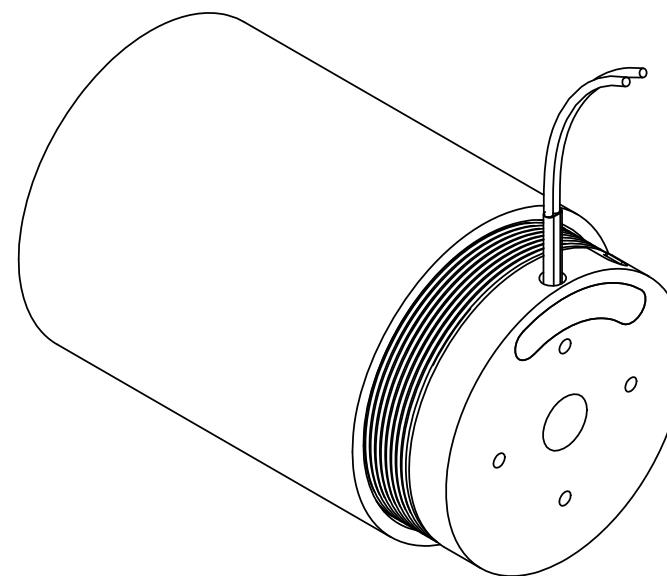
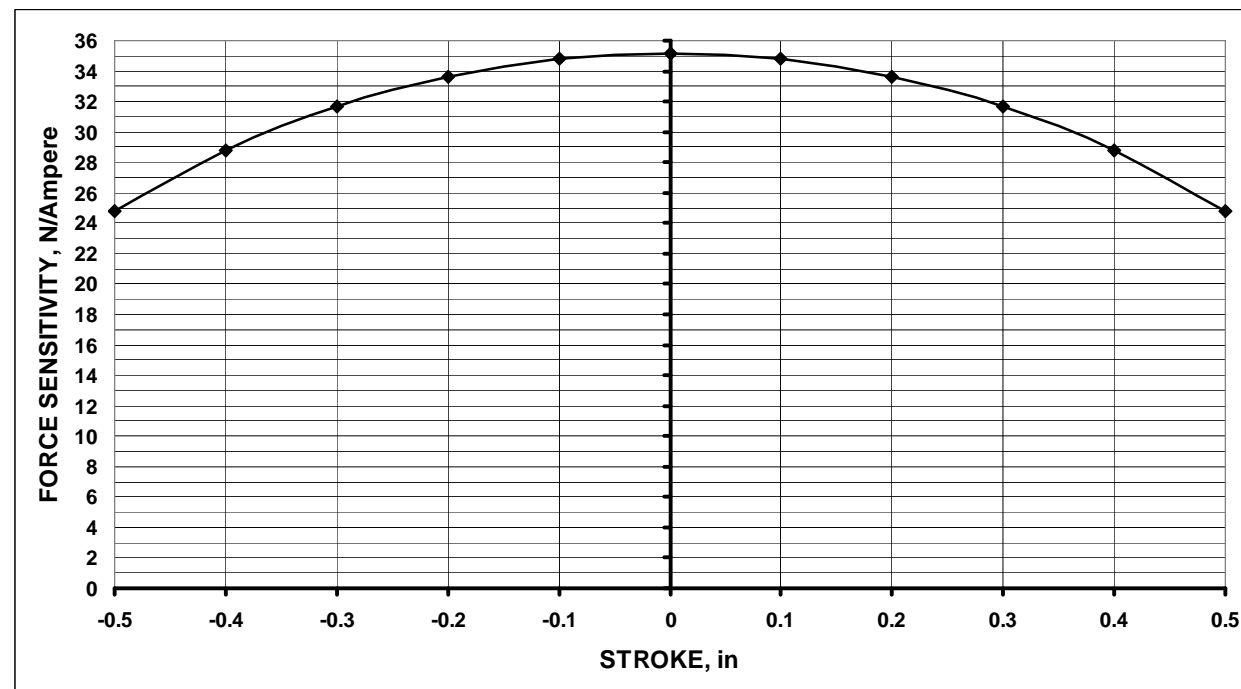


Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	2.6	
Voltage @ F <sub>p</sub>	Volts	Nominal	V <sub>p</sub>	33.0	
Current @ F <sub>p</sub>	Amps	Nominal	I <sub>p</sub>	12.7	
Force Sensitivity	LB/Amp	± 10%	K <sub>F</sub>	7.9	
	N/Amp	± 10%		35.14	
Back EMF Constant	V/(ft/sec)	± 10%	K <sub>B</sub>	10.71	
	V/(m/sec)	± 10%		35.14	
Inductance ****	milli-henry	± 30%	L	2.9	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F <sub>P</sub>	100
	N		445
Continuos Stall Force ***	LB	F <sub>CS</sub>	30.1
	N		133.8
Actuator Constant	LB/√Watt	K <sub>A</sub>	4.9
	N/√Watt		21.8
Electrical Time Constant	milli-sec	τ <sub>E</sub>	1.12
Mechanical Time Constant	milli-sec	τ <sub>M</sub>	1.57
Theoretical Acceleration	ft/sec <sup>2</sup>	α <sub>T</sub>	1962.2
	m/sec <sup>2</sup>		598.1
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f <sub>max</sub>	34.5/38.4
Power I <sup>2</sup> R @ F <sub>p</sub>	Watts	P <sub>P</sub>	419
Stroke:	± in		0.5
	± mm		12.7
Clearance on Each side of Coil	in		0.02
	mm		0.51
Thermal Resistance of Coil in still air	°C/Watt	θ <sub>TH</sub>	2.3
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	LB	WT <sub>C</sub>	1.64
	G		744
Weight of Field Assembly	LB	WT <sub>T</sub>	4.95
	KG		2.25

\* AT MID-STROKE POSITION AND @ 25 °C AMBIENT TEMPERATURE.  
 \*\* 10 SECONDS @ 25 °C AMBIENT & 155 °C COIL TEMPERATURE.  
 \*\*\* @25 °C AMBIENT & 155 °C COIL TEMPERATURE.  
 \*\*\*\* MEASURED AT 1000 Hz.

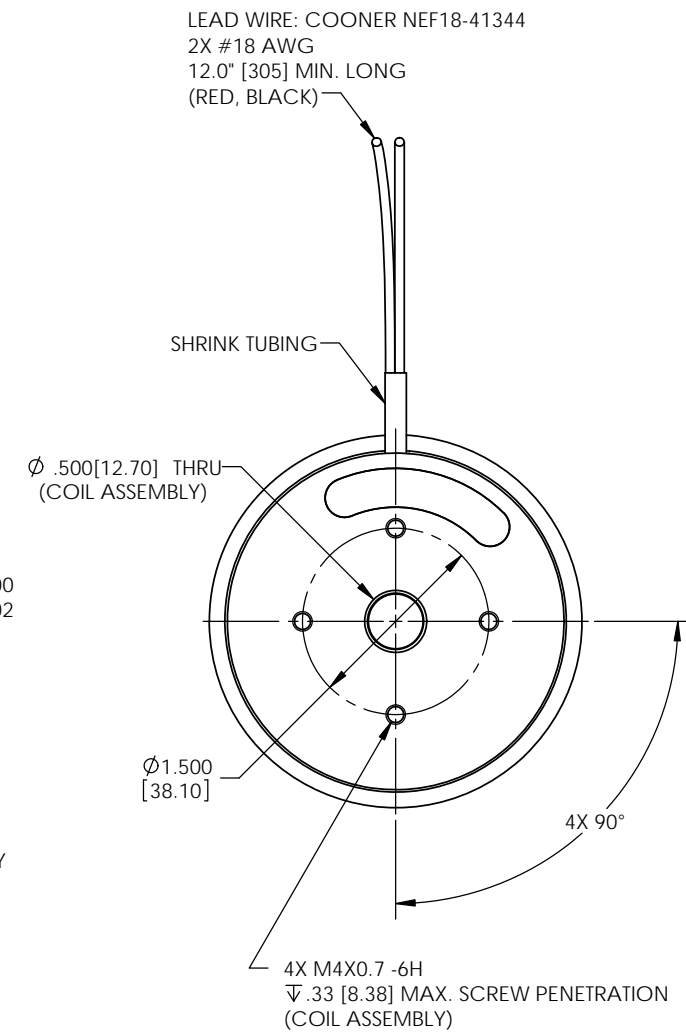
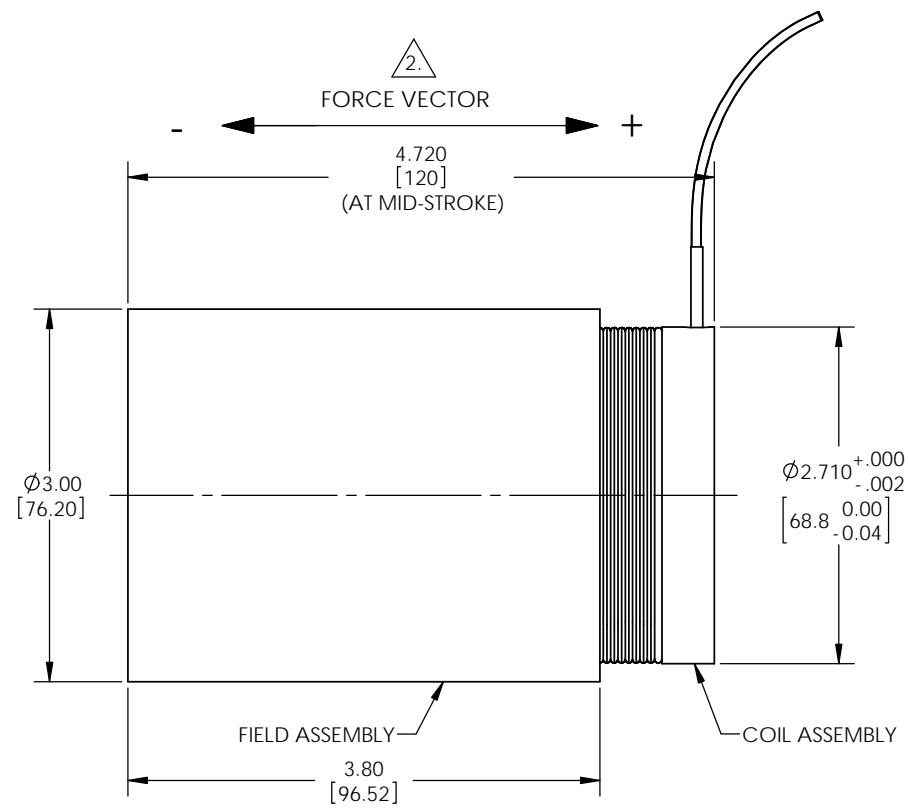
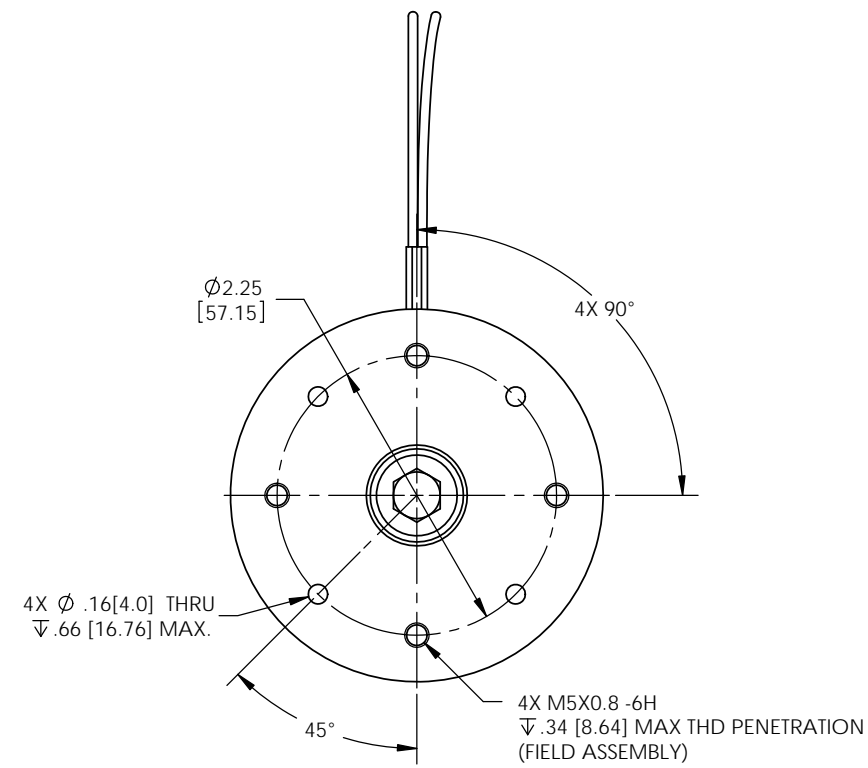
ZONE	REV.	REVISION DESCRIPTION	ECN NO.	DATE
	X2			



SOLIDWORKS

FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE.		529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703	
DRAWN	SENSATA TECHNOLOGIES PROPRIETARY AND CONFIDENTIAL. NEITHER THIS PRINT NOR THE INFORMATION CONTAINED HEREON IS TO BE USED AGAINST THE INTERESTS OF SENSATA TECHNOLOGIES OR AGAINST THE INTERESTS OF ANY OF ITS AFFILIATED COMPANIES OR WHOLLY OWNED SUBSIDIARIES.	TITLE	
DATE		LINEAR ACTUATOR	
ENGINEER	INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES	SIZE	DWG NO.
DATE		C	LA30-48-000A
APPROVED	DECIMALS      ANGLES X.X            ± 0.03      X.X° ± 0°30' X.XX          ± 0.01 X.XXX        ± 0.005	REV.	X2
DATE	DO NOT SCALE DRAWING	SCALE	3:1
APPROVED	THIRD ANGLE PROJECTION	SHEET 1 OF 2	
DATE			





NOTES: UNLESS OTHERWISE SPECIFIED

1. INCH DRAWING, DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY.

2. A POSITIVE (+) VOLTAGE APPLIED TO THE BLACK LEAD WIRE WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.



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SIZE	DWG NO.	REV.
C	LA30-48-000A	X2
SCALE	2:1	SOLIDWORKS SHEET 2 OF 2