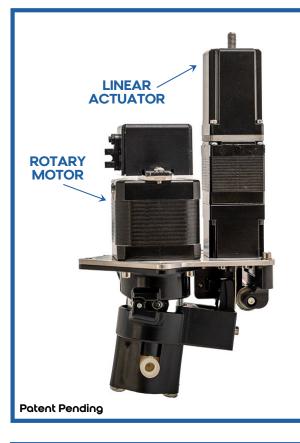
# Fluid metering, inc. *EXAMPLE DISPENSE PUMP*



The **FENYX** Variable Dispense pump connects the needs of the life sciences field with an advanced miniaturized fluidic system designed to manipulate and control small volumes of fluid at the microscale level for a broad range of applications.

Achieving optimal performance in accuracy and repeatability with innovative design modifications, this product enables the ability to do precision microliter dispensing, high flow washing, and priming with one single pump.

This technologically advanced fluidic device not only meets the growing demand for simplified architecture, it also provides increased throughput, decreased cost of ownership, and precise dispenses critical in life science applications.

# **FEATURES & BENEFITS**

- FMI CeramPump<sup>®</sup> chemical inertness for increased reliability
- Valveless pump technology
- Calibratable home dispense volume
- Linear anti-backlash mechanism
- Differential linear encoder
- Non-contact dispensing down to 4µL

- Maintenance free, wear resistant materials
- One moving part in fluid path
- Simplified fluidic architecture
- Reduces system total cost of ownership when compared to alternative technologies
- Enables increased throughput when compared to alternative technologies

REV-A



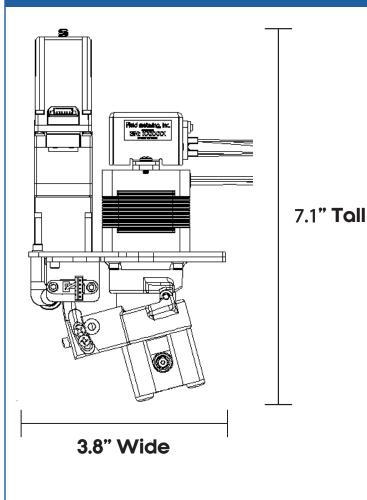
Fluid Metering's facility is certified to the ISO 9001:2015 international standard. Product components are manufactured to meet EU RoHS and REACH compliance requirements.

**Jio** 5 Aerial Way, Suite 500, Syosset, NY 11791 800.223.3388 P: 516.922.6050 F: 516.624.8261 www.fluidmetering.com Follow Us On Social Media @FluidMetering



# FIUID metering, inc.

# PUMP SPECIFICATIONS



### WETTED MATERIAL OPTIONS:

Ceramic: Alumina, Zirconia Pump Housing: PVDF, ETFE, PTFE, Polypropylene, PEEK

SEAL MATERIAL OPTIONS: Carbon-Filled PTFE, FKM, FFKM, Rulon AR

#### **PORT OPTIONS:**

1/4-28 UNC Threaded Ports, Barb Fittings (1/8" - 1/4" Tubing ID), 1/4" Compression Nuts

#### **DISPENSE VOLUME:**

 $\label{eq:states} \begin{array}{l} \hline For \ 2 - 10 \mu L \\ \hline \ Accuracy \ of \ \pm \ 5\% \\ \hline \ Precision \ (CV) \ \leq \ 1\% \end{array}$ 

$$\label{eq:states} \begin{split} & \frac{For > 10 - 200 \mu L}{Accuracy of \pm 1\%} \\ & \text{Precision} \; (CV) \leq 0.5\% \end{split}$$

# **DRIVE MOTOR SPECIFICATIONS**

RATED CURRENT: Rotational: 2.0 amp Linear: 1.0 amp

# STEP ANGLE:

Rotational & Linear: 1.8° Full Step

#### **MOTOR DIRECTION:**

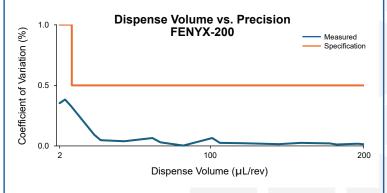
Rotational: Clockwise Linear: Clockwise & Counterclockwise MOTOR FRAME: Rotational: NEMA 17 (43 mm) Linear: NEMA 11 (28 mm)

#### **MOTOR SPEED:**

Rotational: Up to 1000 RPM Linear: Up to 1900 RPM

OPERATING TEMPERATURE: 0°C to 50°C

<b>1</b>	Dispense Volume (µL/rev)		Flow Rate (mL/min)	
FENYX	min	max	1 RPM	1000 RPM
FENYX-100	1	100	0.001	100
FENYX-200	2	200	0.002	200
FENYX-400	4	400	0.004	400



Maximum standard operating pressure: 30 PSIG

# **CUSTOMIZED FLUIDIC SOLUTIONS**

Be it a small tweak to existing technology or a full development project, our pumps and dispensers can be customized to accommodate dispense volume, flow rate, temperature, pressure, resolution, materials, and more.

## **Contact Us Today!**

Rapid prototyping available within 10 business days\*

\*Prototype requests are subject to availability of parts and materials. FMI will confirm availability within 2 business days and provide an estimated shipping date.

5 Aerial Way, Suite 500, Syosset, NY 11791 800.223.3388 P: 516.922.6050 F: 516.624.8261 www.fluidmetering.com Follow Us On Social Media @FluidMetering



REV-A