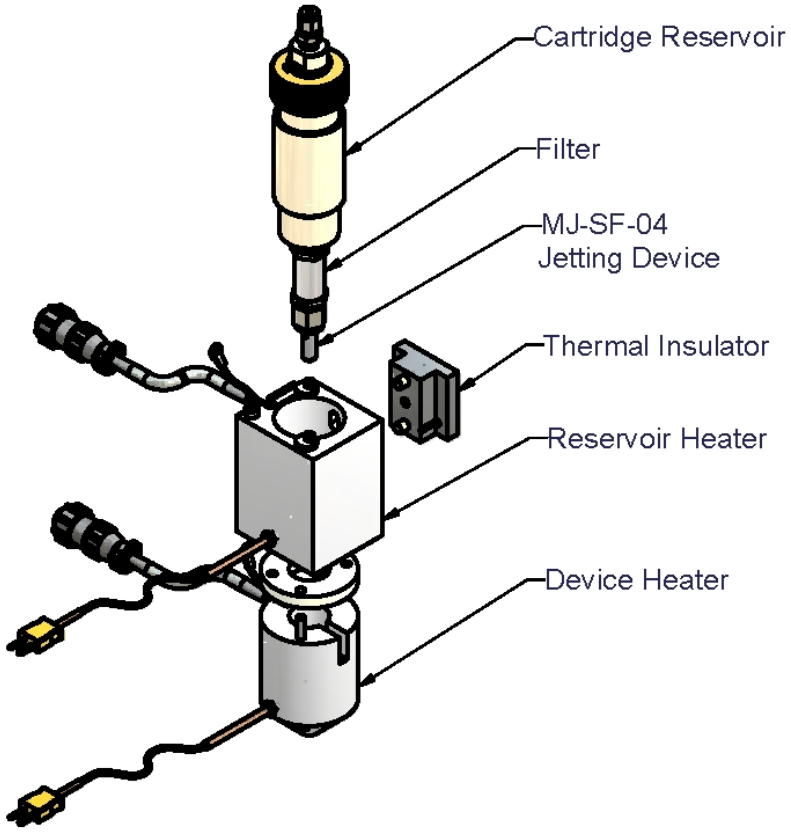
Product Description



The PH-04a Polymer Jet™ high-temperature, drop-on-demand printhead is designed for dispensing polymers and other materials at elevated temperature. Materials that must be heated above 50°C in order to melt and/or lower the viscosity of the fluid to less than 20cp can be dispensed using the PH-04a Polymer Jet™ printhead. Adhesives, optical polymers for light guides and lenses, and optically active materials have all been jetted successfully with the PH-04a.

Drop volumes ranging from 5 pL to as high as 0.5 nL have been dispensed. The PH-04a uses the same interchangeable high temperature dispensing device, the MJ-SF, as does the PH-05a high temperature printhead with inert gas injection

Standard Features

Operation to 240°C; 30 mL capacity stainless steel reservoir; separate heaters for reservoir and dispensing device, allowing different operating temperatures; integrated, high-capacity, 10µm stainless steel filter; compatible with Jetlab® 4xl, Jetlab® 4xl-A, and Jetlab® II.

Available Options

MJ-SF devices available in orifice diameters 10-80µm; Filter material and pore size selectable.

Ordering Information

PH-04a

Polymer Jet™ drop-on-demand printhead. Includes one cartridge (with filter).

MJ-SF-04-xxx

High-temperature device with VCO fluid fitting, xxx denotes orifice diameter in microns.

Support Equipment

The PH-04a 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 and with two T-01 temperature controllers.

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