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 5µm stainless steel sintered filter.

Available Options
- MJ-AL-HT devices available in orifice diameters 30-80µm.
- 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.


C-03-HT One replacement 16 mL 304 SS reservoir with fitting for PH-41HT.

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-41HT.

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.

Addition Information

Available at microfab.com
- Drawings with dimensions
- Equipment selection guide
- Integration Guide
- Cleaning Guide.

Polymer light-emitting diodes (PLED) printed into 100x300µm features.

Functional polymers printed onto 100µm sensor elements.

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