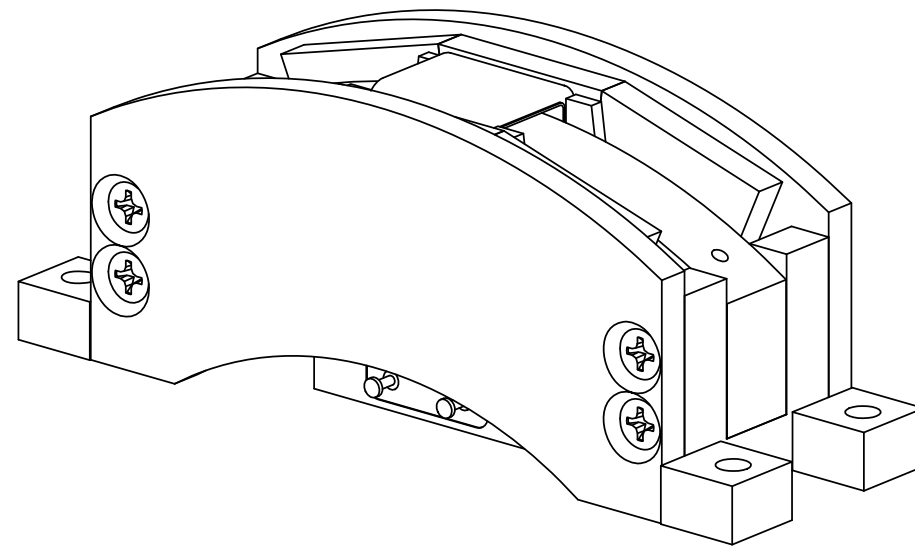
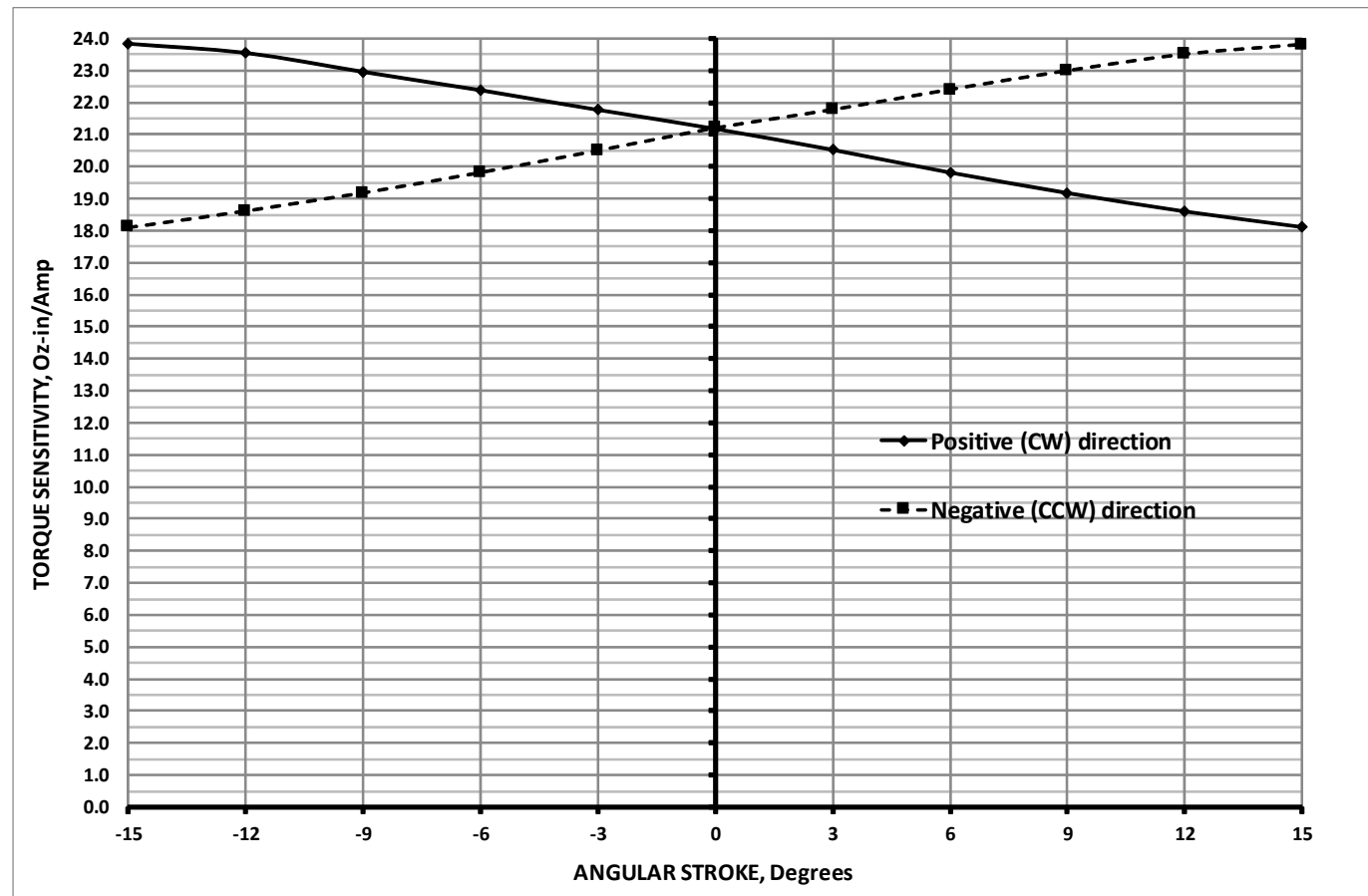


Winding Constants *	Units	Tol	Symbol	Wdg. A
DC Resistance	Ohms	+ 12.5%	R	1.9
Voltage @ T _{PS}	Volts	Nominal	V _{PS}	10.8
Current @ T _{PS}	Amps	Nominal	I _{PS}	5.66
Current @ T _{CS}	Amps	Nominal	I _{CS}	2.97
Force Sensitivity @ T _{PS}	N.m/Amp	± 10%	K _{T_{PS}}	0.15
	oz.in/Amp	± 10%		21.2
Force Sensitivity @ No-Load	N.m/Amp	± 10%	K _{T_{NL}}	0.15
	oz.in/Amp	± 10%		21.2
Back EMF Constant	V/(rad/sec)	± 10%	K _B	0.15
Inductance ****	mH	± 15%	L	1.38

Rotary Actuator Parameters *	Units	Symbol	Value
Peak Stall Torque**	N.m	T _{PS}	0.847
	oz.in		120
Continuous Stall Torque ***	N.m	T _{CS}	0.445
	oz.in		62.9
Actuator Constant	N.m/√Watt	K _A	0.109
	oz.in/√Watt		15.4
Electrical Time Constant	ms	τ _E	0.73
Mechanical Time Constant	ms	τ _M	8.44
Theoretical Acceleration	rad/s ²	α _T	8,470
Max Theoretical Frequency @ Full Stroke and Sinusoidal / Triangular Motion	Hz	f _{max}	28.6/31.8
Power I ² R @ T _{PS}	Watts	P _{PS}	60.9
Angular Stroke	± degrees	S _A	15
Clearance on Each Side of Coil	mm	D _C	0.381
	in		0.015
Moving Coil Assembly Inertia	kg.m ²	J _{CA}	0.0001
	oz.in.s ²		0.0142
Thermal Resistance of Coil in still air	°C/Watt	Θ _{TH}	5.2
Maximum Allowable Winding Temp	°C	T _W	155
Mass, Total	g	M _T	422.4
	oz		14.9

* 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
	R			



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 ANY OF ITS AFFILIATED COMPANIES OR WHOLLY OWNED SUBSIDIARIES. INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES DECIMALS ANGLES X.X ± 0.03 X.X° ± 0°30' X.XX ± 0.01 X.XXX ± 0.005	TITLE		
DATE		ROTARY ACTUATOR		
ENGINEER		SIZE	DWG NO.	REV.
DATE		C	RA60-10-001A	R
APPROVED		SCALE	2:1	SHEET 1 OF 2
DATE	DO NOT SCALE DRAWING	THIRD ANGLE PROJECTION		



4

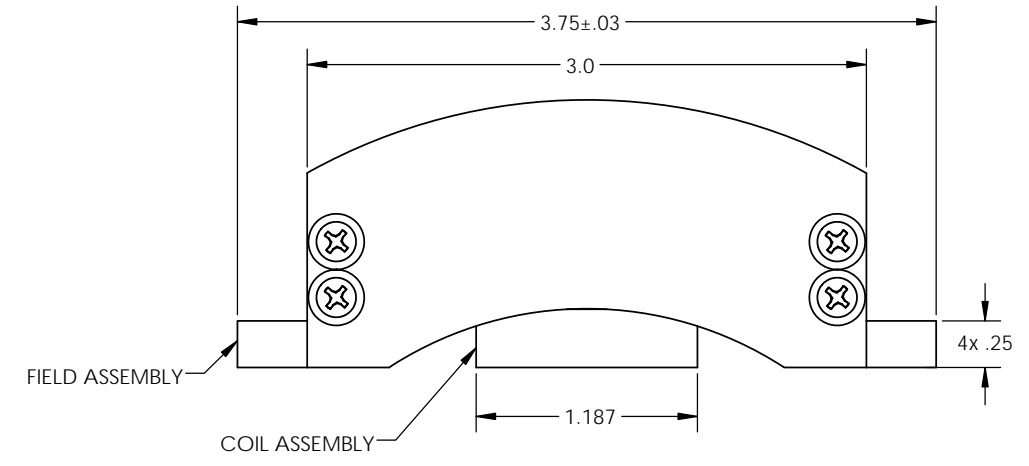
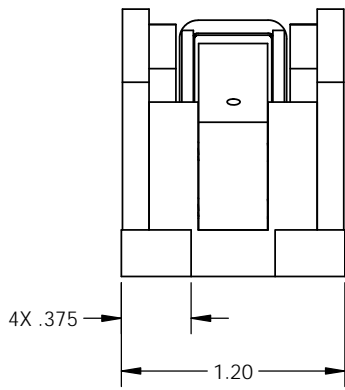
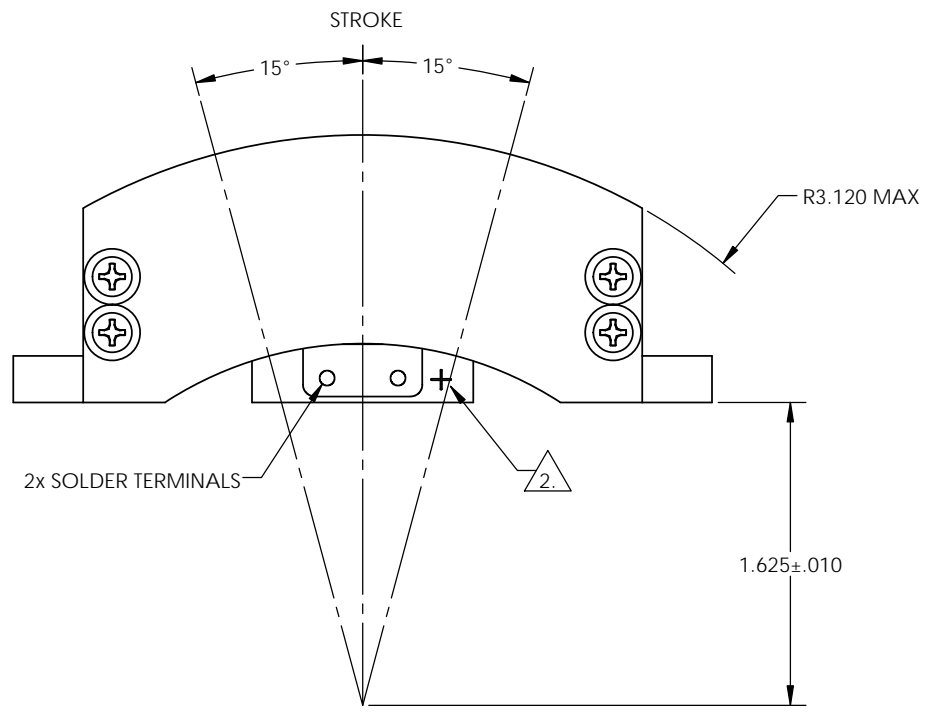
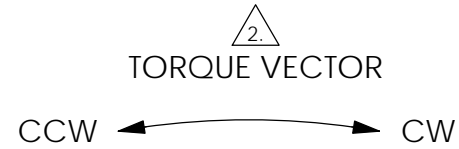
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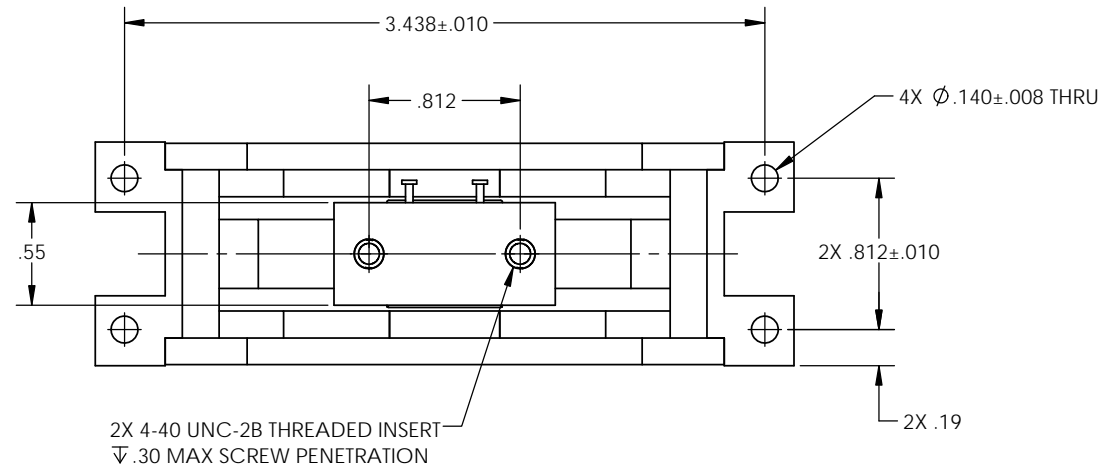


C

C

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A

A

NOTES: UNLESS OTHERWISE SPECIFIED

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

2. A POSITIVE (+) VOLTAGE APPLIED TO "+" TERMINAL WILL PRODUCE A TORQUE ON THE COIL ASSEMBLY IN THE CW DIRECTION WHEN VIEWED FROM THE TERMINAL SIDE.

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

SIZE	DWG NO.	REV.
C	RA60-10-001A	R
SCALE	2:1	SOLIDWORKS SHEET 2 OF 2



4

3

2

1