

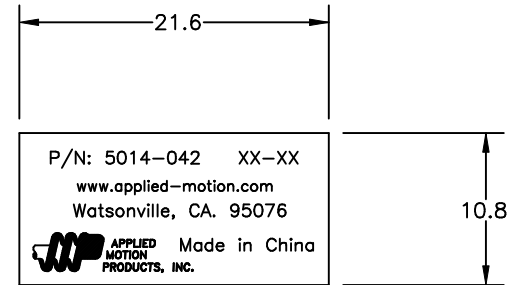
SPECIFICATIONS:	
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 20 G-CM <sup>2</sup> (.11 OZ-IN <sup>2</sup> ) REF
STEP ANGLE: 1.8°	HOLDING TORQUE: 1.84KG-CM ( 25.5 OZ-IN)MIN <sup>1</sup>
STEP TO STEP ACCURACY: ± 5 % <sup>1</sup> , <sup>2</sup>	DETENT TORQUE: 153 G-CM ( 2.1 OZ-IN) REF
POSITIONAL ACCURACY: ± 5 % <sup>1</sup> , <sup>3</sup>	DYNAMIC TORQUE: 20 OZ-IN @ 500PPS, HALF STEP <sup>G</sup> <sup>11</sup>
HYSTERESIS: %	INSULATION CLASS: B
WINDING RESISTANCE: 4.3 OHM ±10% AT 25° <sup>7</sup>	BEARINGS: ABEC 3, DOUBLE SHIELDED, NS7 GR'SE
WINDING INDUCTANCE: 5.5 mH ± 20% <sup>8</sup>	MASS: 210 G, (7.4 OZ) APPX
PHASE VOLTAGE: 4.3 VDC	TEMP. RISE: 80°C MAX. <sup>9</sup>
PHASE CURRENT: 1.0 AMP (RATED)	OPERATING TEMP. RANGE: -20 TO 50°C
	STORAGE TEMP. RANGE: -40 TO 70 °C
	RELATIVE HUMIDITY RANGE: 5 TO 95 %
SHAFT RUNOUT: 0.013	
RADIAL PLAY: 0.01 MAX WITH A .45KG RADIAL LOAD.	
END PLAY: 0.01 MAX WITH A .9KG AXIAL LOAD.	

5014-042

REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6880	A	INITIAL RELEASE	12-3-2013	J.KORDIK

NOTES, UNLESS OTHERWISE SPECIFIED:

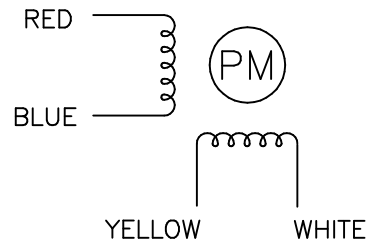
- <sup>1</sup> MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- <sup>2</sup> BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- <sup>3</sup> MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC FOR ONE MINUTE.
5. LEADS: 4 ,AWG 26 ,7 STRAND MIN.,UL AND CSA APPROVED, UL 1430.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- <sup>7</sup> AS MEASURED ACROSS ANY WINDING.
- <sup>8</sup> AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE (1 KHz).
- <sup>9</sup> AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
10. 5014-842 WINDING.
- <sup>11</sup> IMS IB463 BIPOLAR CHOPPER DRIVE, 12 VOLT SUPPLY.
12. DOUBLE MAGNET ROTOR.
13. LAMINATION MATERIAL: .5mm thk, SEE AMP STD SPEC #1500-063.
14. MATERIAL: FRONT AND REAR END BELL; UNPAINTED ALUMINUM, SHAFT; NON-MAGNETIC STAINLESS STEEL.
15. LABEL TO INCLUDE PART NUMBER AND DATE CODE. REF: DETAIL A.
16. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
17. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.
- <sup>18</sup> SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER. ENCODER HOLES INCLUDED WITH REAR SHAFT VERSION ONLY.



LABEL  
DETAIL A

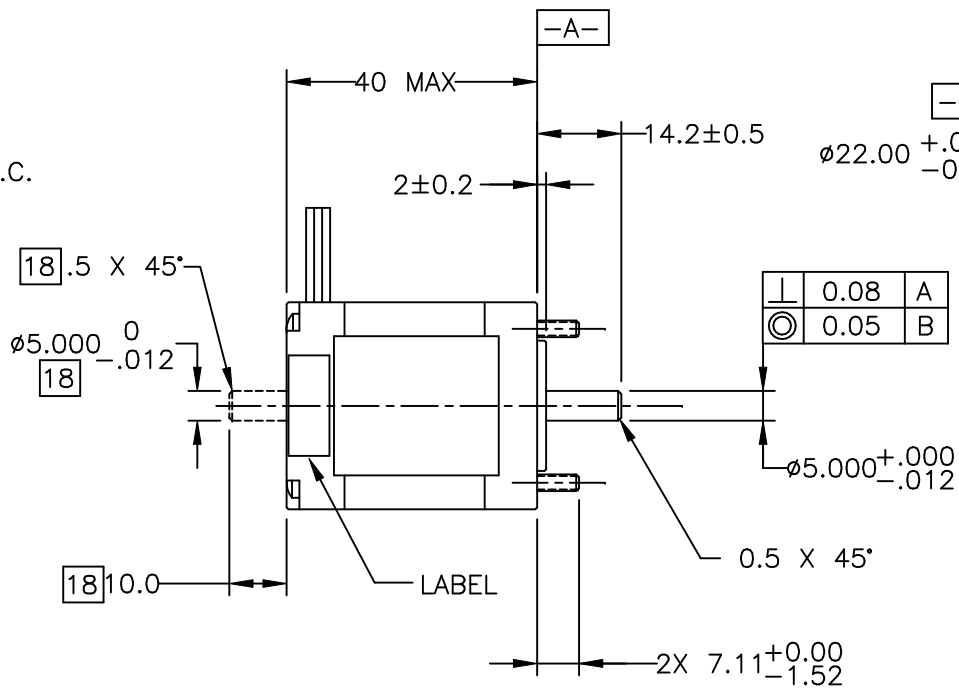
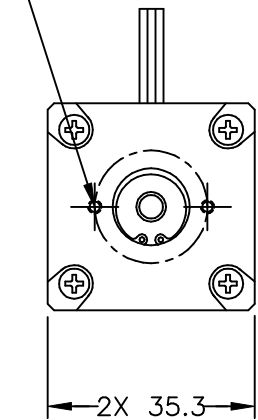
SWITCHING SEQUENCE FOR CW ROTATION  
FACING MOUNTING END

STEP	RED	WHITE	BLUE	YELLOW
0	-	-	+	+
1	-	+	+	-
2	+	+	-	-
3	+	-	-	+
4	-	-	+	+



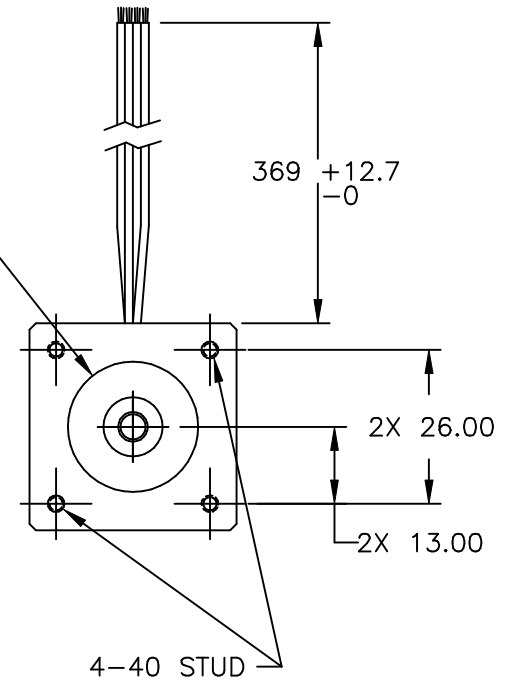
CONTRACT NO. -		APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>			
DRAWN R.JONEZ	11/27/13				
CHECKED		<b>B</b>	COMPUTER DATA BASE DRAWING	DWG NO. <b>5014-042</b>	REV <b>A</b>
APPROVED			SCALE: NONE	SHEET 1 OF 2	

18 2X #2-56 TAP  
ON A  $\phi 19.05$  B.C.



$\perp$	0.08	A
$\odot$	0.05	B

-B-  
 $\phi 22.00$   $\begin{matrix} +.00 \\ -0.052 \end{matrix}$



<p>TOLERANCES</p> <p>DECIMALS: MM (INCH)</p> <p>X.XXX = <math>\pm</math> (.005)</p> <p>X.XX = <math>\pm</math>0.13 (.010)</p> <p>X.X = <math>\pm</math>0.25 (.020)</p> <p>ANGLES:</p> <p>MACH. = <math>\pm</math>5°</p> <p>CHAM. = <math>\pm</math>5°</p> <p>COMPUTER DATA BASE DRAWING</p>	THIRD ANGLE PROJECTION		<p>APPLIED MOTION PRODUCTS, INC.</p>
	APPROVALS	DATE	<p>B DWG NO. 5014-042 REV A</p>
	<p>DRAWN R. JONEZ</p> <p>CHECKED</p>	11/27/13	