

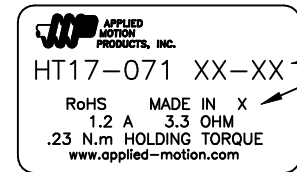
SPECIFICATIONS:	
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 54.0 G-CM <sup>2</sup> (.295 OZ-IN <sup>2</sup> ) REF
STEP ANGLE: 1.8°	HOLDING TORQUE: 2.4KG-CM (33.3 OZ-IN) MIN <sup>1</sup>
STEP TO STEP ACCURACY: ±5 % <sup>1</sup> , <sup>2</sup>	DETENT TORQUE: 72 G-CM (1.0 OZ-IN) MIN
POSITIONAL ACCURACY: ±5 % <sup>1</sup> , <sup>3</sup>	
HYSTERESIS: - %	INSULATION CLASS: B
WINDING RESISTANCE: 3.3 OHM ±10% AT 25° <sup>7</sup>	BEARINGS: ABEC 3, DOUBLE SHIELDED
WINDING INDUCTANCE: 3.6 mH ± 20% <sup>8</sup>	WEIGHT: 258 G (9.1 OZ) APPROXIMATE
PHASE VOLTAGE: 4.0 VDC	TEMP. RISE: 80°C MAX. <sup>9</sup>
PHASE CURRENT: 1.2 AMP (RATED)	OPERATING TEMP. RANGE: -10 TO 40 °C
	STORAGE TEMP. RANGE: -40 TO 70 °C
SHAFT RUNOUT: 0.013 T.I.R.	RELATIVE HUMIDITY RANGE: 5 TO 95 %
RADIAL PLAY: 0.025 MAX WITH .5KG RADIAL LOAD.	
END PLAY: 0.075 MAX WITH 1.0KG AXIAL LOAD.	

HT17-071

REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
3847	A	INITIAL RELEASE	2-16-94	<i>K. Nordik</i>
3930	B	CHANGE H.T. WAS: 2.6KG	4-13-96	<i>K. Nordik</i>
5009	C	ADD "17HT39D" DBL SFT REQD	7/26/02	<i>B. Hazelwood</i>
5070	D	CHG HT17-071P TO 17HT39P	7/23/03	<i>B. Hazelwood</i>
5235	E	ADD EU COMPLIANCE NOTES	8/25/05	<i>B. Hazelwood</i>
5251	F	TEXT CHANGED FOR CLARITY	11/22/05	<i>B. Hazelwood</i>
6018	G	ADD MECH DATA	10/29/09	<i>J. Nordik</i>
6042	H	REVISE ENCODER HOLES	12/23/09	<i>J. Nordik</i>
6082	J	ADD ENCODER HOLES	3/3/10	

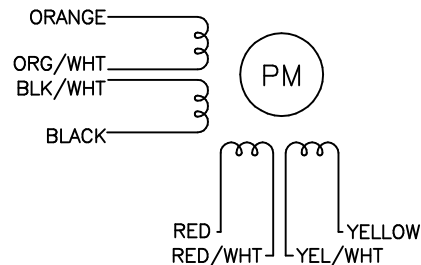
NOTES, UNLESS OTHERWISE SPECIFIED:

- <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.
- <sup>5</sup> LEADS: 8 ,AWG 26,7 STRAND MIN.,UL AND CSA APPROVED, UL 3265.
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. HIGH TORQUE MOTOR DESIGN.
11. ROTOR & STATOR LAMINATION MATERIAL: 0.5mm thk, SEE AMP STD SPEC #1500-062.
- <sup>12</sup> SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER.
13. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- <sup>14</sup> MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

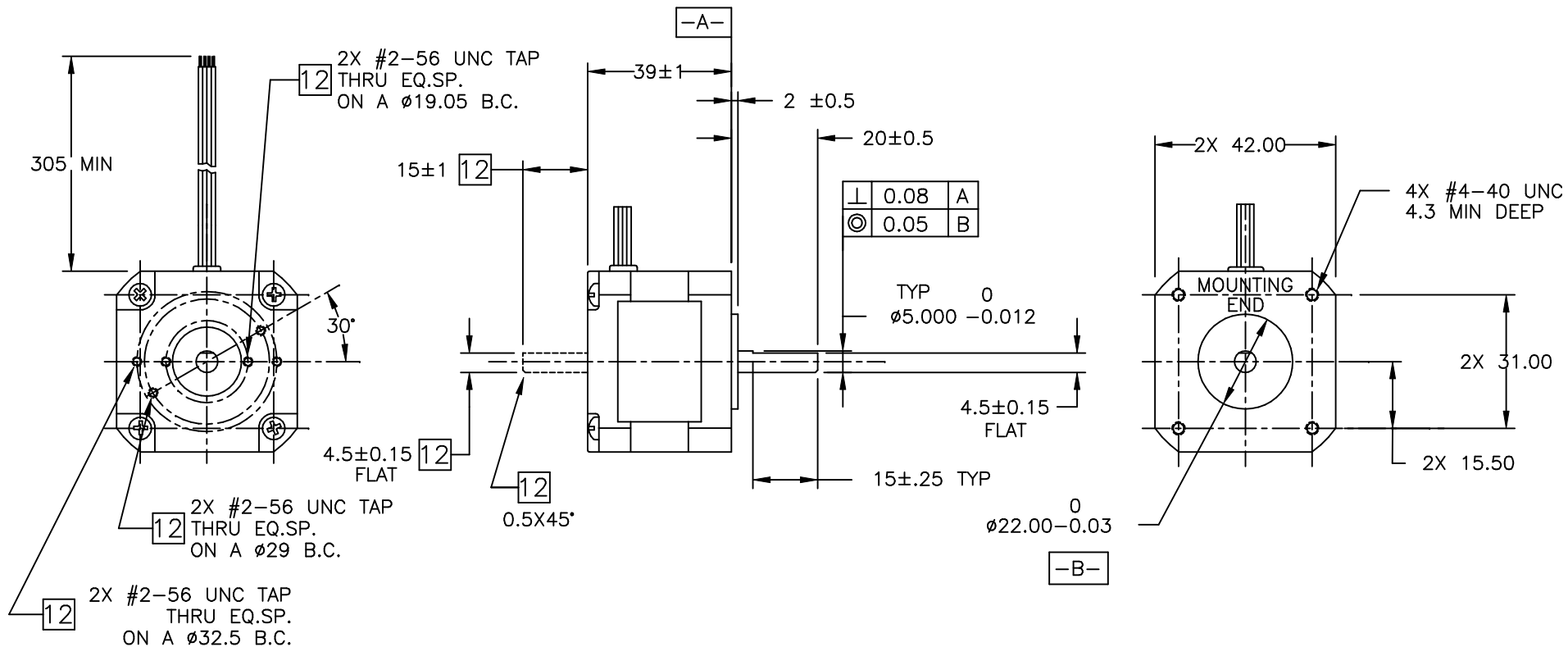


SWITCHING SEQUENCE FOR CW ROTATION  
FACING MOUNTING END

STEP	ORANGE	BLACK	RED	YELLOW
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



CONTRACT NO. CAT		APPLIED MOTION PRODUCTS, INC.		
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>		
DRAWN <i>R. BARRICK</i>	<i>1/11/94</i>			
CHECKED <i>B. Corser</i>	<i>2/16/94</i>			
APPROVED <i>K. Nordik</i>	<i>2/16/94</i>			
APPROVED <i>B. Hazelwood</i>	<i>7/26/02</i>			
<b>B</b>	COMPUTER DATA BASE DRAWING	DWG NO. HT17-071	REV J	
SCALE: FULL		SHEET 1 OF 2		



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)				<b>STEP MOTOR OUTLINE</b>	
ANGLES: MACH. = $\pm 5^\circ$ CHAM. = $\pm 5^\circ$		APPROVALS      DATE			
COMPUTER DATA BASE DRAWING		DRAWN <i>R. JONEZ</i> CHECKED		10/22/09	
APPROVED		B		DWG NO. HT17-071      REV J	
		SCALE: NONE		SHEET 2 OF 2	