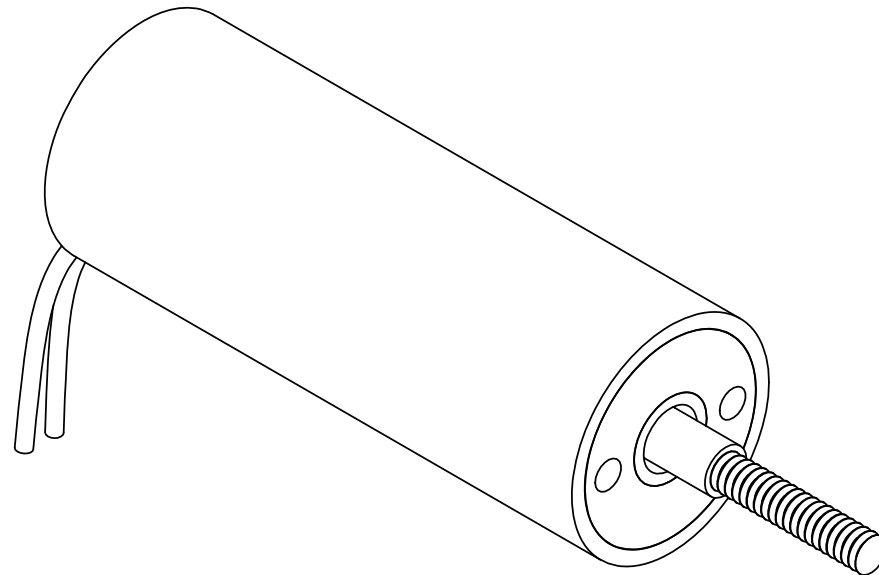


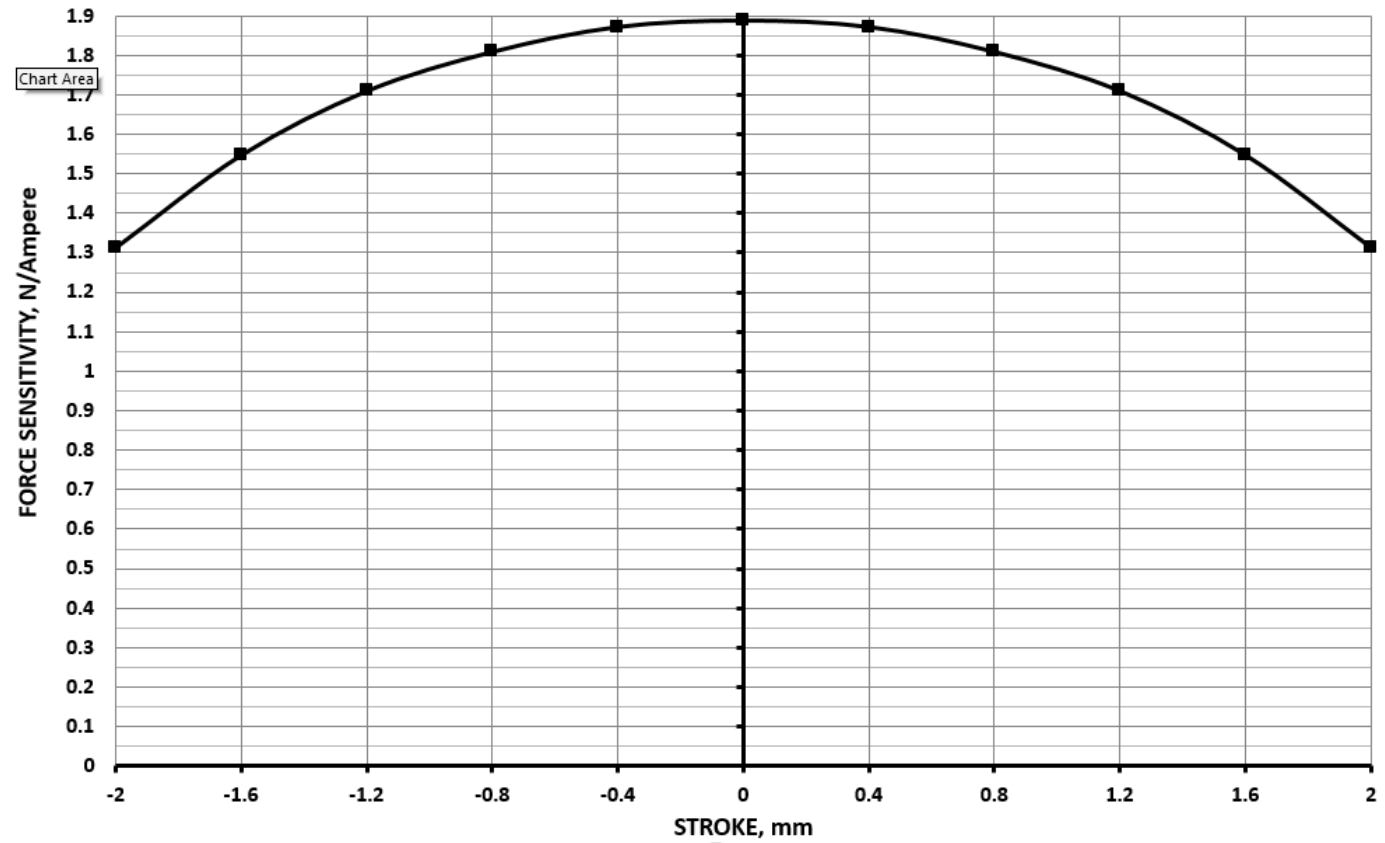
Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	5.1	
Voltage @ F _p	Volts	NOMINAL	V _p	5.1	
Current @ F _p	Amps	NOMINAL	I _p	1.0	
Force Sensitivity	OZ/Amp	+ 10%	K _F	6.8	
	N/Amp	+ 10%		1.89	
Back EMF Constant	V/(ft/sec)	+ 10%	K _B	0.576	
	V/(m/sec)	+ 10%		1.89	
Inductance ****	micro-Henry	± 15%	L	220	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	OZ	F _p	6.8
	N		1.89
Continuos Stall Force ***	OZ	F _{CS}	3.98 (EST)
	N		1.11 (EST)
Actuator Constant ****	OZ/√Watt	K _A	3.01
	N/√Watt		0.84
Electrical Time Constant	micro-sec	τ _E	43.1
Mechanical Time Constant	milli-sec	τ _M	4.98
Theoretical Acceleration @ F _p	ft/sec ²	α _T	1776.9
	m/sec ²		541.6
Max Theoretical Frequency @ F _p , Full Stroke and Triangular Motion	Hz	f _{max}	92
Power I ² R @ F _p	Watts	P _p	5.1
Stroke:	± in		0.079
	± mm		2
Thermal Resistance of Coil	°C/Watt	θ _{TH}	50 (EST)
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Moving Field Assembly	OZ	WT _{F.A}	0.123
	g		3.49
Total Weight	OZ	WT _T	0.353
	g		10

* AT MID-STROKE POSITION & @ 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			

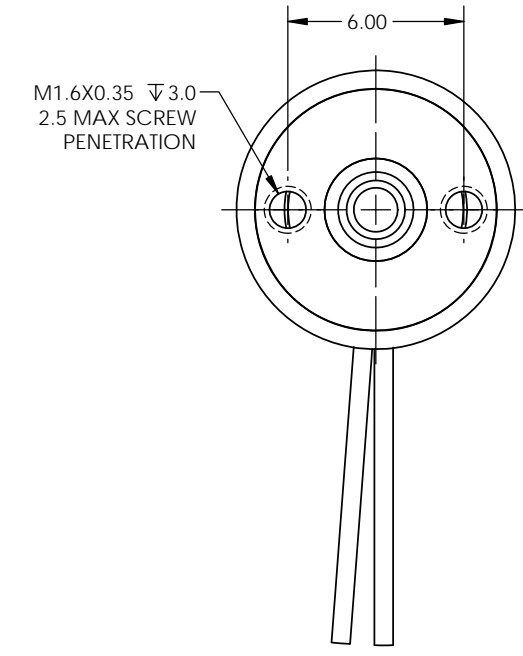
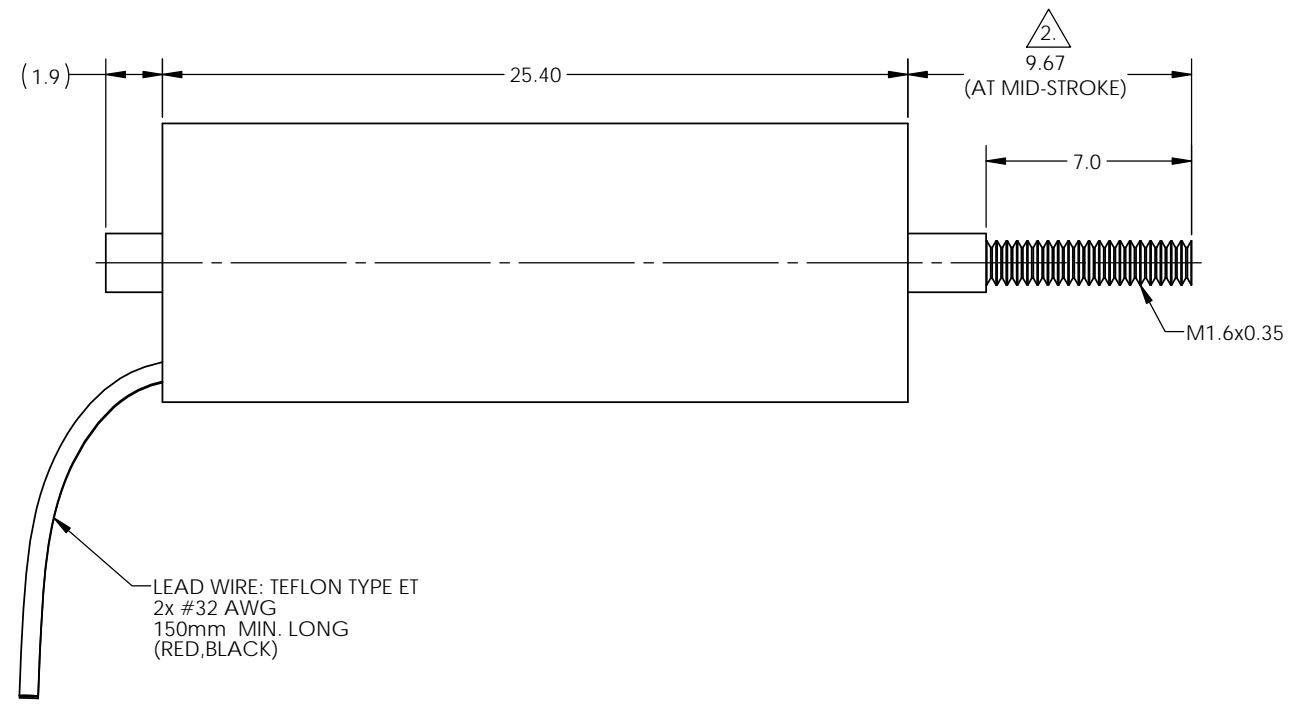
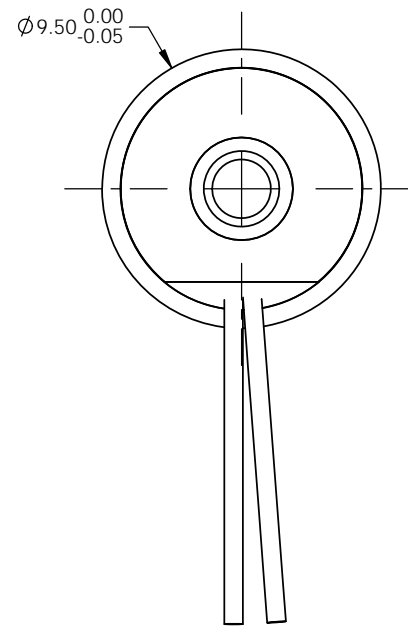


SOLIDWORKS

METRIC DRAWING

FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE.		529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703	
DRAWN DATE ENGINEER	SENSATA TECHNOLOGIES PROPRIETARY AND CONFIDENTIAL. NEITHER THIS PRINT NOR THE INFORMATION CONTAINED HEREON IS TO BE USED AGAINST THE INTERESTS OF ANY OF ITS AFFILIATED COMPANIES OR WHOLLY OWNED SUBSIDIARIES.		
DATE APPROVED M. GODKIN	INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.		
DATE APPROVED	DECIMALS X ± 0.8 X.X ± 0.25 X.XX ± 0.13	ANGLES X.X° ± 0°30'	TITLE LINEAR ACTUATOR HOUSED
DATE APPROVED	DO NOT SCALE DRAWING	THIRD ANGLE PROJECTION	SIZE DWG NO. C LAH04-10-000A
			REV. X2
			SCALE NONE SHEET 1 OF 2





LEAD WIRE: TEFLON TYPE ET
2x #32 AWG
150mm MIN. LONG
(RED, BLACK)

NOTES: UNLESS OTHERWISE SPECIFIED

- 1. METRIC DRAWING. DIMENSIONS IN BRACKETS [] ARE IN INCHES AND ARE FOR REFERENCE ONLY.
- 2. SHAFT SHOWN AT MID-STROKE POSITION. SYSTEM ALLOWS FOR 0.5 MECHANICAL OVER TRAVEL IN BOTH DIRECTION.
- 3. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WIRE WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

METRIC DRAWING

		529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703	
SIZE	DWG NO.	REV.	
C	LAH04-10-000A	X2	
SCALE	2:1	SOLIDWORKS	SHEET 2 OF 2

