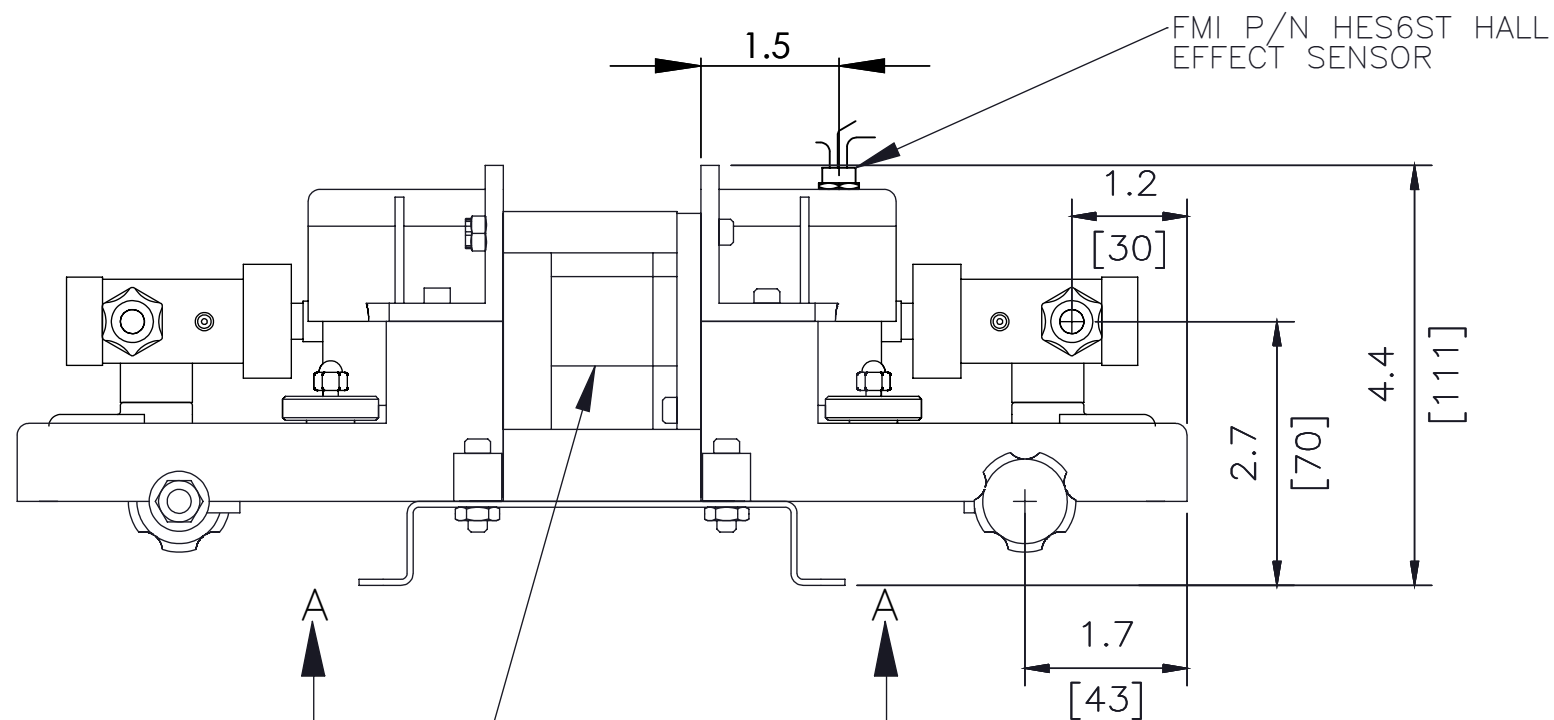
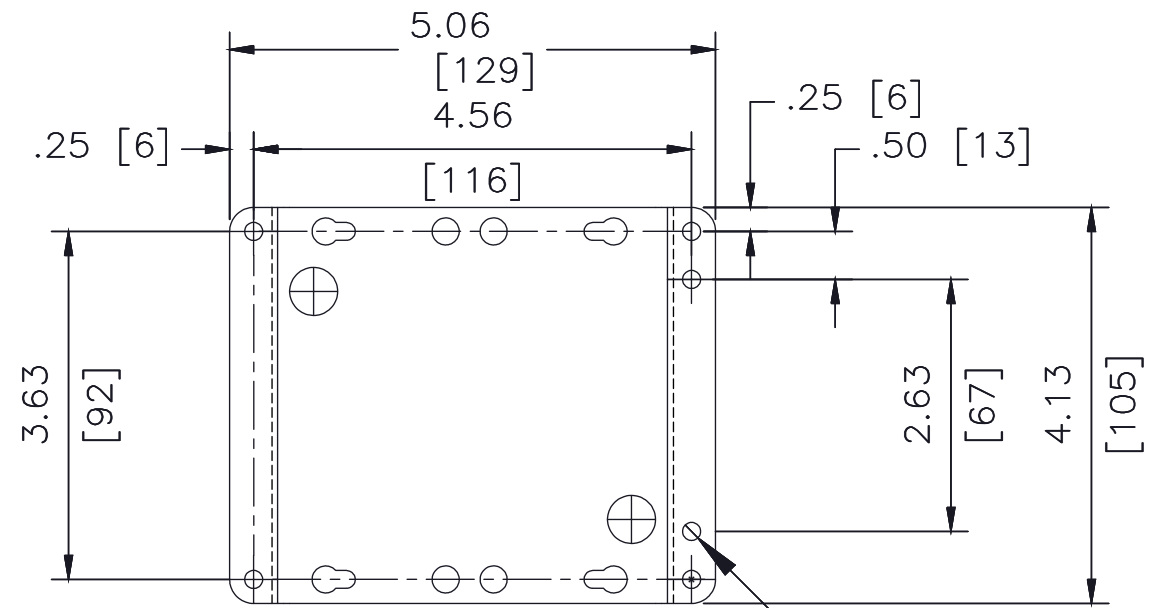
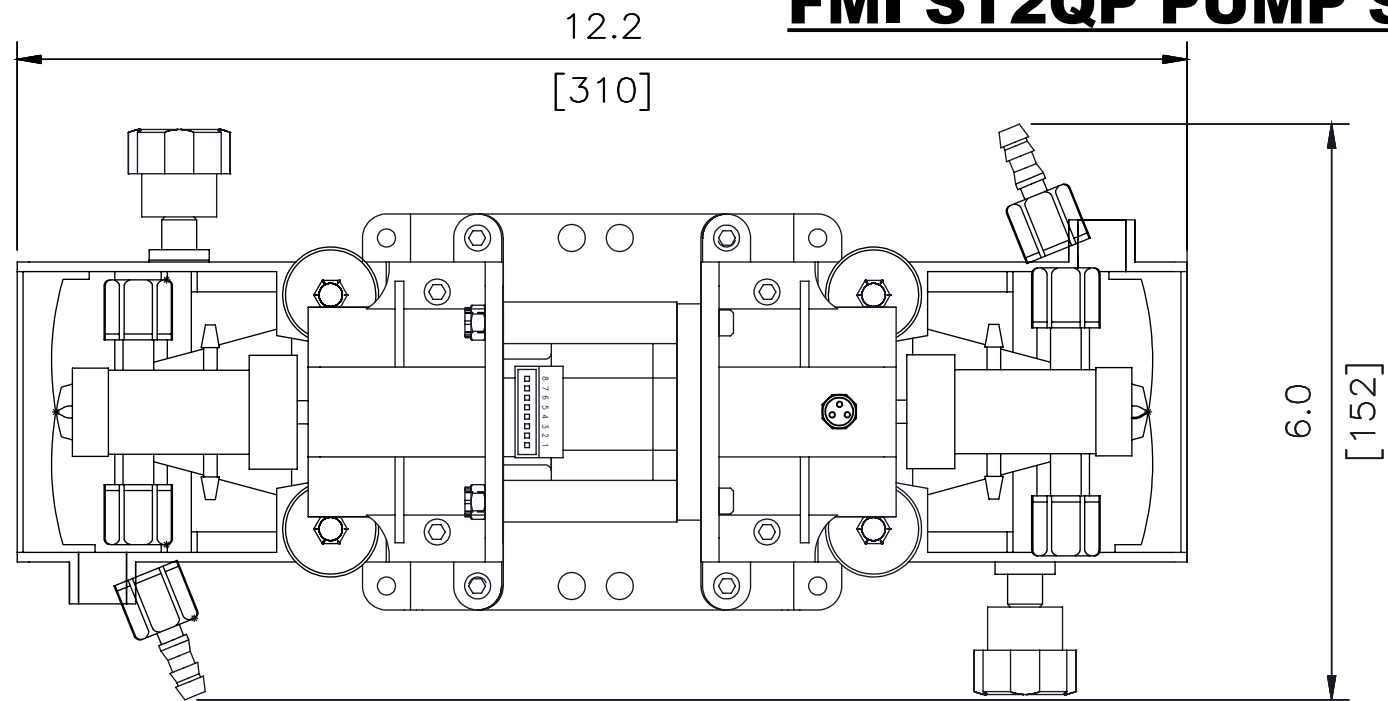
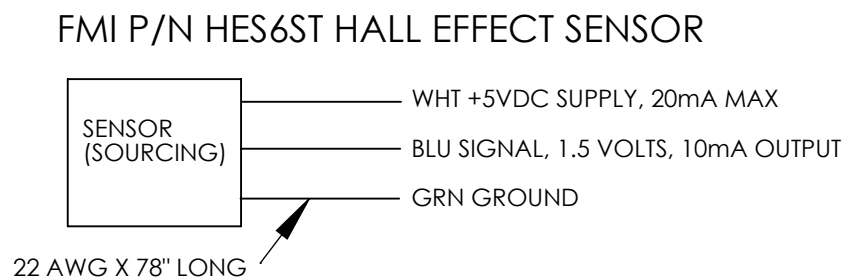


FMI ST2QP PUMP SPECIFICATIONS



FMI P/N 300615
23-FRAME STEP MOTOR
SEE SHEET #2 FOR
ADDITIONAL INFORMATION

- NOTES:
1. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]
2. PUMP HEAD MODULES ARE SHOWN FOR REF ONLY
3. UNLESS OTHERWISE SPECIFIED ALL TOLERANCES ARE ± 0.02 [0.5].



[4.83]
Ø0.19 (6X)

FMI P/N ST2QP - 23



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Syosset, NY 11791

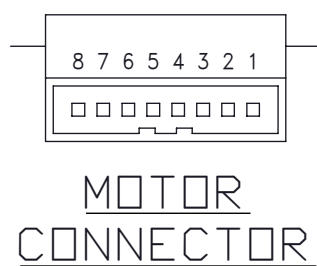
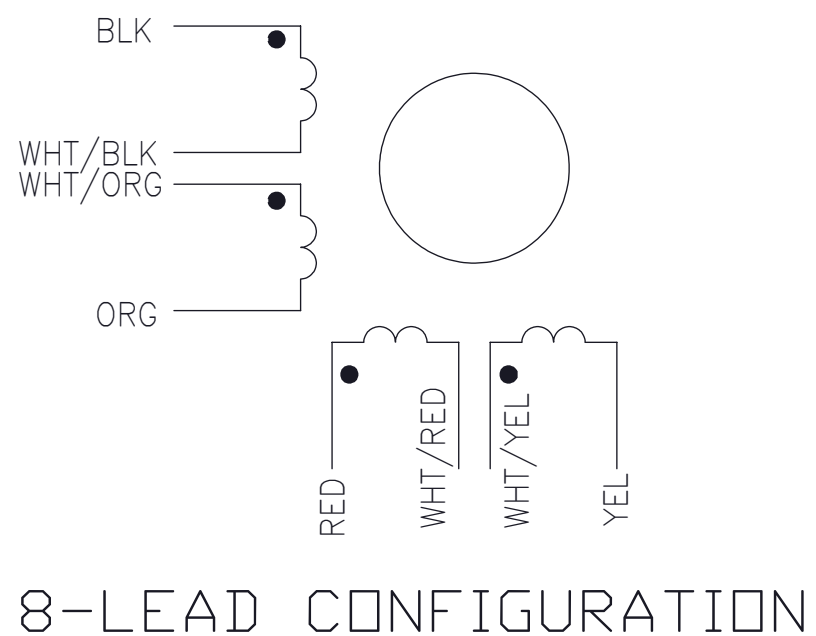
TITLE
**ST2QP 23-FRAME HIGH
FLOW ADJUSTABLE
(STANDARD)**

DWG NO
600086

REV
G

SHT NO 1 Of 2

FMI P/N 300615 - 23 FRAME STEP MOTOR



MOTOR VALUE DATA ALL VALUES TYPICAL AT 40° C UNLESS OTHERWISE NOTED		UNITS	BI-POLAR 4-LEAD SERIES	* BI-POLAR 4-LEAD PARALLEL	UNIPOLAR 6-LEAD
IC	RATED CONT. CURRENT/PHASE (2)	AMPS	1.75	3.5	2.5
Ke	VOLTAGE CONSTANT/PHASE ± 10%	Vpk/RAD/SEC	0.412	0.206	0.206
Rp	RESISTANCE: 25°C ±10%	OHMS	2.22	.56	1.11
Lp	PHASE INDUCTANCE ±20% (3)	mH	9.2	2.3	2.3
Th	HOLDING TORQUE (2-PHASE ON) (1)	OZ_IN (Nm)	116 (0.82)	116 (0.82)	82 (0.58)
Tr	LOW SPEED RUNNING TORQUE (1)	OZ_IN (Nm)	89 (0.63)	89 (0.63)	63 (0.44)
Td	DETENT TORQUE	OZ_IN (Nm)	4.0 (0.028)		
Jm	ROTOR INERTIA	OZ-IN-SEC ² (KG-M ² 10 ⁻³)	0.0017 (0.012)		
RTH	THERMAL RES, WINDINGS TO AMBIENT (2)	DEGREES C PER WATT	5.5		
STEP ANGLE		DEGREES OF ROTATION	1.8		

* RECOMMENDED HOOK UP FOR BEST PERFORMANCE.

DRIVER CONNECTION (5) DRIVER CONNECTION (5)

STEP	A	\bar{A}	B	\bar{B}
1	+	-	-	+
2	-	+	-	+
3	-	+	+	-
4	+	-	+	-
1	+	-	-	+

CCW ↓ ↑ CW

BIPOLAR FULL STEP PHASE SEQUENCING

STEP	A	B	C	D
1	GND	0	GND	0
2	0	GND	GND	0
3	0	GND	0	GND
4	GND	0	0	GND
1	GND	0	GND	0

CCW ↓ ↑ CW

UNIPOLAR FULL STEP PHASE SEQUENCING

+ = POSITIVE CURRENT FLOW
 - = NEGATIVE FLOW
 0 = OFF OR OPEN
 GND = GROUND

CONNECTION	PIN	LEAD COLOR	DRIVER CONNECTION
4-LEAD BIPOLAR SERIES	6	BLK	A
	1	ORG	\bar{A}
	8	RED	B
	3	YEL	\bar{B}
	2 & 5	WHT/BLK & WHT/ORG	---
4 & 7	WHT/RED & WHT/YEL	---	
* 4-LEAD BIPOLAR PARALLEL	6 & 5	BLK & WHT/ORG	A
	1 & 2	ORG & WHT/BLK	\bar{A}
	8 & 7	RED & WHT/YEL	B
	3 & 4	YEL & WHT/RED	\bar{B}
6-LEAD UNIPOLAR	6	BLK	A
	1	ORG	B
	8	RED	C
	3	YEL	D
	2 & 5	WHT/BLK & WHT/ORG	+V
4 & 7	WHT/RED & WHT/YEL	+V	

NOTES:

- (1) WITH RATED CURRENT APPLIED.
- (2) WINDINGS AT 130°C MOTOR UNMOUNTED IN STILL AIR AT 40°C (AMBIENT).
- (3) SMALL SIGNAL INDUCTANCE AS MEASURED AT WITH IMPEDANCE BRIDGE @ 1 KHZ, 1 AMP.
- (4) SUGGESTED MATING CONNECTOR AMP# 641653-8 OR EQUIVALENT.
- (5) INDICATED DIRECTION WHEN VIEWED FROM MOTOR DRIVE SHAFT END.
- (6) OPERATING TEMPERATURE -20°C TO +40°C.



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TITLE		
ST2QP 23-FRAME HIGH FLOW ADJUSTABLE STEP (STANDARD)		
DWG NO	REV	SHT NO 2 Of 2
600086	G	