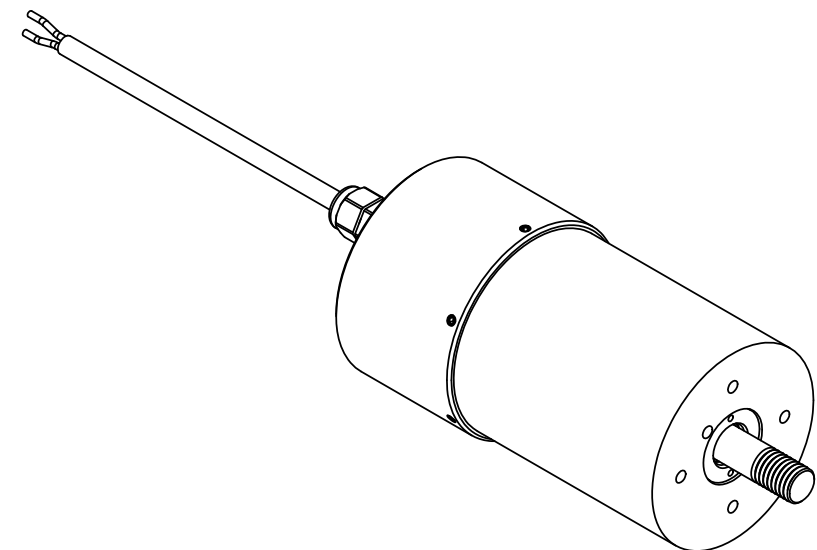
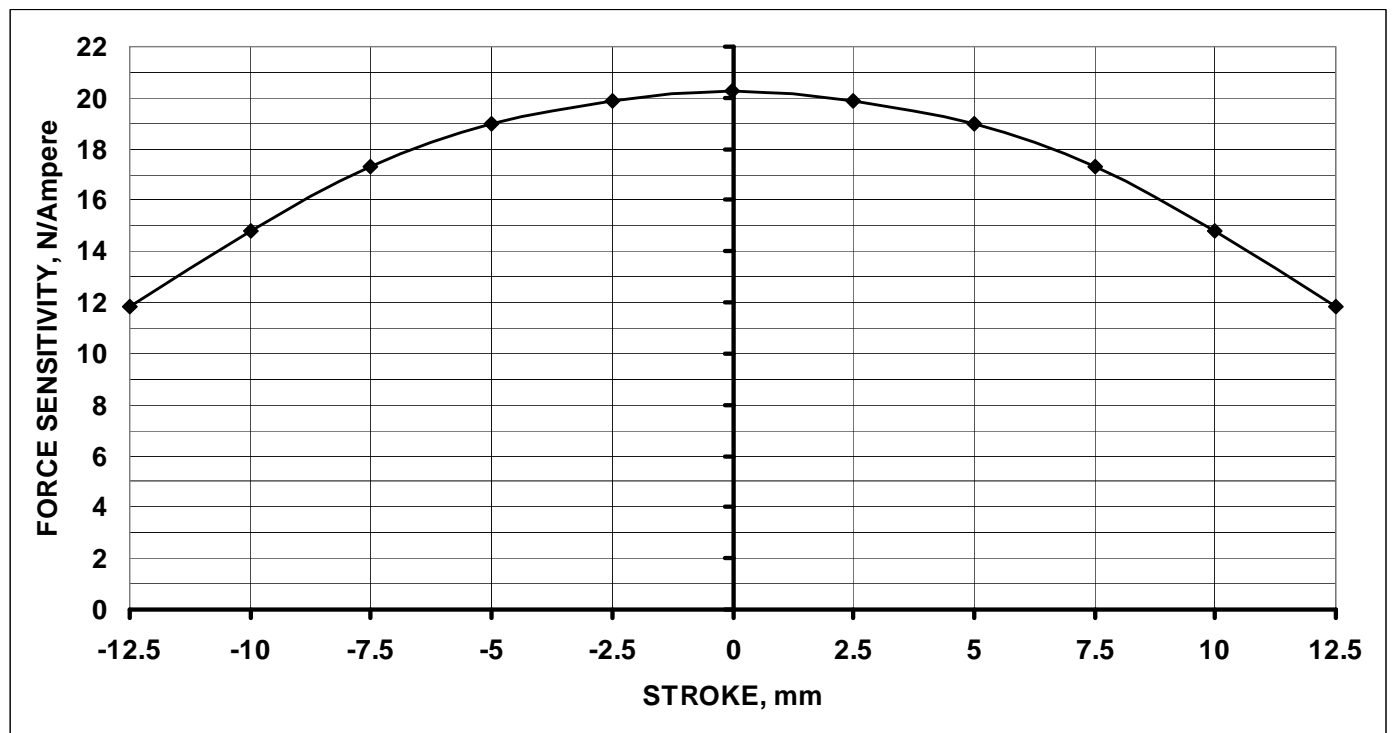


Winding Constants *	Units	Tol	Symbol	Wdg	A
DC Resistance	Ohms	± 12.5%	R	2.4	
Voltage @ F _P	Volts	Nominal	V _P	31.6	
Current @ F _P	Amps	Nominal	I _P	13.16	
Force Sensitivity	N/Amp	± 10%	K _F	20.28	
	LB/Amp	± 10%		4.56	
Back EMF Constant	V/(m/sec)	± 10%	K _B	20.28	
	V/(ft/sec)	± 10%		6.18	
Inductance ****	milli-henry	± 30%	L	3.15	

Linear Actuator Parameters *	Units	Symbol	Value
Peak Force **	N	F _P	266.9
	LB		60
Continuos Stall Force ***	N	F _{CS}	60.1
	LB		13.5
Actuator Constant	N/√Watt	K _A	13.09
	LB/√Watt		2.94
Electrical Time Constant	milli-sec	τ _E	1.31
Mechanical Time Constant	milli-sec	τ _M	4.4
Theoretical Acceleration	m/sec ²	α _T	353.5
	ft/sec ²		1159.8
Max Theoretical Frequency @ Full Stroke & Sinusoidal/Triangular Motion	Hz	f _{max}	26.8/29.7
Power I ² R @ F _P	Watts	P _P	416
Stroke:	± mm		12.5
	± in		0.492
Clearance on Each side of Coil	mm		1.51
	in		0.02
Thermal Resistance of Coil	°C/Watt	θ _{TH}	4.11
Maximum Allowable Coil Winding Temp	°C	Temp	155
Weight of Coil Assembly	Kg	WT _C	0.755
	LB		1.66
Total Weight	Kg	WT _T	2.4
	LB		5.29

* 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
	X1			



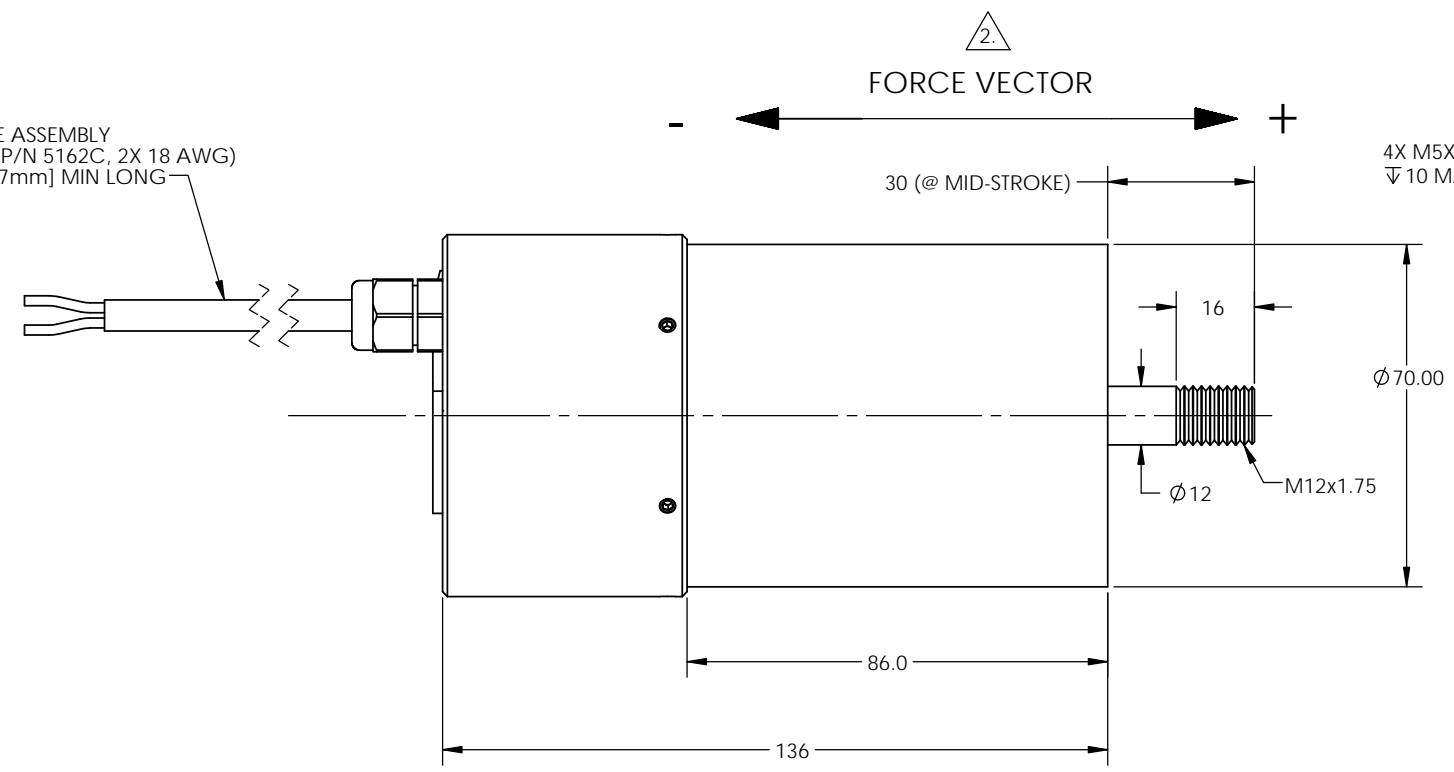
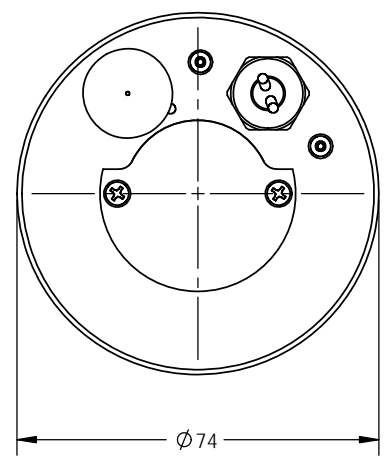
SOLIDWORKS

METRIC DRAWING

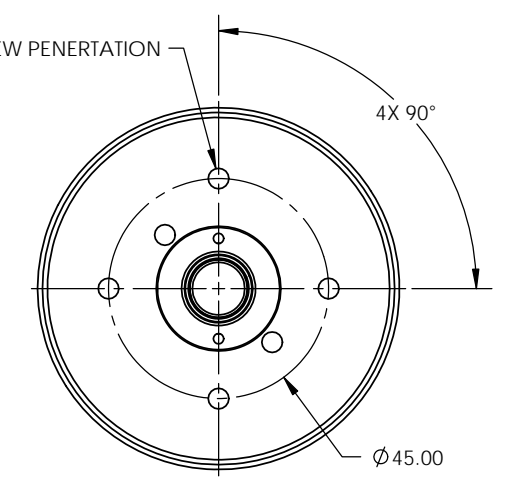
FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE.		529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703
DRAWN DATE ENGINEER DATE APPROVED	SENSATA TECHNOLOGIES PROPRIETARY AND CONFIDENTIAL. NEITHER THIS PRINT NOR THE INFORMATION CONTAINED HEREON IS TO BE USED AGAINST THE INTERESTS OF SENSATA TECHNOLOGIES OR AGAINST THE INTERESTS OF ANY OF ITS AFFILIATED COMPANIES OR WHOLLY OWNED SUBSIDIARIES. INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS. TOLERANCES DECIMALS ANGLES X ± 0.8 X.X° ± 0°30' X.X ± 0.25 X.XX ± 0.13	
DATE APPROVED	DO NOT SCALE DRAWING THIRD ANGLE PROJECTION	TITLE LINEAR ACTUATOR HOUSED
DATE APPROVED	SCALE NONE	SIZE DWG NO. REV. C LAH28-53-000A-DASH NO. X1 SHEET 1 OF 2



POWER CABLE ASSEMBLY
 (ALPHA WIRE: P/N 5162C, 2X 18 AWG)
 18 INCHES [457mm] MIN LONG



4X M5X0.8 - 6H
 ∇ 10 MAX SCREW PENERTATION



NOTES: UNLESS OTHERWISE SPECIFIED

1. METRIC DRAWING. DIMENSIONS IN BRACKETS [] ARE IN INCHES AND ARE FOR REFERENCE ONLY.
2. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WIRE OF THE CABLE ASSEMBLY WILL PRODUCE A FORCE ON THE COIL ASSEMBLY (SHAFT) IN THE POSITIVE (+) DIRECTION.
3. -12E SHAFT CONFIGURATION SHOWN.

(DASH)	SHAFT END CONFIGURATION
-12S	12mm Diameter
-12I	12mm Diameter, Internal Thread M8x1.25 X 16 mm Deep
-12E	12mm Diameter, External Thread M12x1.75 X 16mm Long

METRIC DRAWING

Sensata Technologies
 529 PLEASANT STREET
 P.O. BOX 2964
 ATTLEBORO, MA 02703

SIZE	DWG NO.	REV.
C	LAH28-53-000A-DASH NO.	X1
SCALE	2:1	SOLIDWORKS SHEET 2 OF 2

