneumatic channel.

CT-PT-A1

Electronic Pressure Controller and Pressure Mode Selector, single channel.

CM-VS-03

Basic Optics System: CCD camera, power supply, lens, fine focus, mounting block.

Additional Information

Brochure (PDF)

Drawings with dimensions

Equipment Selection Guide

Integration Guide

Cleaning Guide