

NOTICE TO PERSONS RECEIVING THIS DRAWING

FLUID METERING INC. CLAIMS PROPRIETARY RIGHTS IN THE MATERIAL DISCLOSED HEREON. THIS DRAWING IS LOANED IN CONFIDENCE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE REPRODUCED, DISTRIBUTED, SOLD, RELENT, OR USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT DIRECT PRIOR WRITTEN PERMISSION FROM FLUID METERING, INC. TO THE USER. THIS DRAWING IS LOANED FOR MUTUAL ASSISTANCE AND REMAINS THE PROPERTY OF FLUID METERING, INC. IT IS SUBJECT TO RECALL AT ANY TIME.

TOLERANCES UNLESS OTHERWISE SPECIFIED		.X = ±.06 [1.5] .XX = ±.02 [0.5] .XXX = ±.01 [0.25]
DO NOT SCALE	SURFACE FINISH	63
DRAWN BY	RH	DATE 11/29/2021
CHECKED BY	SEM	DATE 01/11/2022
APPVD BY	RH	DATE 01/11/2022

Fluid metering, inc.
5 Aerial Way, Suite 500, Syosset, NY 11791
800.223.3388 P: 516.922.6050 F: 516.624.8261 www.fluidmetering.com

FMI P/N 400797

TITLE VARIABLE DISPENSE PUMP

DWG NO.	REV	SHT NO
600410	A	1 of 4

PUMP PERFORMANCE AND SPECIFICATIONS

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
- CERAMICA (ALUMINA)
- PEEK
- FKM

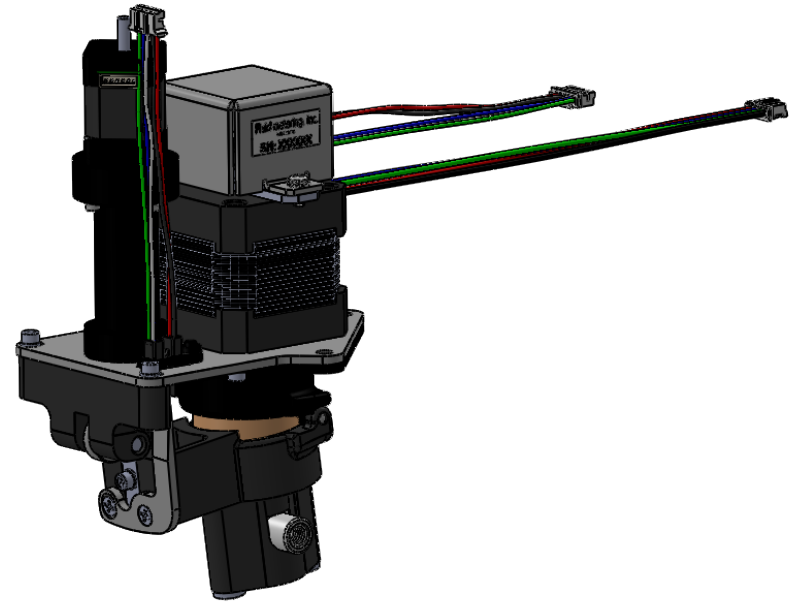
SEAL MATERIALS

- UHMW-PE
- FKM

WEIGHT: 1.3 lbs.

CERTIFICATIONS: REACH, RoHS

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



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TITLE <h2 style="margin: 0;">VARIABLE DISPENSE PUMP</h2>			
DWG NO.	REV	SHT NO 2 of 4	
600410	A		

ELECTRICAL SPECIFICATIONS

111283 MOTOR WIRING TABLE

MOTOR WIRING		
JST PIN #	COLOR	PHASE
1	RED	A
2	BLUE	\bar{A}
3	GREEN	B
4	BLACK	\bar{B}

JST CONNECTOR HOUSING PHR-4
CRIMP TERMINAL P/N SPH-002T-PO.5S
(FOR 30 - 24 AWG)

111283 MOTOR SWITCHING SEQUENCE

MOTOR SWITCHING SEQUENCE					
C.W.	STEP	A	\bar{A}	B	\bar{B}
	4	-	+	+	-
	3	-	+	-	+
	2	+	-	-	+
	1	+	-	+	-
	4	-	+	+	-
	MOTOR ROTATION FROM NOTED VIEW ON SHEET 1				

111283 MOTOR CHARACTERISTICS

	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	0.28oz-in ²

300864 SENSOR WIRING TABLE

SENSOR WIRING		
JST PIN #	SIGNAL	WIRE COLOR
5	ANODE	RED
4	CATHODE	BLACK
3	V _{cc}	WHITE
2	OUTPUT	BLUE
1	GROUND	GREEN

JST CONNECTOR HOUSING PHR-5
CRIMP TERMINAL P/N SPH-002T-PO.5S
(FOR 30 - 24 AWG)

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TITLE
VARIABLE
DISPENSE PUMP

DWG NO. 600410	REV A	SHT NO 3 of 4
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ELECTRICAL SPECIFICATIONS

111281 LINEAR ACTUATOR SPECS

111281 MOTOR WIRING TABLE

MOTOR WIRING		
PIN	COLOR	PHASE
1	BLACK	A
3	GREEN	\bar{A}
4	RED	B
6	BLUE	\bar{B}

JST CONNECTOR HOUSING S6B-ZR

	CHARACTERISTIC	RATING
1	NUMBER OF PHASE	2
2	LINEAR TRAVEL/STEP	0.003048 MM (1.8°)
3	RATED VOLTAGE	5.2 V DC
4	RATED CURRENT	0.4 AMP
5	RATED THRUST	40N (@300RPM, RATED CURRENT)
6	PHASE RESISTANCE	13 OHM \pm 10% (20°C)
7	PHASE INDUCTANCE	7.8MH \pm 20% (1KHZ 1 V RMS)
8	ROTOR INERTIA	1.6 GCM ²
9	WEIGHT	0.1 KG
10	INSULATION CLASS	B (130°C)
11	SCREW DIAMETER	3.505 MM
12	LEAD	0.6096 MM


111281 MOTOR SWITCHING SEQUENCE

MOTOR SWITCHING SEQUENCE					
	STEP	A	\bar{A}	B	\bar{B}
C.W.	1	-	+	+	-
	2	-	+	-	+
	3	+	-	-	+
	4	+	-	+	-

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