

**SPECIFICATIONS:**

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 38.0 G-CM <sup>2</sup> (0.20 OZ-IN <sup>2</sup> ) REF
STEP ANGLE: 1.8°	DETENT TORQUE: 122.3G-CM (1.69 OZ-IN) MIN
STEP TO STEP ACCURACY: ±5 % [1], [2]	INSULATION CLASS: B
POSITIONAL ACCURACY: ±5 % [1], [3]	BEARINGS: ABEC 3, DOUBLE SHIELDED
HYSTERESIS: X %	WEIGHT: 210 G (7.3 OZ) APPROXIMATE
SHAFT RUNOUT: 0.03 T.I.R.	TEMP. RISE: 80 °C MAX. [8]
RADIAL PLAY: 0.02 MAX W/A .5KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 MAX W/A 0.5KG AXIAL LOAD	STORAGE TEMP. RANGE: -30 TO +70 °C
	RELATIVE HUMIDITY RANGE: 15 TO 85 %

[7]

CONNECTION	SPECIFICATION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE N.m Min
BI-POLAR SERIES		2	8.4	10.0	0.67	5.6	0.22
BI-POLAR PARALLEL		2	2.1	2.5	1.34	2.8	0.22
UNI-POLAR		4	4.2	2.5	0.95	4.0	0.16

HT17-268

**REVISIONS**

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	J.KORDIK
5995	B	PERPENDICULARITY CORRECTED	9/28/09	J.KORDIK
6090	C	STANDARDIZE ENCODER HOLES	3/29/10	J.KORDIK

**NOTES, UNLESS OTHERWISE SPECIFIED:**

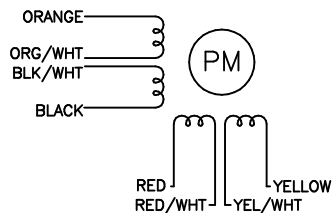
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
- 4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- 5. LEADS: 8, 26 AWG, 7 STRAND MIN., UL AND CSA APPROVED, UL 1430 OR UL 3265.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz.
- [8] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- [9] SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER, DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.
- 10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [11] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

**DRIVE SEQUENCE MODEL  
BI-POLAR FULL STEP**

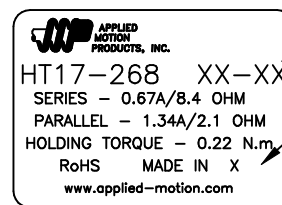
STEP	ORANGE & BLK/WHT	BLACK & ORG/WHT	RED & YEL/WHT	YELLOW & RED/WHT
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+

CW(CLOCKWISE) AND CCW(COUNTER-CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

**WIRING DIAGRAM**



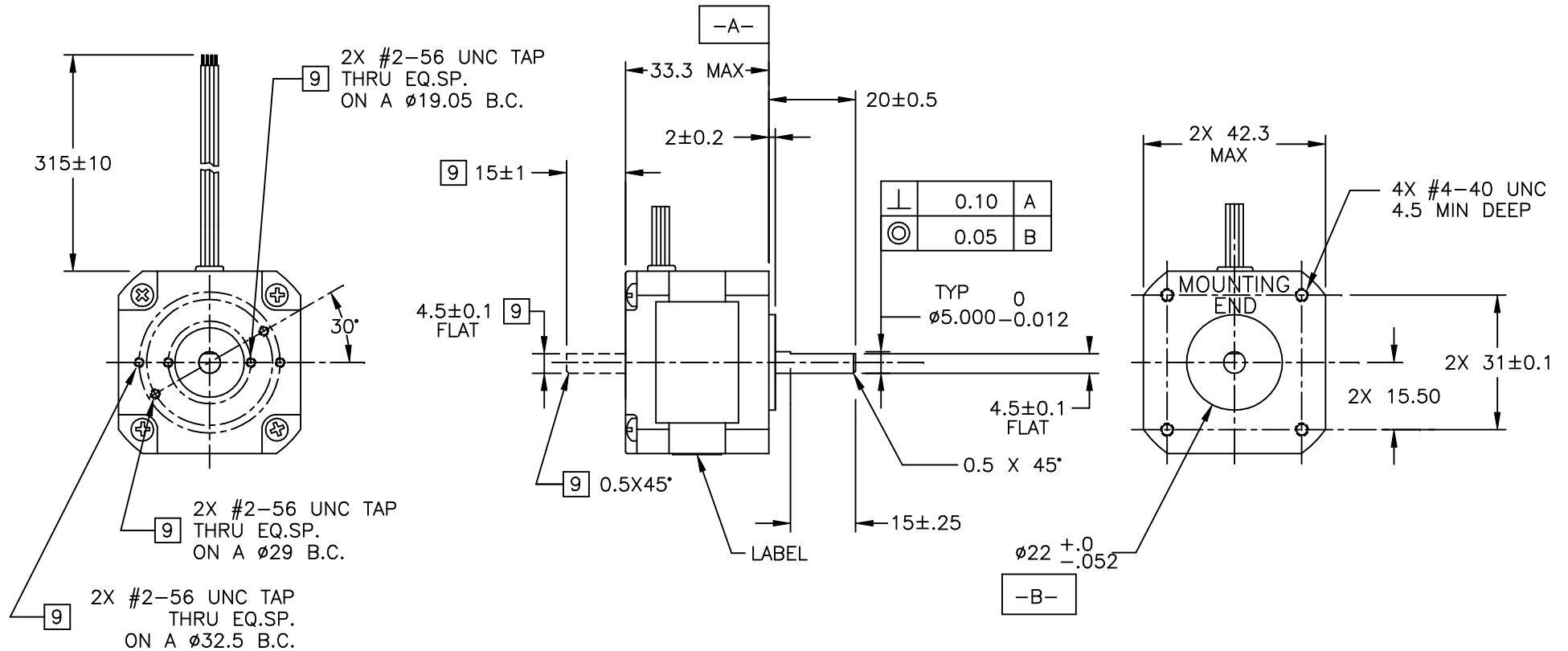
**LABEL DETAIL**



[11]

CONTRACT NO. -		APPLIED MOTION PRODUCTS, INC.		
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>		
DRAWN <i>R.JONEZ</i>	<i>8/19/09</i>			
CHECKED		<b>B</b>	COMPUTER DATA BASE DRAWING	DWG NO. <b>HT17-268</b>
APPROVED			REV <b>C</b>	
APPROVED		SCALE: NONE	SHEET 1 OF 2	

# MOTOR DRAWING



TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX = $\pm$ (.005) X.XX = $\pm$ 0.13 (.010) X.X = $\pm$ 0.25 (.020) ANGLES: MACH. = $\pm$ 5° CHAM. = $\pm$ 5°					
COMPUTER DATA BASE DRAWING		APPROVALS      DATE DRAWN <i>R. JONEZ</i> <i>8/19/09</i> CHECKED APPROVED			
				B      DWG NO.	REV C
				HT17-268	SHEET 2 OF 2
				SCALE: NONE	