

Fluid metering

FENYX+™ VARIABLE DISPENSE PUMP

Advancing Proven Performance

The FENYX+™ Variable Dispense Pump delivers accurate, repeatable fluid handling from microliter-scale to higher-volume dispensing within a single compact platform. Built on valveless CeramPump® technology, it enables adjustable dispense volumes without hardware changes while maintaining consistent, repeatable performance across varying operating conditions.

Designed for OEM Integration

FENYX+ consolidates multiple pump technologies into a single configurable platform, enabling OEMs to simplify system design while adapting to evolving application requirements. Engineered for reliability in demanding fluid handling environments, it features chemically inert ceramic components and a long service life that often matches or exceeds the lifespan of the instrument.



Patented

KEY BENEFITS

Higher Flow Capacity

- Expands the operating flow range with a larger pump head design, enabling higher throughput while maintaining precise dispense control.

Dynamic Volume Control

- Adjust dispense volumes electronically in real time without manual intervention or hardware modifications.

Extended Operating Range

- Supports both low-volume precision dosing and higher-volume delivery within a single integrated platform.

Reduced Component Complexity

- Eliminates the need for multiple pump types or syringe changeouts, simplifying fluidic architecture and control.

Consistent Fluid Handling Performance

- Maintains stable dispensing behavior across varying fluid properties, including viscosity and surface tension.

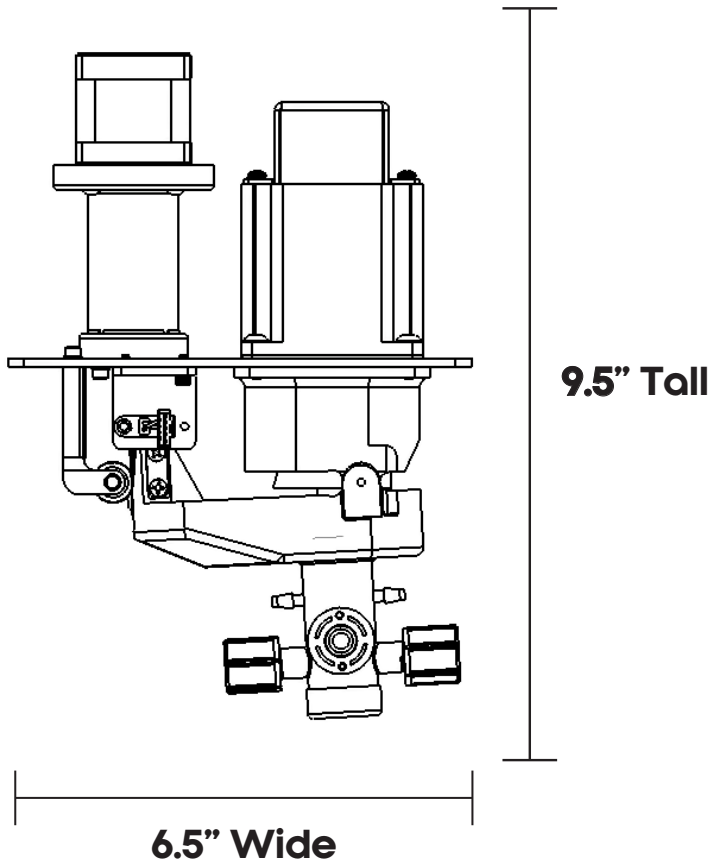
OEM Engineering Support

We offer support for dispense volume, flow rate, pressure, material compatibility, system integration, and configuration optimization. Contact us to discuss your project and explore a solution designed for your specific needs.



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.

PUMP SPECIFICATIONS



WETTED MATERIAL OPTIONS:

Ceramics: Alumina
 Pump Housing: PVDF, ETFE
 Seals: PTFE, FKM, FFKM, Rulon AR, UHMW-PE

PORT OPTIONS:

7/16-20 UNF Threaded Ports,
 Compatible with Compression Nuts

DISPENSE VOLUME¹:

For > 0.25-1.15 mL
 Accuracy of ± 2%
 Precision (CV) < 1%

¹ The performance of Fluid Metering pumps may vary based on specific application conditions and individual user setups. We recommend speaking with one of our engineering experts for guidance tailored to your specific needs.

DRIVE MOTOR SPECIFICATIONS

RATED CURRENT:

Rotational: 4.2 A
 Linear: 1.5 A

MOTOR FRAME:

Rotational: NEMA 23 (57 mm)
 Linear: NEMA 14 (35 mm)

STEP ANGLE:

Rotational & Linear:
 1.8° Full Step

MOTOR SPEED:


Rotational: Up to 1150 rpm
 Linear: Up to 1750 rpm

MOTOR DIRECTION:

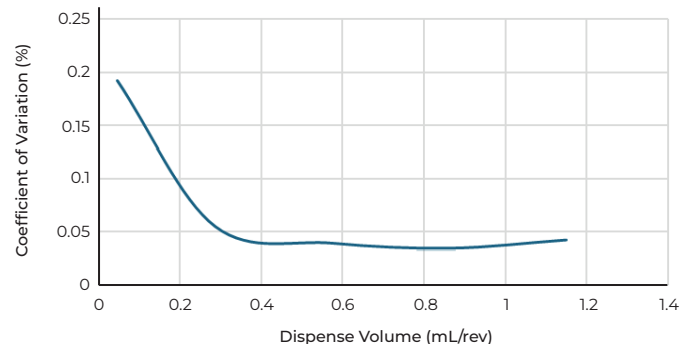
Rotational: Clockwise
 Linear: Clockwise &
 Counterclockwise

OPERATING TEMPERATURE:

0°C to 50°C

	Dispense Volume (µL/rev)		Flow Rate (mL/min)	
	min	max	min	max
FENYX+	250	1150	0.25	1322.5
FENYX-100	0.75	110	0.00075	110
FENYX-200	2	200	0.002	200
FENYX-400	4	400	0.004	400

Coefficient of Variation vs. Dispense Volume



- 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, materials, and more.

Contact Us Today!

Rapid prototyping available within 10 business days*

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