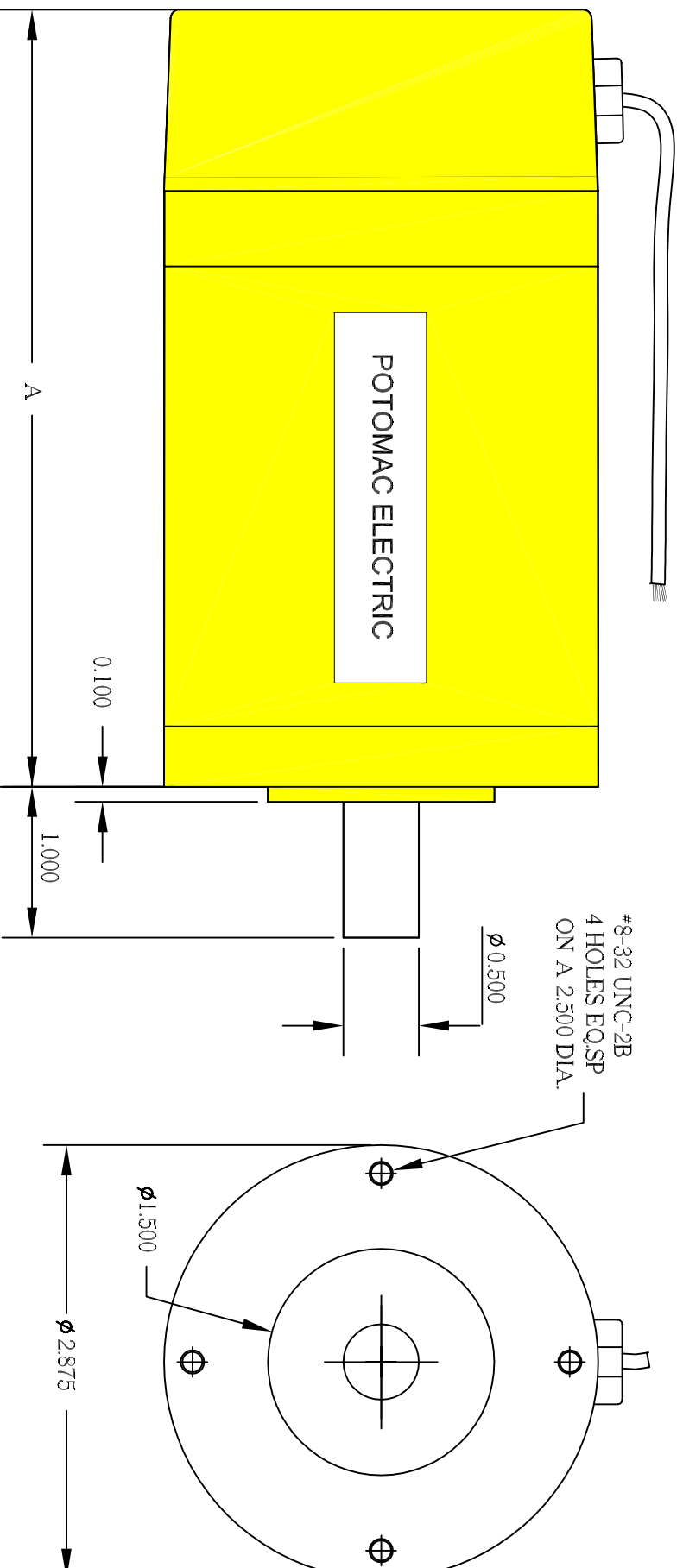


**“OVERKILL” SERIES DC SERVOMOTORS  
MOTORS COME IN THREE LENGTH SIZES  
DATA SHEET BELOW IS GIVEN FOR A MIDDLE SIZE MOTOR**

**MXX3200.CX (3 inch diameter)**

PERFORMANCE DATA			
SYM	PARAMETER	UNITS	NOMINAL
<b>T<sub>pk</sub></b>	Torque, peak rated	oz.in.	400
<b>T<sub>C</sub></b>	Torque, continuous at 40°C ambient	oz.in.	180
<b>K<sub>T</sub></b>	Torque sensitivity	oz.in./AMP	32.4
<b>R<sub>a</sub></b>	Resistance of armature at 25°C	ohms	0.67
<b>L<sub>a</sub></b>	Inductance of armature at 1000 Hz	millihenrys	0.74
<b>I<sub>p</sub></b>	Amps at peak torque	amps	20
<b>E<sub>p</sub></b>	Maximum terminal voltage	volts	85
<b>K<sub>V</sub></b>	Volts back EMF (+/- 3%)	volts/KRMP	24
<b>F<sub>I</sub></b>	Viscous friction coefficient	oz.in./KRMP	1.5
<b>T<sub>f</sub></b>	Static friction torque	oz.in.	6.1
<b>T<sub>R</sub></b>	Cogging torque at zero excitation	oz.in.	+/- 3%
<b>J<sub>m</sub></b>	Moment of inertia - motor/encoder	oz.in.sec <sup>2</sup>	0.020
<b>τ<sub>m</sub></b>	Time constant, mechanical	millisec	5.4
<b>τ<sub>e</sub></b>	Time constant, electrical	millisec	1.2
<b>R<sub>th</sub></b>	Thermal resistance, mounted	deg C/watt	2.0
<b>τ<sub>th</sub></b>	Thermal time constant	minutes	36
<b>θ<sub>a</sub></b>	Armature temp., max allowable	deg C	150 <sup>o</sup>
<b>K<sub>vt</sub></b>	Tachometer sensitivity	volts/KRPM	-
<b>R<sub>t</sub></b>	Tachometer resistance	ohms	-
	Tachometer ripple volts	% of average	1.5
	Tachometer test filter & R.P.M.	1kHz @ 1000 RPM	
	Motor/tach torsional res. freq.	hertz	-
<b>W</b>	Weight	lbs.	7.1

# "OVERKILL" SERIES 3" DC SERVOMOTORS



DIMENSION CHART OF MOTOR LENGTH - SIZE "A" (INCHES)

TYPICAL CONFIGURATIONS	MOTOR-ENCODER	MOTOR-TACH.	MOTOR-TACH-ENCODER
3100	5.150	5.150	5.860
3200	6.400	6.400	7.150
3300	7.650	7.650	8.400