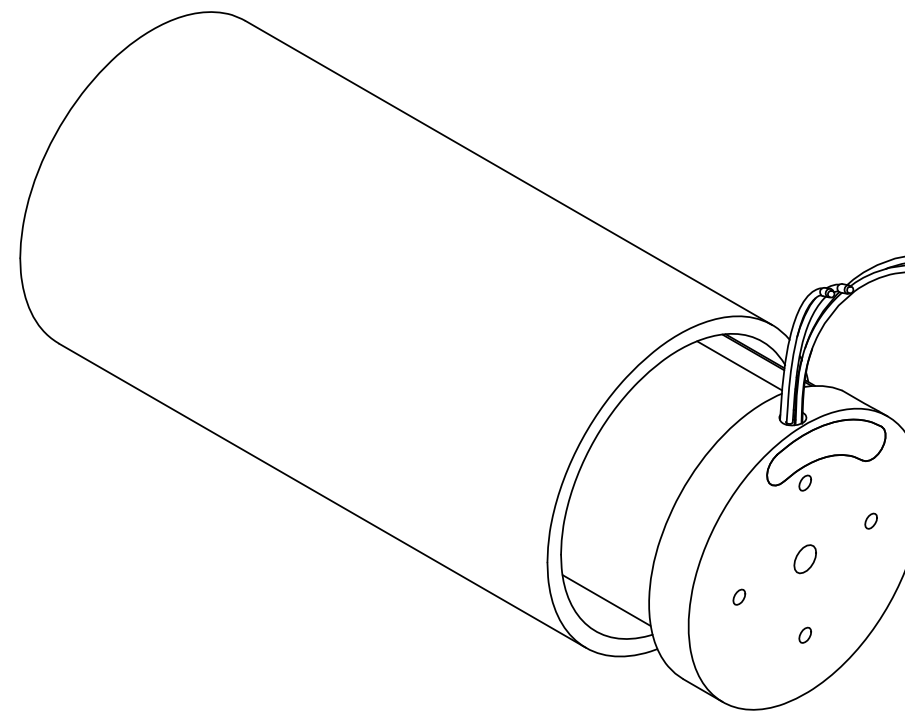
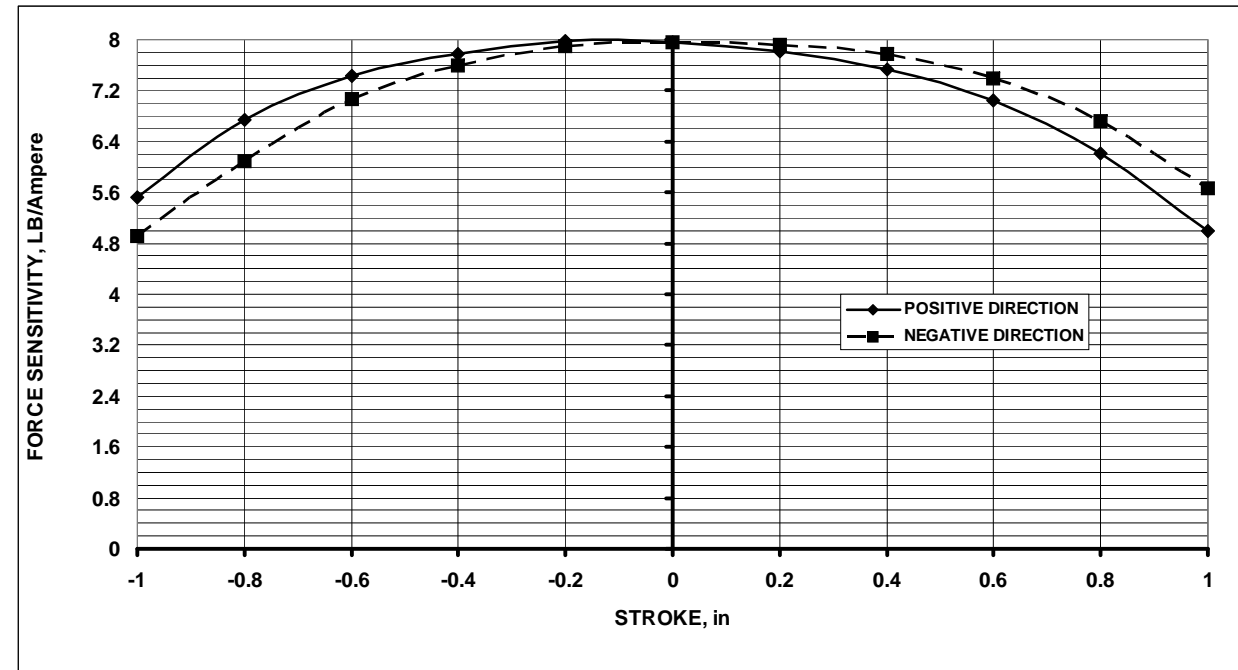


Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	4.5	
Voltage @ F _P	Volts	Nominal	V _P	56.7	
Current @ F _P	Amps	Nominal	I _P	12.6	
Force Sensitivity	LB/Amp	± 10%	K _F	7.95	
	N/Amp	± 10%		35.36	
Back EMF Constant	V/(ft/sec)	± 10%	K _B	10.78	
	V/(m/sec)	± 10%		35.36	
Inductance ****	milli-henry	± 15%	L	4.3	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	LB	F _P	100
	N		444.8
Continuous Stall Force ***	LB	F _{CS}	21.7
	N		96.24
Actuator Constant	LB/√Watt	K _A	3.75
	N/√Watt		16.67
Electrical Time Constant	milli-sec	τ _E	0.96
Mechanical Time Constant	milli-sec	τ _M	2.45
Theoretical Acceleration	ft/sec ²	α _T	2146
	m/sec ²		654.1
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f _{max}	25.5/28.4
Power I ² R @ F _P	Watts	P _P	714
Stroke:	± in		1
	± mm		25.4
Clearance on Each side of Coil	in		0.02
	mm		0.508
Thermal Resistance of Coil in still air	°C/Watt	θ _{TH}	2.6
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	LB	WT _C	1.5
	Kg		0.68
Weight of Field Assembly	LB	WT _T	7.7
	Kg		3.49

* 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.

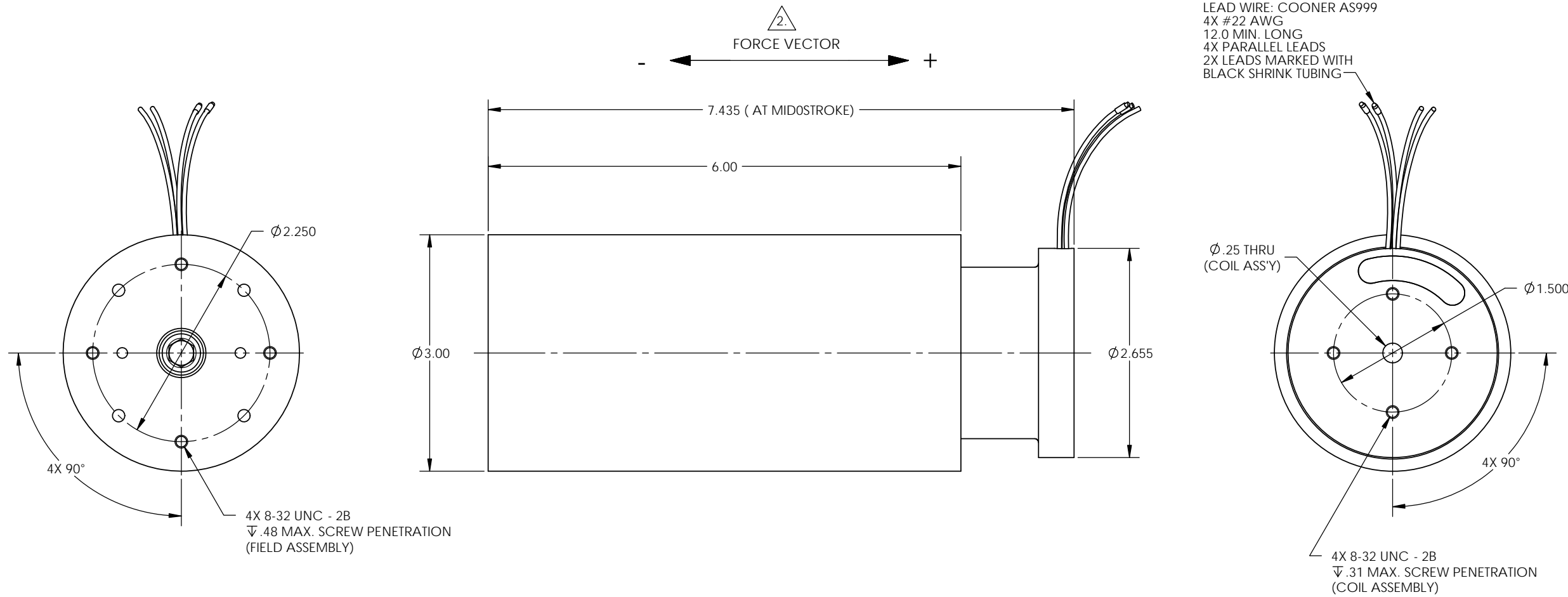
ZONE	REV.	REVISION DESCRIPTION	ECN NO.	DATE
	X2			



SOLIDWORKS

FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE.		529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703	
DRAWN	DATE	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
ENGINEER	DATE	INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.	LINEAR ACTUATOR
APPROVED	DATE	TOLERANCES DECIMALS ANGLES X.X ± 0.03 X.X° ± 0°30' X.XX ± 0.01 X.XXX ± 0.005	SIZE DWG NO.
DATE	APPROVED	DO NOT SCALE DRAWING	C LA30-75-001A
DATE	APPROVED	THIRD ANGLE PROJECTION	REV. X2
			SCALE 3:1 SHEET 1 OF 2





NOTES: UNLESS OTHERWISE SPECIFIED

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

2. A POSITIVE (+) VOLATAGE APPLIED TO THE MARKED LEAD WIRES WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.

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SIZE	DWG NO.	REV.
C	LA30-75-001A	X2
SCALE	2:1	SOLIDWORKS SHEET 2 OF 2

