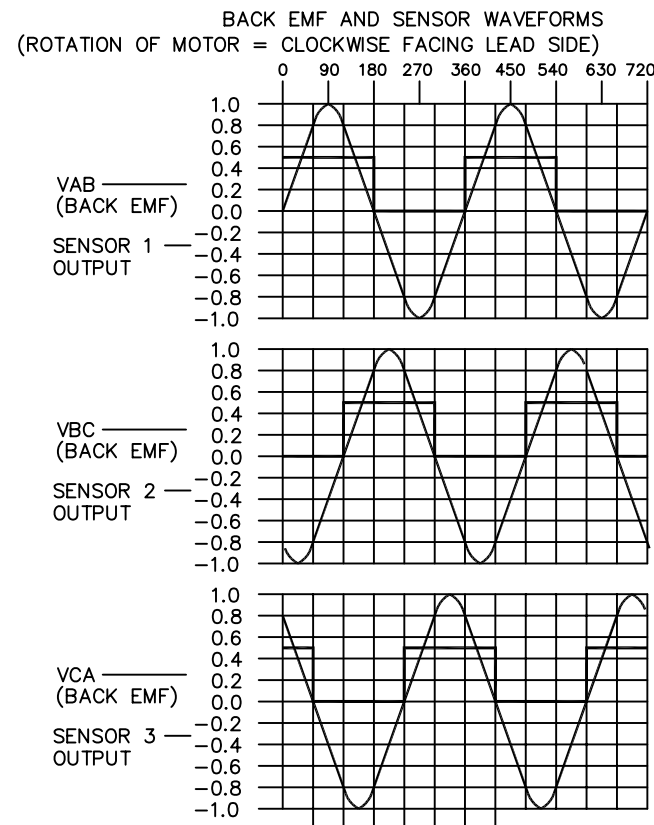


WINDING CONSTANTS	UNITS	TOL	SYM	WDG A
DC RESISTANCE	OHMS	±12.5%	R	0.36
VOLTAGE @ T <sub>P</sub>	VOLTS	NOMINAL	V <sub>P</sub>	9.00
CURRENT @ T <sub>P</sub>	AMPERES	NOMINAL	I <sub>P</sub>	25.0
TORQUE SENSITIVITY	OZ IN/AMP	±10%	K <sub>T</sub>	14.0
BACK EMF CONSTANT	VOLTS/(RAD/SEC)	±10%	K <sub>B</sub>	0.099
INDUCTANCE	MILLIHENRY	±30%	L	1.33

MOTOR PARAMETERS	UNITS	SYM	NOM. VALUE
PEAK TORQUE *	OZ IN	T <sub>P</sub>	350.0
CONTINUOUS STALL TORQUE **	OZ IN	T <sub>CS</sub>	135.0
MOTOR CONSTANT	OZ IN/√WATT	K <sub>M</sub>	23.3
ELECTRICAL TIME CONSTANT	MILLISECOND	τ <sub>E</sub>	3.7
MECHANICAL TIME CONSTANT	MILLISECOND	τ <sub>M</sub>	5.4
POWER I <sup>2</sup> R @ T <sub>P</sub>	WATTS	P <sub>P</sub>	212.3
DAMPING FACTOR (ZERO IMPEDANCE)	OZ IN/(RAD/SEC)	F <sub>O</sub>	4.07
BREAKAWAY TORQUE	OZ IN	T <sub>F</sub>	7.0
ROTOR INERTIA	OZ IN SEC <sup>2</sup>	J <sub>M</sub>	2.2x10 <sup>-2</sup>
MAX ALLOWABLE SPEED	RPM	S <sub>M</sub>	18,000
SPEED @ 100 OZ-IN & 80 VDC	RPM	S <sub>L</sub>	6,200
THEO ACC @ T <sub>P</sub>	RAD/SEC <sup>2</sup>	α <sub>T</sub>	1.6x10 <sup>4</sup>
THERMAL RESISTANCE ***	°C/WATT	θ <sub>TH</sub>	2.2
MAX ALLOWABLE WINDING TEMP	°C	TEMP	125
NUMBER OF PHASES/WINDING TYPE			3/Y
NUMBER OF POLES			6
WEIGHT	OZ	W <sub>T</sub>	66

\* 10 SEC @ 25°C AMBIENT TEMP  
 \*\* 25°C AMBIENT, 125° WINDING TEMP  
 \*\*\* WITH 12 X 12 X .25 THICK AL HEAT SINK



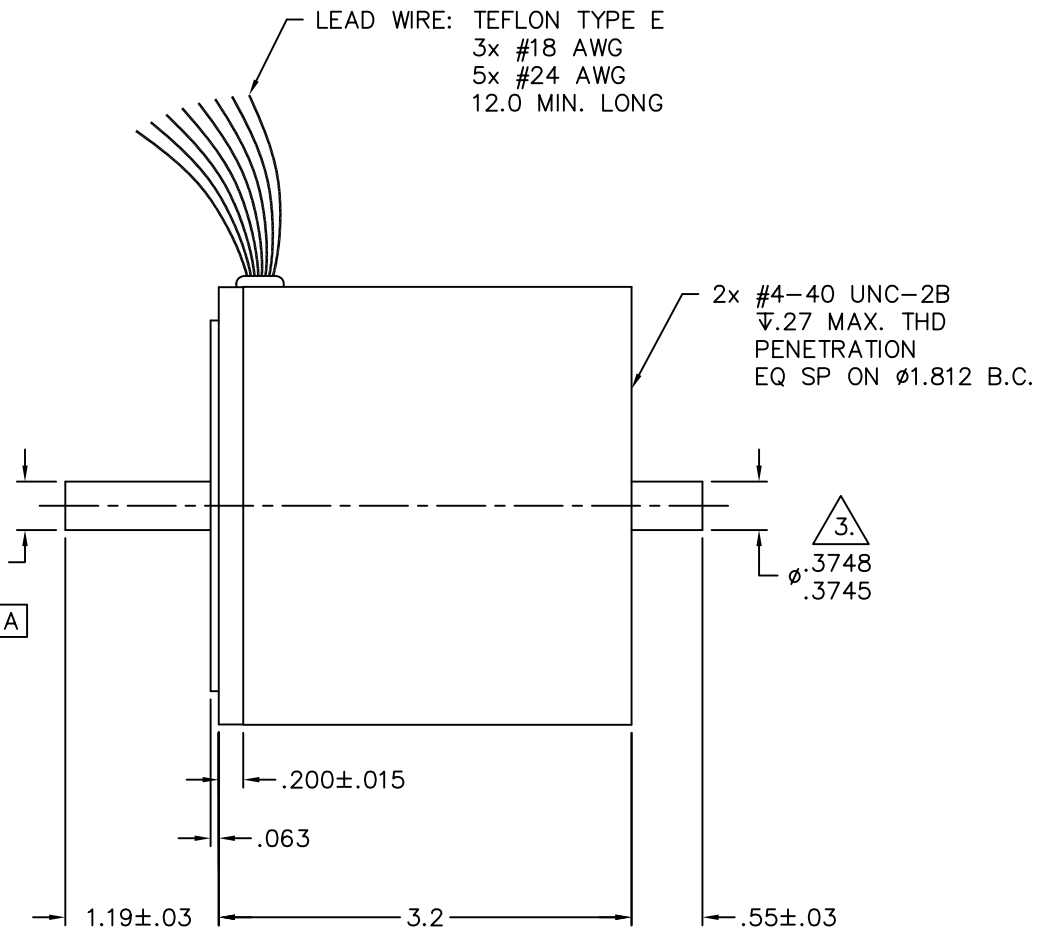
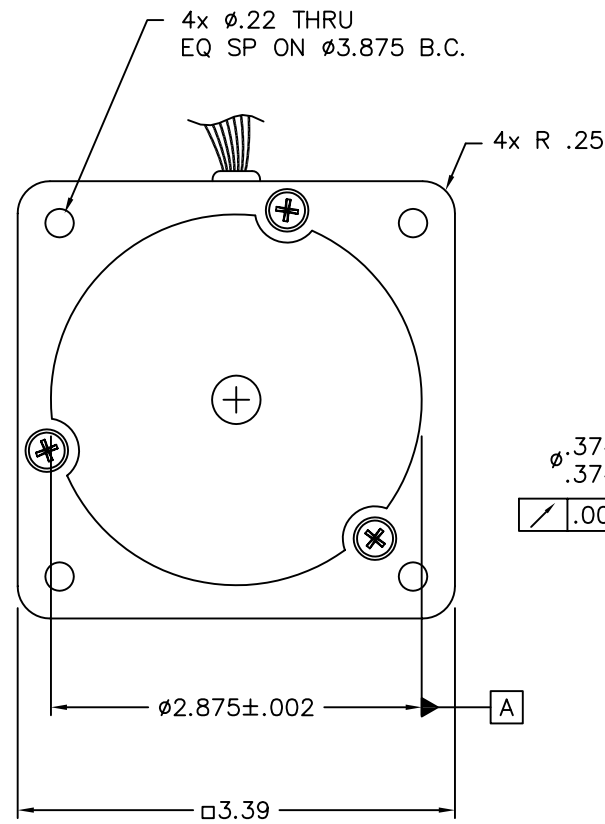
COLOR	1	2	3	4	5	6
A RED	+	+	-	-		
B BLK	-	+	+	-		
C GRN	-	-	+	+		
1 BRN	1	1	0	0	0	1
2 BLU	0	1	1	1	0	0
3 ORG	0	0	0	1	1	1
Vcc+ YEL						
GND GRY						

NOTES: UNLESS OTHERWISE SPECIFIED

- INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
- INTERPRET DRAWING IAW ASME Y14.100.

3. SHAFT RUNOUT TO BE .003 MAX.

LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
B	99-0724	UPDATE WDG. INFO	RLE	HP	09/13/99
D	070564	ADD WAVEFORM	SLM	BD	09/18/07
E	070595	CORRECT ROTATION DIRECTION	SLM	BD	09/28/07



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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:  
 -ALL DIMENSIONS ARE IN INCHES  
 -BREAK SHARP EDGES .015 MAX.  
 -SURFACE ROUGHNESS √63  
 -DIMENSIONS APPLY AFTER FINISH  
 -MAX FILLET R .010

TOLERANCES:  
 DECIMALS ANGULAR  
 .X ± .03 ±0° 30'  
 .XX ± .01  
 .XXX ± .005  
 DO NOT SCALE DRAWING

**BEI KIMCO MAGNETICS DIVISION**  
 VISTA, CA 92081

DRAWN	R. ELLOITT	DATE	11/06/98	TITLE	BRUSHLESS DC MOTOR
MECH CHECK	McGHEE	DATE	09/18/07	SIZE	C
APPD	HA PHAM	DATE	11/06/98	FSCM NO.	55789
FILE NO.	M:\TOPLEVEL\DIM\...	DWG NO.	DIN34-32-CDYA	REV	E
SCALE	1/1	SHEET	1 OF 1		