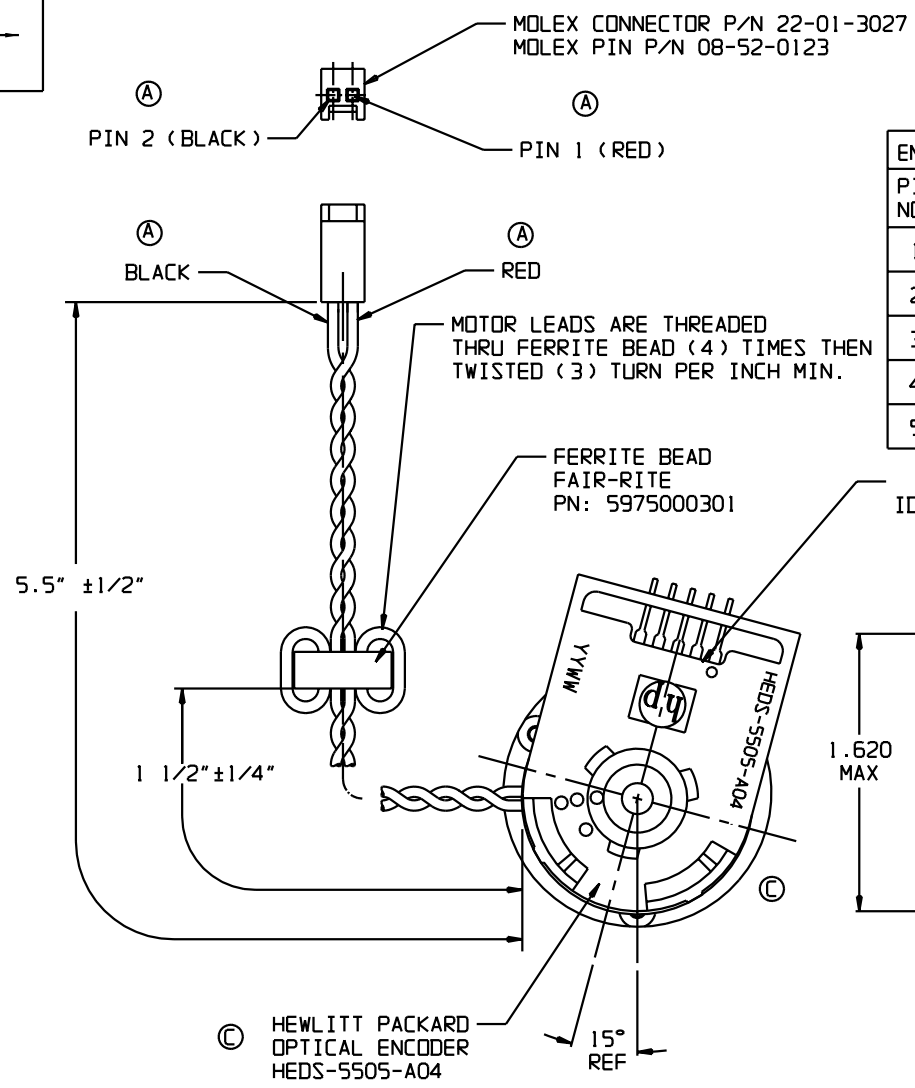
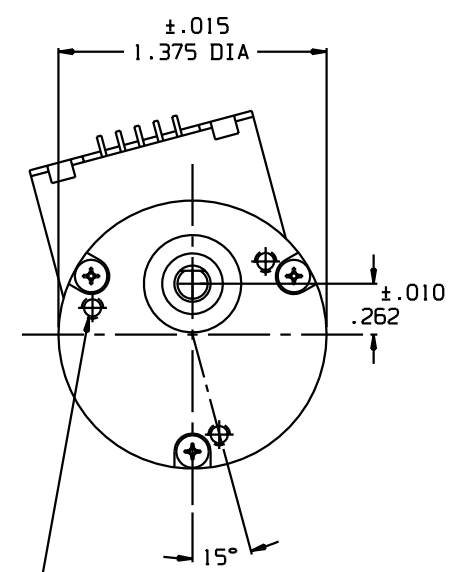
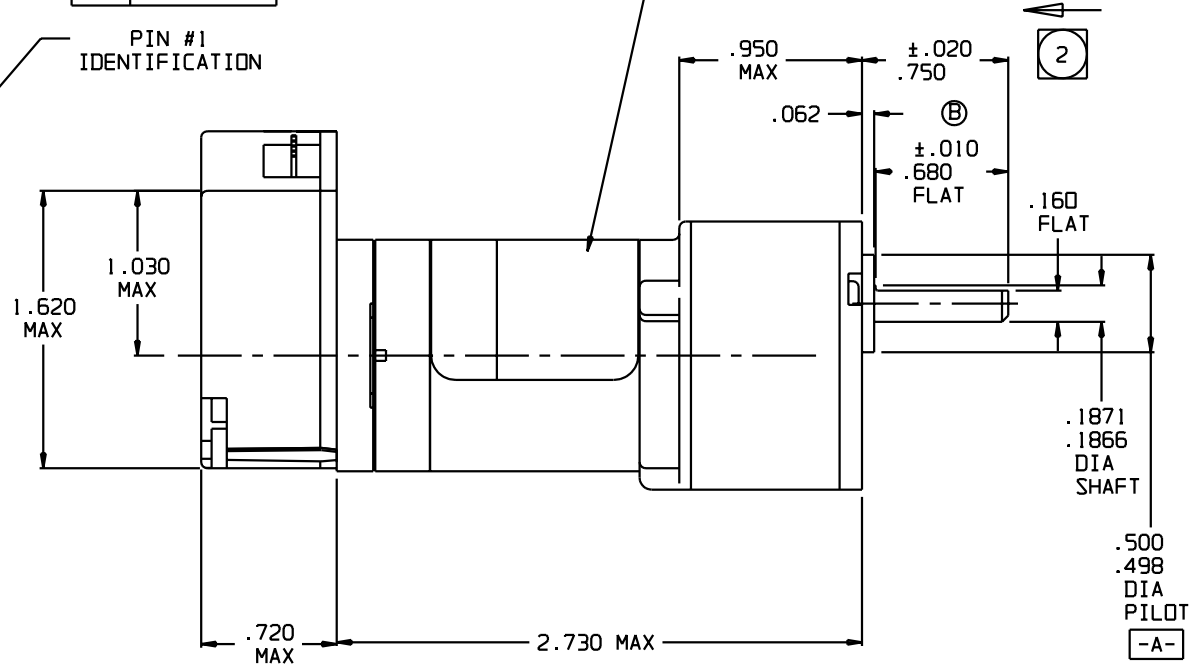


REVISIONS		DWG NO. 415A832	
REV	DESCRIPTION	DATE	APPROVED
-	PRODUCTION RELEASE PER ECO 73663	DEI 5-21-04	RMS
A	INC ECO 73857	DEI 7-29-04	RMS
B	INC ECO 73891	DEI 8-13-04	RMS
C	INC ECO 73917	DEI 8-24-04	RMS



ENCODER PIN-OUTS	
PIN NO.	FUNCTION
1	GND
2	NC
3	CH. A
4	Vcc
5	CH. B

415A832 12 VDC
 PAKON P/N: 125052
 DATE CODE: (YR-WK)
 REV LEVEL



- NOTES:
1. ROTATION (BI-DIRECTIONAL): RED LEAD IS POSITIVE (+) AND BLACK LEAD IS NEGATIVE (-), GEARBOX OUTPUT SHAFT ROTATION IS COUNTERCLOCKWISE VIEWING END OPPOSITE LEADS. MOTOR (PINION) ROTATION IS CLOCKWISE VIEWING PINION END OF MOTOR SHAFT.
 2. OUTPUT SHAFT END PLAY: .002 TO .027 (DIMENSION IS WITH END PLAY REMOVED IN DIRECTION SHOWN)

3. MOTOR PERFORMANCE (BI-DIRECTIONAL):

PARAMETER	VALUE	UNITS	TOL
VOLTAGE-DC	12	VOLTS	NOM
NO LOAD SPEED	16.7(±1.67)	RPM	10%
NO LOAD CURRENT	.11	AMPS	MAX
LOAD	22	OZ. IN.	NOM
SPEED AT LOAD	15.7(±1.88)	RPM	12%
CURRENT AT LOAD	.14	AMPS	MAX

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE WITHOUT WRITTEN PERMISSION FROM GLOBE MOTORS. SHOP STD. 535100 SUPPLEMENTS THIS DWG. GEOMETRIC DIMENSIONS & TOLERANCE TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M - 1982 SPECIFICATIONS REFERENCED ON THIS DWG SHALL BE OF LATEST ISSUE.	DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED. DECIMAL .X ±.030 FRACTION 1/64 .XX ±.010 ANGLE 11° .XXX ±.005	REQ DR 60269 DRAWN D. ISAAC 5-21-04 DESIGNER D. ISAAC 5-21-04 ENGR T. UNTERBRINK 5-21-04 APPD W. JESSE 5-21-04 APPD RMS 5-21-04	Globe Motors, Inc. 2275 Stanley Ave. Dayton Oh 45404
	MATERIAL 416M832 HEAT TREAT ----- COATING -----	NEXT ASSY USED ON APPLICATION	TITLE MOTOR-GEARBOX IM-13 .520 STACK BALL BRGS MOTOR/SLEEVE BRG GEARBOX LEADS&CONNECTOR/ENC 187.68:1 RATIO