

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 120 G-CM ² (0.66 OZ-IN ²) NOM
STEP ANGLE: 1.8°	DETENT TORQUE: N/AG-CM (N/A OZ-IN) MIN
STEP TO STEP ACCURACY: ±.09 DEGREE [1], [2]	INSULATION CLASS: B
POSITIONAL ACCURACY: ±.09 DEGREES [1], [3]	BEARINGS: ABEC 3, DOUBLE SHIELDED
HYSTERESIS: - %	WEIGHT: 0.47 KG (1.03 LB)
SHAFT RUNOUT: 0.05 T.I.R.	TEMP. RISE: 80 °C MAX. [9]
RADIAL PLAY: 0.02 MAX W/0.45 KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 MAX W/1.0 KG AXIAL LOAD	STORAGE TEMP. RANGE: -40 TO +70 °C
	RELATIVE HUMIDITY RANGE: 5 TO 95 %

[7] [8]

SPECIFICATION CONNECTION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE Nm Min
BI-POLAR SERIES	2	12.4	30.4	0.71	7.8	0.53
BI-POLAR PARALLEL	2	3.1	7.6	1.41	3.9	0.53
UNI-POLAR	4	6.2	7.6	1.00	5.6	0.42

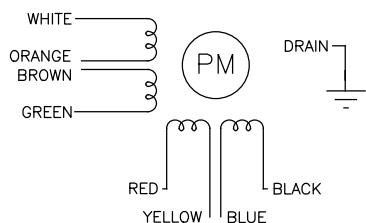
NOTES, UNLESS OTHERWISE SPECIFIED:

- [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, 24AWG, 7 STRAND MIN., UL AND CSA APPROVED, UL 1430 OR UL 3265. CABLE, 8 COND. W/DRAIN. CABLE 666-2107.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] MEASUREMENTS MADE WITHOUT CABLE.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. MEASUREMENTS MADE WITHOUT CABLE.
- [9] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE 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 TO INCLUDE "ROHS" COMPLIANT, DATE CODE AND "MADE IN (COUNTRY OF ORIGIN)".
- [15] SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.

BIPOLAR, FULL STEP, 2 PHASE ON SERIES CONNECTED

SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END
WITH ORANGE WIRE CONNECTED TO BROWN, YELLOW CONNECTED TO BLUE.

STEP	WHITE	GREEN	RED	BLACK
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



HT23-552

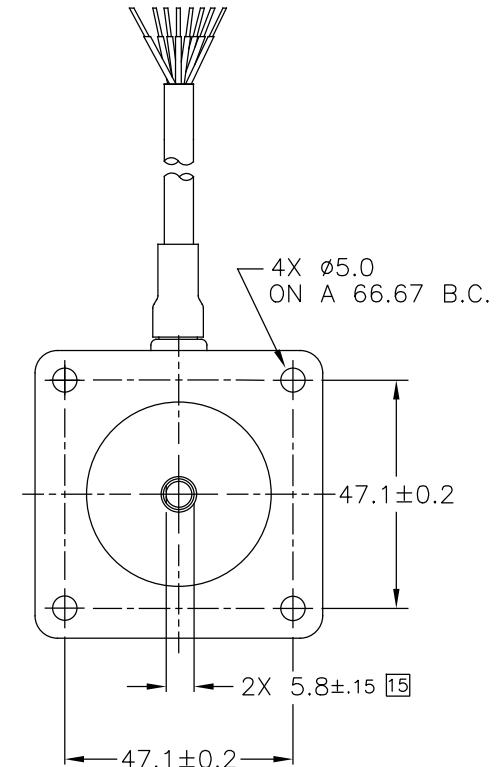
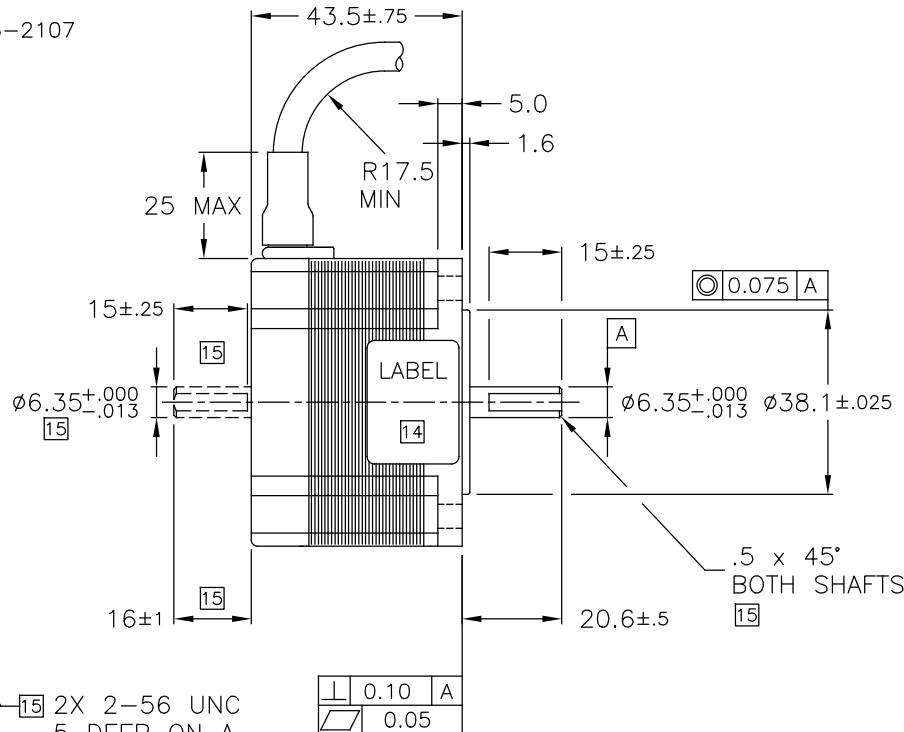
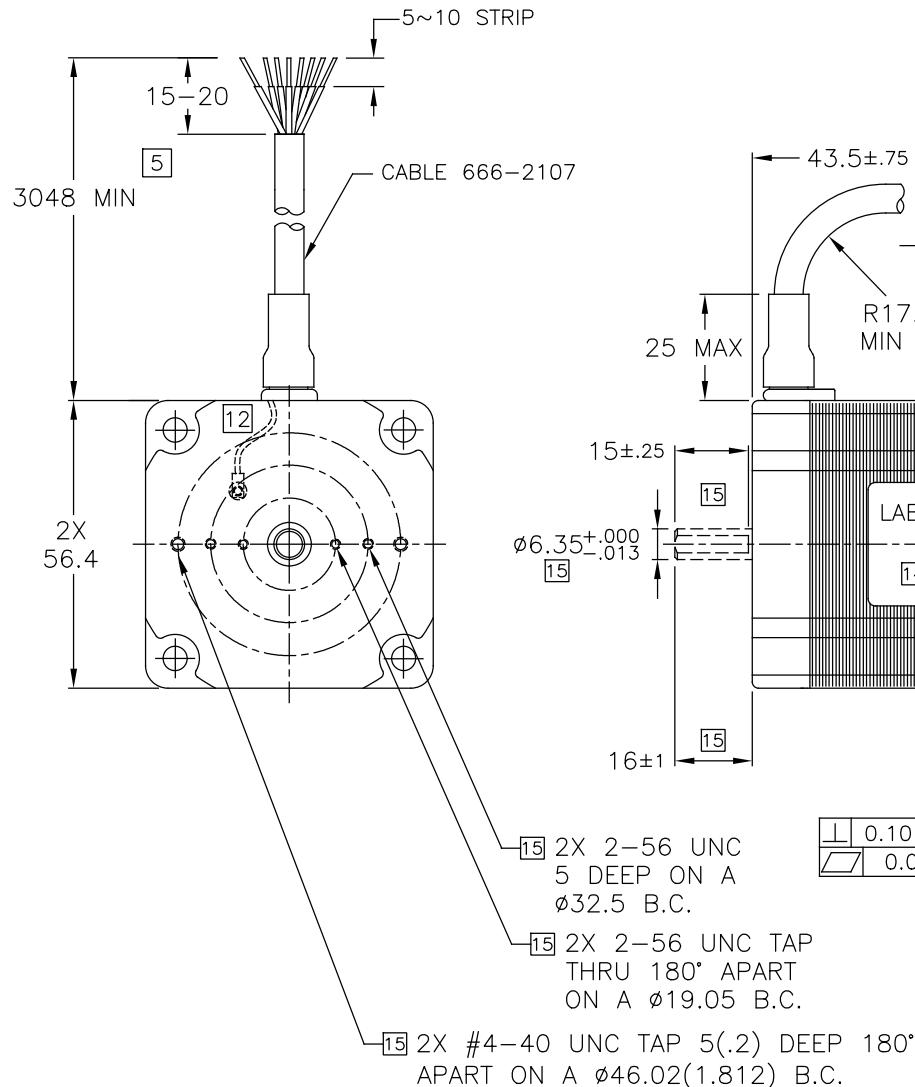
REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5349	A	INITIAL RELEASE	11/07/06	J.Kordik
5462	B	REVISE NOTE 12, ADD LABEL	4/4/07	J.Kordik
5891	C	REMOVE D FROM PN, DASH SHFT OPTN	3/9/09	J.Kordik
6165	D	REMOVE CONN, BOOT	9/10/10	J.Kordik
6197	E	REVISE CABLE P/N	10/27/10	J.Amos
6203	F	REVISE SPECS	12/21/10	J.Amos
6342	G	REVISE SPECS	9/20/11	E.Rice
7445	H	REVISE NOTE 13	6/6/16	J.Kordik
8221	J	ADD ENCODER MOUNTING HOLES	5/3/19	J.Kordik



CONTRACT NO.		APPLIED MOTION PRODUCTS, INC.		
APPROVALS		DATE		
DRAWN R.JONEZ		9/1/10		
CHECKED E.RICE		9/20/11		
APPROVED				
APPROVED				

STEP MOTOR OUTLINE

B	COMPUTER DATA BASE DRAWING	DWG NO.	HT23-552	REV J
SCALE: NONE				SHEET 1 OF 2



ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES		THIRD ANGLE PROJECTION		 APPLIED MOTION PRODUCTS, INC.		
DECIMALS: MM (INCH) X.XXXX = \pm (.005) X.XX = \pm 0.13 (.010) X.X = \pm 0.25 (.020) ANGLES: MACH. = \pm 5° CHAM. = \pm 5°						
		APPROVALS	DATE	STEP MOTOR OUTLINE		
		DRAWN <i>R.JONEZ</i>	9/2/10			
		CHECKED		B	DWG NO.	REV
COMPUTER DATA BASE DRAWING		APPROVED		SCALE: NONE		SHEET 2 OF 2