PH-05a

High Temperature Printhead with Inert Gas Injection

Product Description

The PH-05a drop-on-demand printhead is designed for dispensing oxygen and/or water sensitive materials at temperatures up to 240°C. Integrated heated inert gas injection is used to creating a local inert environment at the orifice of the dispensing device and around the drop in flight.

The PH-05a uses the same interchangeable high temperature dispensing device, the MJ-SF, as does the PH-04a Polymer Jet™ printhead. Drop volumes ranging from 5 pL to as high as 0.5 nL have been dispensed. Using MicroFab's patented drive waveforms, the range of the drop volume obtainable without changing the dispensing device can be a factor 3 or better.

Standard Features

- Operation to 240°C.
- 30 mL capacity stainless steel reservoir.
- Separate heaters for reservoir and dispensing device for uniform / precise temperature control.
- Integrated heated inert gas injection for creating a local inert environment.
- Compatible with Jetlab® 4xl, Jetlab® 4xl-A, and Jetlab® II.

Available Options

- MJ-SF devices available in orifice diameters 10-80µm.

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Ordering Information

PH-05a	High Temperature Printhead with Integrated Inert Gas Injection.
MJ-SF-04-xxx	High-temperature device with VCO fluid fitting, xxx denotes orifice diameter in microns.
C-01	Spare cartridge.

Addition Information

Available at microfab.com

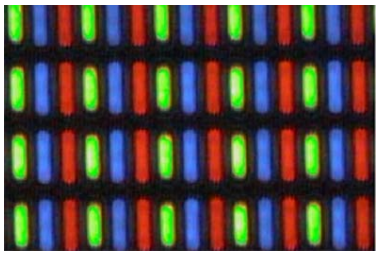
- Drawings with dimensions
- Equipment selection guide
- Integration Guide
- Cleaning Guide

Support Equipment

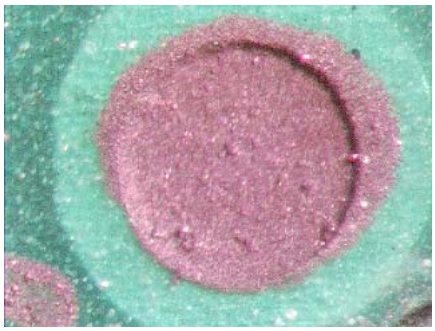
The PH-05a may be combined with the following components and subsystems to create a functional subsystem.

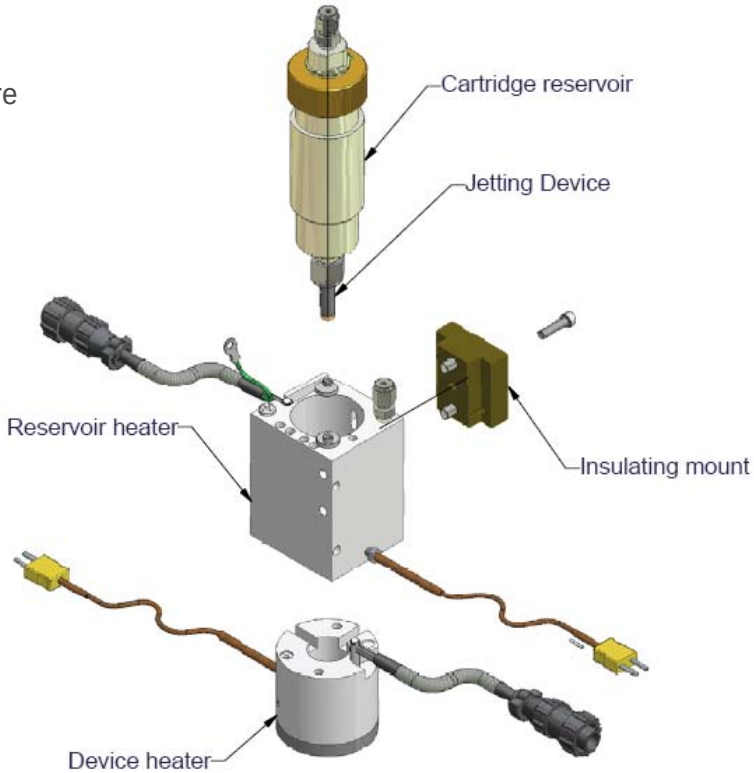
CT-M3-02	JetDrive™ III controller, including command set and stand-alone control program. Includes built in strobe delay. Level 02 firmware (complex waveforms) included.
CT-PT-21 **TS-01**	Pressure / Thermal Controller with one manual pneumatic channel and with two TS-01 temperature controllers.
CT-PT-A1	Electronic Pressure Controller and Pressure Mode Selector, single channel.
CM-VS-01	Basic Optics System: CCD camera, power supply, lens, fine focus, mounting block.

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



Nano-copper ink printed onto PWB.





MicroFab TECHNOLOGIES•INC.

an ink-jet innovation company

1104 Summit Ave. suite 110 Plano, TX 75074 USA +1-972-578-8076 +1-972-423-2438 (f) www.microfab.com