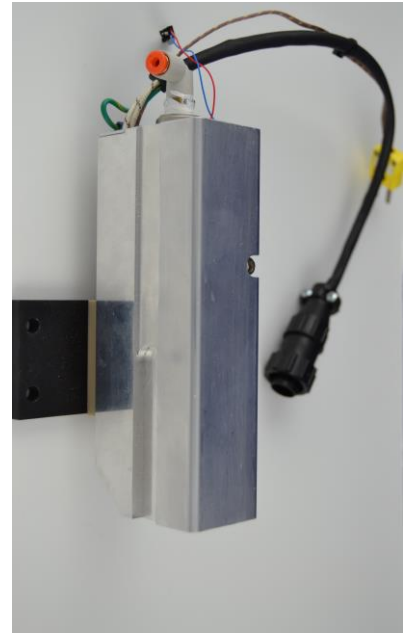


# PH-41HT

## Cartridge Style High Temperature Printhead

### Product Description

The PH-41HT is a cartridge style, high-temperature drop-on-demand printhead designed as a replacement for bulkier and more expensive PH-04a printhead for dispensing fluids that does not require heating above 150°C. The reservoir attaches directly to the dispensing device, forming a replaceable assembly that allows quick change out and storage. An integrated filter enhances reliability. A broad range of materials can be dispensed using PH-41HT, including organic hydrocarbons, optically active, sensor, and other materials. Drop volumes ranging from 5 pL to as high as 0.5 nL can be dispensed.



### Standard Features

- MJ-AL-HT dispensing device, filter, and 304 SS reservoir form replaceable cartridge assembly for quick change out and storage, simplifying printing of multiple fluids. All parts are cleanable / reusable.
- 16 mL capacity 304 stainless steel reservoir; unused fluid recoverable; 1 mL minimum load volume.
- Integrated, replaceable / removable 5 $\mu$ m stainless steel sintered filter.

### Available Options

- MJ-AL-HT devices available in orifice diameters 30-80 $\mu$ m.
- Filter material and pore size selectable.

## Ordering Information

- PH-41-HT** Cartridge style, high temperature drop-on-demand printhead. Includes one 304 stainless steel reservoir.
- MJ-AL-HT-xxx** High-temperature device with Luer fluid fitting, xxx denotes orifice diameter in microns. Includes 5 $\mu$ m stainless steel sintered filter element.
- C-03-HT** One replacement 16 mL 304 SS reservoir with fitting for PH-41HT.

## Addition Information

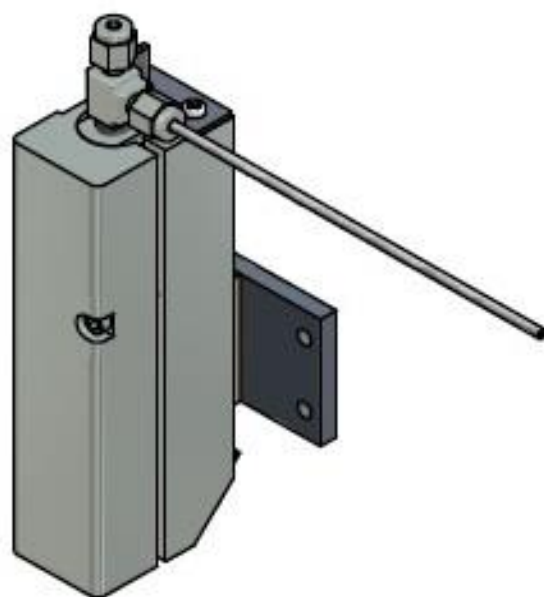
Available at [microfab.com](http://microfab.com)

- Drawings with dimensions
- Equipment selection guide
- Integration Guide
- Cleaning Guide.

## Support Equipment

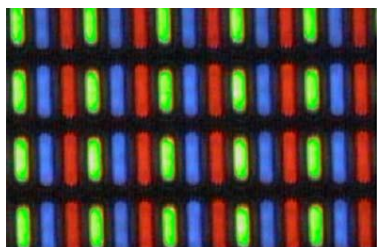
The PH-41HT may be combined with the following components and subsystems to create a functional subsystem.

- CT-M5-01** JetDrive™ V controller, including command set and stand-alone control program. Includes built in strobe delay. Level 02 firmware (complex waveforms) included.
- CT-PT-21** Pressure / Thermal Controller with one manual pneumatic channel. Add one TS-01 temperature controller for the PH-41H.
- CT-PT-A1** Electronic Pressure Controller and Pressure Mode Selector, single channel.
- CM-VS-01** Basic Optics System: CCD camera, power supply, lens, fine focus, mounting block.

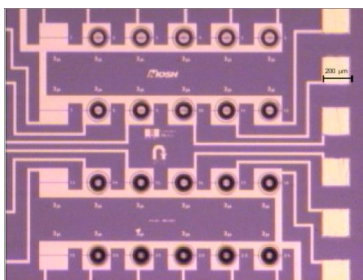


**PH-41HT High temperature printhead**

Polymer light-emitting diodes (PLED) printed into 100x300 $\mu$ m features.



Functional polymers printed onto 100 $\mu$ m sensor elements.



1.8mm diam. vascular stents coated with fluorescent dyes; (analog for antirestenotic drugs).

