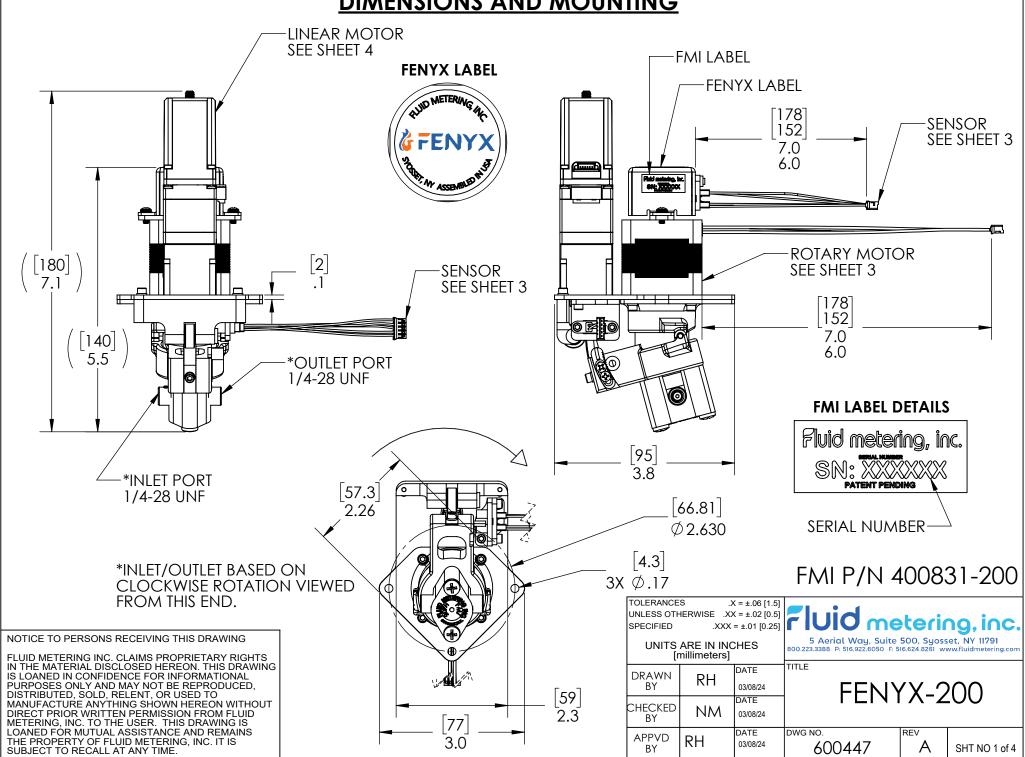
# **DIMENSIONS AND MOUNTING**



# **PUMP PERFORMANCE AND SPECIFICATIONS**

DISPENSE VOLUME CAN BE ADJUST BETWEEN 2 µL AND 200 µL. EACH CCW STEP OF THE LINEAR ACTUATOR INCREASES THE DISPENSE VOLUME BY APPROXIMATELY 39 nL. PUMP TESTED WITH HIGH PURITY WATER. PUMP CAN WORK IN REVERSE FLOW CONDITION THE SAME AS IN THE CLOCKWISE DIRECTION.

MAX OPERATING PRESSURE: 30 PSI MAX FLUID WORKING TEMPERATURE: 100°C

LIFE EXPECTANCY AND PUMP MAINTENANCE: DEPENDENT ON APPLICATION. CONSULT FACTORY.

FLUID PATH MATERIALS

- PTFE IMPREGNATED CERAMIC (ALUMINA)
- PVDF
- UHMW-PE
- FKM

SEAL MATERIALS

- UHMW-PE

- FKM

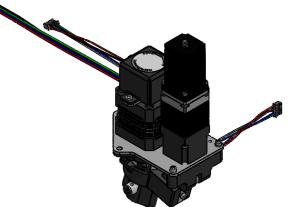
WEIGHT: 1.3 lbs.

CERTIFICATIONS: REACH, ROHS

NOTE: LINEAR AND ROTARY MOTORS SHOULD NOT BE RUN AT THE SAME TIME.

NOTICE TO PERSONS RECEIVING THIS DRAWING

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# FMI P/N 400831-200

TOLERANCES .X = ±.06 [1.5]   UNLESS OTHERWISE .XX = ±.02 [0.5]   SPECIFIED .XXX = ±.01 [0.25]				eterin	ng, inc.
UNITS ARE IN INCHES [millimeters]		5 Aerial Way, Suite 500, Syosset, NY 11791 800.223.3388 P: 516.922.6050 F: 516.624.8261 www.fluidmetering.com			
DRAWN BY	RH	DATE 03/08/24	FEN	(X_7	$\sim 0.0$
CHECKED BY	NM	DATE 03/08/24		Λ-Ζ	.00
APPVD BY	RH	DATE 03/08/24	dwg no. 600447	A	SHT NO 2 of 4

# **ELECTRICAL SPECIFICATIONS**

#### **TABLE 1: ROTARY MOTOR WIRING**

MOTOR WIRING					
JST PIN # COLOR PHASE					
1	А				
2	BLUE	Ā			
3	GREEN	В			
4 BLACK		B			
JST CONNECTOR HOUSING PHR-4					

**TABLE 3: ROTARY MOTOR CHARACTERISTICS** 

### **TABLE 2: ROTARY MOTOR SWITCHING SEQUENCE**

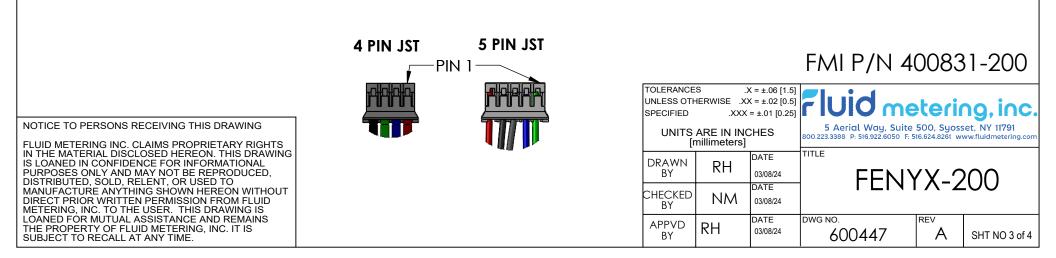
MOTOR SWITCHING SEQUENCE						
	STEP	А	Ā	В	B	
	4	-	+	+	-	
C.W.	3	-	+	-	+	
	2	+	-	-	+	
	1	+	-	+	-	
	4	-	+	+	-	
MOTOR ROTATION FROM NOTED VIEW ON SHEET 1						

### **TABLE 4: SENSOR WIRING**

	CHARACTERISTIC	RATING
1	step angle	1.8°
2	FRAME SIZE	NEMA 17
3	RATED CURRENT/PHASE	2 AMP
4	resistance/phase	1.1 OHMS ± 10%
5	INDUCTANCE/PHASE	2.26 mH ± 20%
6	ROTOR INERTIA	0.28 OZ-IN^2

SENSOR WIRING					
JST PIN # SIGNAL WIRE COLOR					
5	ANODE	RED			
4	CATHODE	BLACK			
3	Vcc	WHITE			
2	OUTPUT	BLUE			
1	GROUND	GREEN			

JST CONNECTOR HOUSING PHR-5



# **ELECTRICAL SPECIFICATIONS**

### **TABLE 6: LINEAR ACTUATOR SPECIFICATIONS**

	CHARACTERISTIC	RATING
1	NUMBER OF PHASE	2
2	LINEAR TRAVEL/STEP	0.000125 IN (1.8°)
3	RATED CURRENT	1.0 AMP
4	HOLDING TORQUE	12.7 OZ-IN <u>+</u> 10%
5	PHASE RESISTANCE	2.7 OHM ± 10% (20°C)
6	PHASE INDUCTANCE	2.50MH±20% (1KHZ 1 V RMS)
7	ROTOR INERTIA	0.049 OZ-IN^2
8	WEIGHT	0.1 KG
9	INSULATION CLASS	B (130°C)
10	SCREW DIAMETER	0.184 IN
11	LEAD	0.0250 IN
12	OPERATING TEMPERATURE	-20°C TO 50°C

### TABLE 5: LINEAR MOTOR WIRING

MOTOR WIRING					
PIN COLOR PHASE					
1	RED	A			
2	BLUE	Ā			
3	GREEN	В			
4	BLACK	B			

JST CONNECTOR HOUSING PHR-4

### TABLE 7: LINEAR MOTOR SWITCHING SEQUENCE

MOTOR SWITCHING SEQUENCE						
	STEP	А	Ā	В	B	
	1	-	+	+	-	
C.W.	2	-	+	-	+	
	3	+	-	-	+	
	4	+	-	+	-	

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