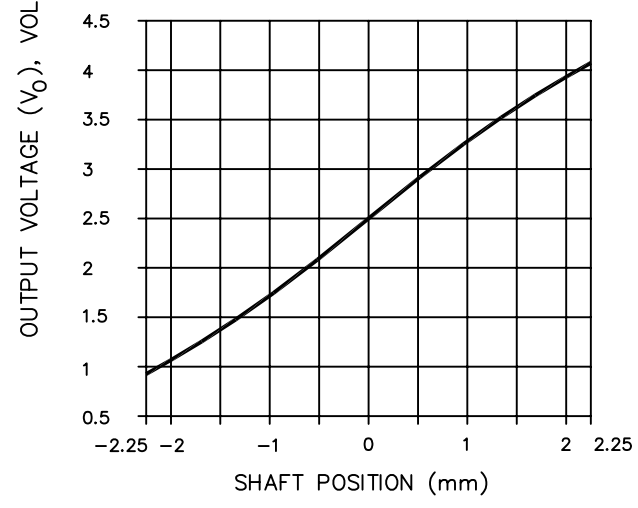


WINDING CONSTANTS *	UNITS	TOL	SYMBOL	WDG A
DC RESISTANCE	OHMS	±12.5%	R	3.2
VOLTAGE @ F _p	VOLTS	NOMINAL	V _p	24.3
CURRENT @ F _p	AMPERES	NOMINAL	I _p	7.6
FORCE SENSITIVITY	N/AMP	±10%	K _F	7.90
	LB/AMP	±10%		1.78
BACK EMF CONSTANT	V/M/SEC	±10%	K _B	7.90
	V/FT/SEC	±10%		2.41
INDUCTANCE ****	MILLI-HENRY	±30%	L	0.38

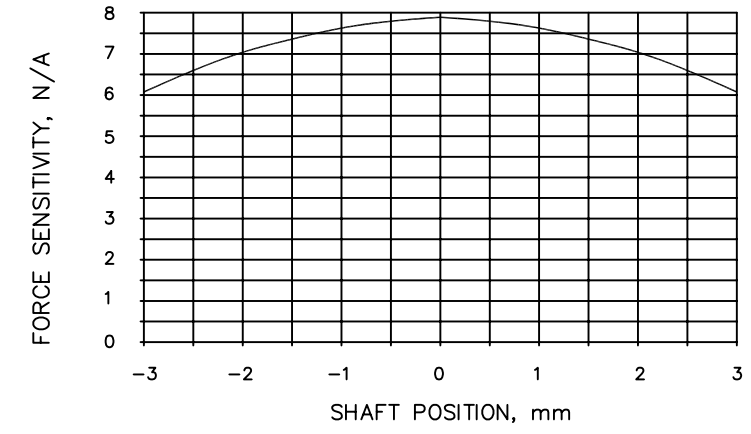
LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
C	045021	MATCHED DWG REV. TO AVANTE	JJC	MG	12/15/04
D	080315	CORRECT ACTUATOR LEADS CALL OUT	SLM	MG	08/04/08
E	100070	ADD POSITION SENSOR TABLE	SLM	MG	05/11/10

ACTUATOR PARAMETERS *	UNITS	SYMBOL	VALUE
PEAK FORCE **	N	F _p	60
	LB		13.5
CONTINUOUS STALL FORCE ***	N	T _{cs}	16.8
	LB		3.78
ACTUATOR CONSTANT	N/√WATT	K _A	4.42
	LB/√WATT		0.99
ELECTRICAL TIME CONSTANT	MILLI-SEC	τ _E	0.119
MECHANICAL TIME CONSTANT	MILLI-SEC	τ _M	2.05
POWER I ² R @ F _p	WATTS	P _p	185
STROKE	± MM		3.0
	± IN		0.118
CLEARANCE ON EACH SIDE OF COIL	MM		0.46
	INCHES		0.018
THERMAL RESISTANCE OF COIL	°C/WATT	θ _{TH}	6.0
MAX. ALLOWABLE COIL TEMP.	°C	TEMP	155
WEIGHT OF COIL ASSEMBLY	G	WT _C	40 MAX
	OZ		1.41 MAX
WEIGHT OF FIELD ASSEMBLY	G	WT _F	198
	OZ		7.0

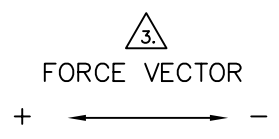
POSITION SENSOR (±2.7% MAXIMUM LINEARITY ERROR)



ACTUATOR

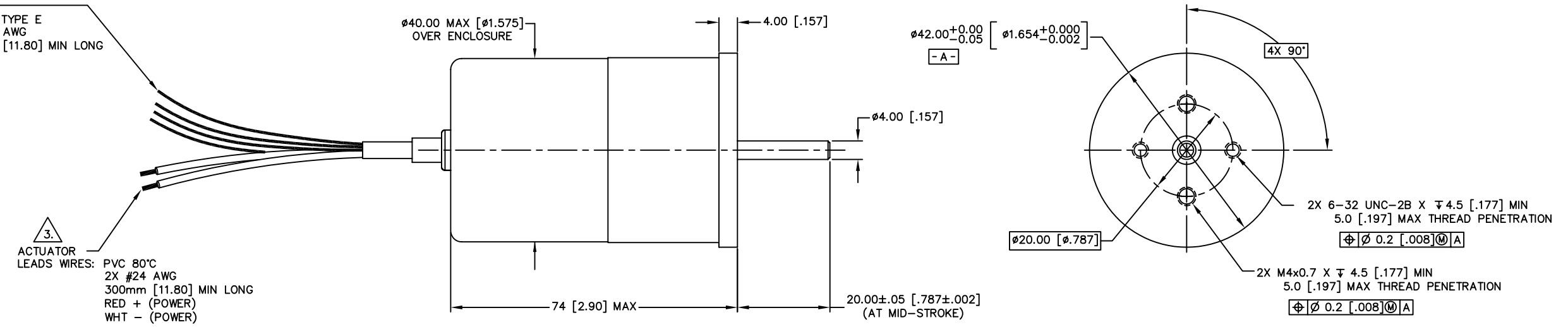


* AT MID-STROKE & 25°C AMBIENT TEMPERATURE
 ** 10 SECONDS AT 25°C AMBIENT & 155°C COIL TEMPERATURE
 *** 25°C AMBIENT & 155°C COIL TEMPERATURE
 **** MEASURED AT 1000 Hz



POSITION SENSOR
 LEADS WIRES: TEFLON TYPE E
 4X #30 AWG
 300mm [11.80] MIN LONG

ACTUATOR
 LEADS WIRES: PVC 80°C
 2X #24 AWG
 300mm [11.80] MIN LONG
 RED + (POWER)
 WHT - (POWER)



POSITION SENSOR

LEAD WIRE	IDENTIFICATION	DESCRIPTION
YELLOW	V _{CC}	INPUT VOLTAGE (5 VOLTS)
GRAY	GND	GROUND
BROWN	V ₀	OUTPUT VOLTAGE
WHITE	V _{PP}	VOLTAGE FOR PROGRAMMING ONLY, NOT TO BE USED BY CUSTOMER

3. A POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD WILL PRODUCE A FORCE ON THE COIL ASSEMBLY IN THE POSITIVE (+) DIRECTION.
- DIMENSION IN BRACKETS ARE INCHES [IN.] AND ARE FOR REFERENCE ONLY.
 - INTERPRET DIMENSIONS & TOLERANCES PER ANSI Y14.5M-1982.
- NOTES: UNLESS OTHERWISE SPECIFIED

U.S. PATENT NO'S:
 5,345,206 7,166,996

METRIC DRAWING

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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:
 -ALL DIMENSIONS ARE IN INCHES
 -BREAK SHARP EDGES .015 MAX.
 -SURFACE ROUGHNESS-3.2
 -DIMENSIONS APPLY AFTER FINISH
 -MAX FILLET R.010

TOLERANCES:
 DECIMALS ANGULAR
 X ± .008 ±0° 30'
 XX ± .0025
 XXX ± .0013
 DO NOT SCALE DRAWING

BEI KIMCO MAGNETICS DIVISION
 SAN MARCOS, CA 92069

LINEAR ACTUATOR SYSTEM

DRAWN R. GUERRERO	DATE 10/16/03	TITLE LINEAR ACTUATOR SYSTEM
MECH CHECK W. BUTTERFIELD	06/21/04	
APPD M. GODKIN	06/21/04	
FILE NO. L\TOP\LAS		

SIZE D	FSCM NO. 55789	DWG NO. LAS16-29-001A	REV E
SCALE 2/1	SHEET 1 OF 1		