

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 460 G-CM ² (6.51X10 ⁻³ oz-in-sec ²)NOM				
STEP ANGLE: 1.8°	INSULATION CLASS: B				
STEP TO STEP ACCURACY:±.09 DEGREES [1] , [2]	WEIGHT: 1.0 KG (2.2 LB)				
RADIAL PLAY:0.02 mm MAX W/.5KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C				
END PLAY: 0.08 MAX W/1.0 KG AXIAL LOAD	STORAGE TEMP. RANGE: -30 TO +70 °C				
SHAFT RUNOUT: 0.05 T.I.R.	TEMP. RISE: 80 °C MAX. [9]				
	RELATIVE HUMIDITY RANGE: 15 TO 99 %				
	[7]	[8]	[1]	[1]	
SPECIFICATION CONNECTION	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	HOLDING TORQUE N-m Min	HOLDING TORQUE oz-in Min
BI-POLAR SERIES	16.6	60.8	0.71	1.6	227
BI-POLAR PARALLEL	4.15	15.2	1.41	1.6	227
UNI-POLAR	8.3	15.2	1.00	1.3	184

HW23-754

REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6449	A	INITIAL RELEASE	3/7/12	J KORDIK
6470	B	REVISE MOTOR LENGTH, MTG HOLE SIZE	3/13/12	J KORDIK
6356	C	REVISE SPECS	5/2/12	J KORDIK
6578	D	105°C CABLE/DRAWING CLEANUP	8/28/12	J KORDIK
6718	E	ADD BLACK COATING NOTE	3/15/13	J KORDIK
6729	F	REVISE NOTE 5	4/4/13	J KORDIK
7373	G	END BELL SEALING OPTIONS	2/12/16	J KORDIK
7445	H	REVISE NOTE 13	6/6/16	J KORDIK

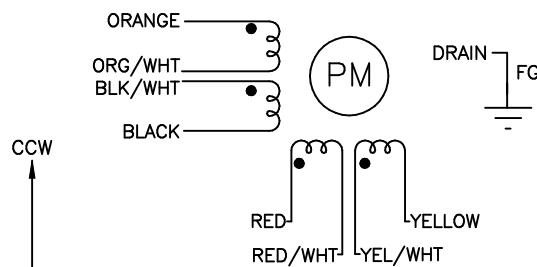
NOTES, UNLESS OTHERWISE SPECIFIED:

- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- [5] LEADS: 8, 22 AWG, 7 STRAND MIN., UL AND CSA APPROVED, 105°C RATED SHIELDED CABLE 666-2126, 8 COND W/DRAIN.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] MEASUREMENTS MADE AT LEAD ENDS.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. MEASUREMENTS MADE AT LEAD ENDS.
- [9] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES; WITH MOTOR AT REST.
10. HIGH TORQUE MOTOR DESIGN, MICROSTEP LAMINATION.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- [12] DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
13. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
- [14] MOTOR LABEL SHOWN IN DETAIL. MARK DATE CODE, MOTOR DATA, PART NUMBER AND MADE IN CHINA.
- [15] MOTOR TO MEET IP65 STANDARDS. REAR END BELL OPTIONS INCLUDE A SOLID END BELL OR A BRASS PLUG COVERING THE SHAFT BEARING, A 3M LABEL MUST COVER THE BRASS PLUG.
CABLE GLAND TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
16. END BELLS TO BE PROTECTED WITH BLACK COATING.

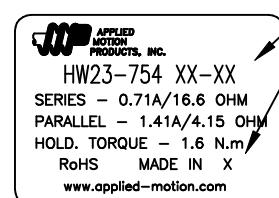
BIPOLAR, FULL STEP, 2 PHASE ON PARALLEL CONNECTED

SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

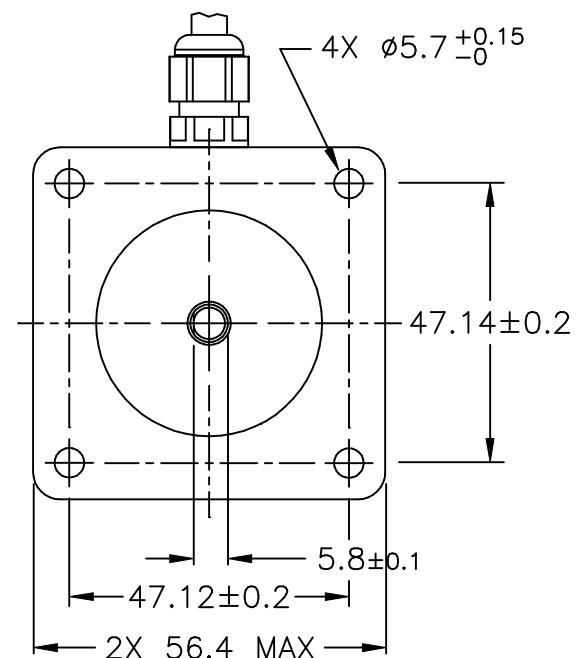
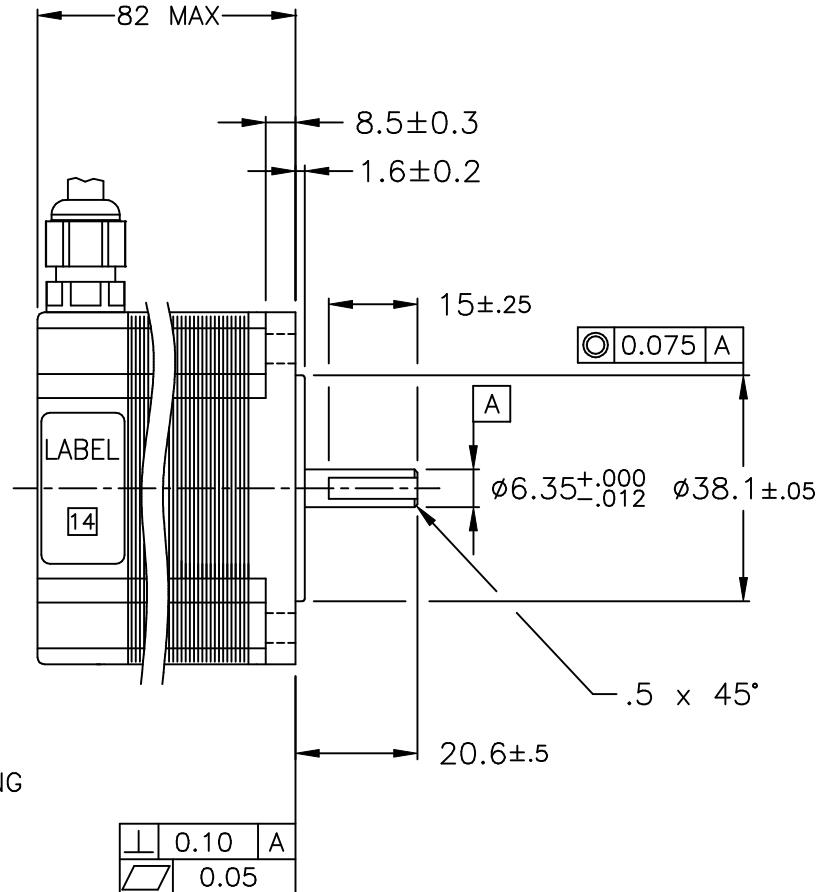
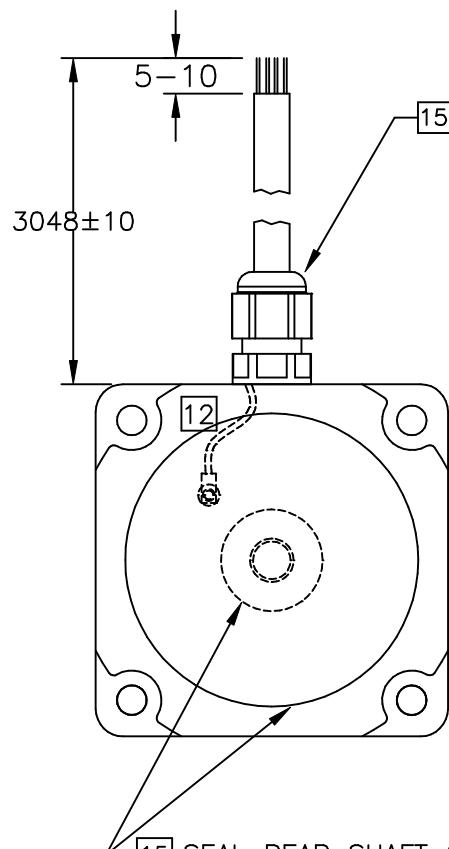
STEP	ORANGE & BLK/WHT	BLACK & ORN/WHT	RED & YEL/WHT	YELLOW & RED/WHT
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



LABEL DETAIL



CONTRACT NO.		APPROVALS		STEP MOTOR OUTLINE	
-		DRAWN R.JONEZ 3/7/12		APPLIED MOTION PRODUCTS, INC.	
CHECKED		APPROVED		B COMPUTER DATA BASE DRAWING	
APPROVED		DWG NO. HW23-754		REV H	
APPROVED		SCALE: NONE		SHEET 1 OF 2	



ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH)					
X.XXX = ± (.005)					
X.XX = ± 0.13 (.010)					
X.X = ± 0.25 (.020)					
ANGLES:					
MACH. = ± .5°					
CHAM. = ± 5°					
COMPUTER DATA BASE DRAWING		APPROVALS	DATE	STEP MOTOR OUTLINE	
DRAWN R.JONEZ		3/7/12		DWG NO.	
CHECKED				B	HW23-754
APPROVED				REV	H
SCALE: NONE			SHEET 2 OF 2		