

SPECIFICATION	
NUMBER OF PHASES: 2	ROTOR INERTIA: 18 g-cm^2 (0.1 oz-in ²) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 8 mNm (1.13 oz-in) MIN
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY: ±0.09°	BEARINGS: ABEC 3, DOUBLE SHIELDED
POSITION ACCURACY: ±0.09°	TEMP. RISE: 80°C MAX. 9
HYSTERESIS: N/A%	OPERATING TEMP. RANGE: -20 TO +50°C
SHAFT RUNOUT: 0.03 mm T.I.R. MAX	STORAGE TEMP. RANGE: -30 TO +70°C
RADIAL PLAY: 0.02 mm MAX (0.5 kg RADIAL LOAD)	RELATIVE HUMIDITY RANGE: 15 TO 85%
END PLAY: 0.08 mm MAX (0.5 kg AXIAL LOAD)	WEIGHT: 0.2kg (0.44lb) APPROXIMATE

REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
7000	A	INITIAL RELEASE	5/29/14	J.KORDIK
8497	B	NEW FORMAT, 3D MODEL, 4X MOUNTING SCREWS FROM M2.6 TO M2.5	6/25/2020	LEO. L

B

B

CONNECTION	RESISTANCE PER PHASE (ohm ±10%) 7	INDUCTANCE PER PHASE (mH ±20%) 8	RATED CURRENT (Amp) 1	HOLDING TORQUE (mNm MIN) 1	HOLDING TORQUE (oz-in MIN) 1
BI-POLAR	2	2.4	1.0	100	14.16

NOTES, UNLESS OTHERWISE SPECIFIED:

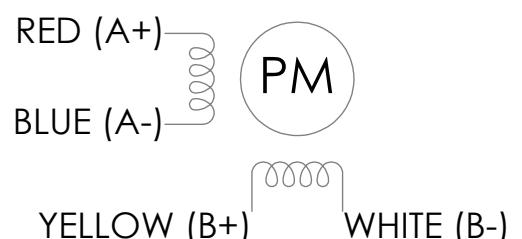
1. MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
2. BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
3. MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60Hz FOR ONE MINUTE.
5. LEADS: 4, 26 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1007
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
7. AS MEASURED ACROSS EACH PHASE.
8. AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
9. AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES: WITH MOTOR AT REST.
10. ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED.
11. ROTOR AND STATOR LAMINATED CONSTRUCTION.
12. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
13. MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.
14. HI TORQUE MOTOR DESIGN.

DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

STEP	A+	A-	B+	B-
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

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

WIRING DIAGRAM



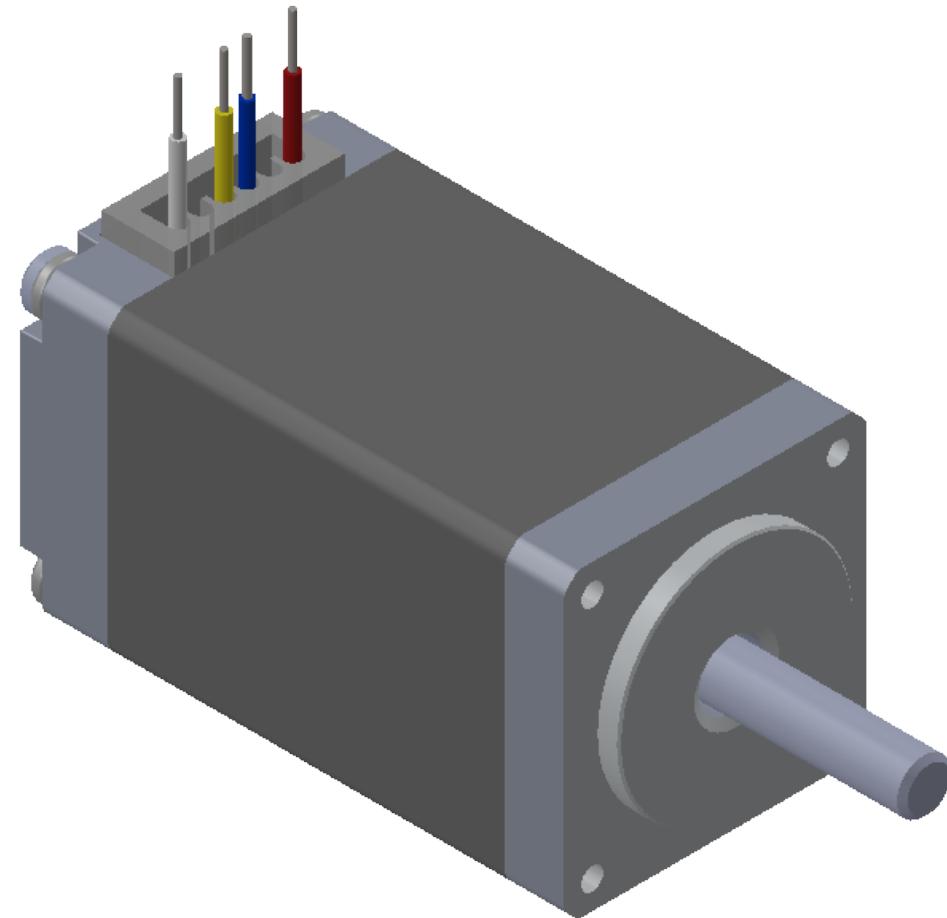
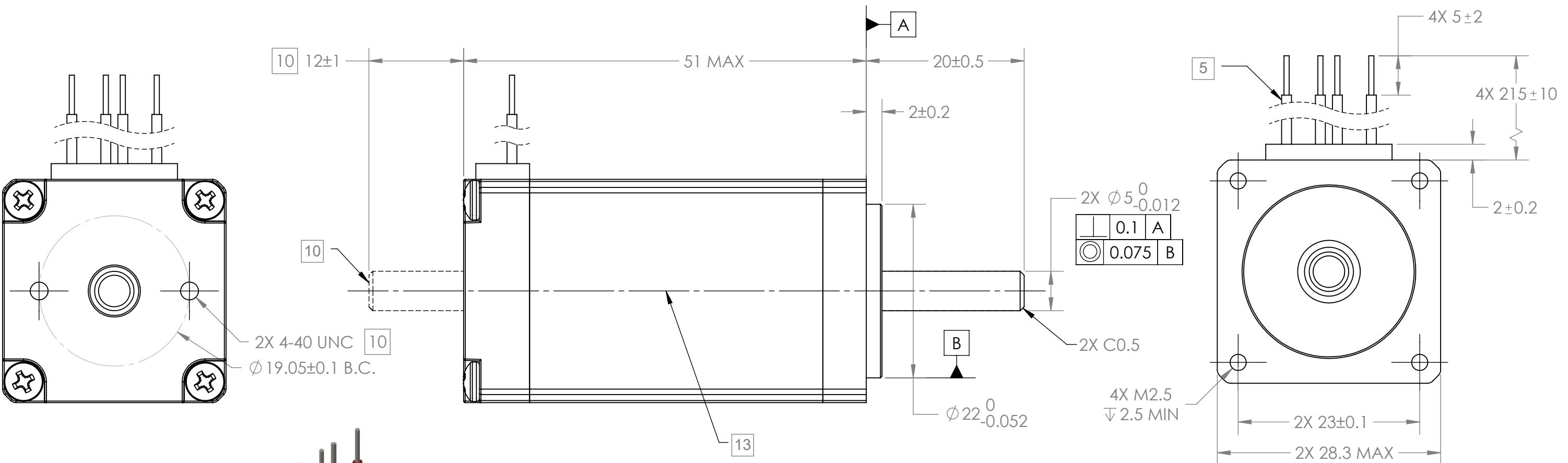
Applied Motion Products A MOON'S COMPANY		UNLESS OTHERWISE SPECIFIED:			NAME	DATE	TITLE:	
		DIMENSIONS ARE IN MILLIMETERS	TOLERANCES:	ANGULAR: ± 0.5				
TOLERANCES:			ONE PLACE DECIMAL ± 0.25	TWO PLACE DECIMAL ± 0.13			THIRD ANGLE PROJECTION	
MATERIAL:			COMMENTS:					
FINISH:								
DO NOT SCALE DRAWING								
SIZE		DWG. NO.		REV				
B		HT11-021		B				
SCALE: 1:1		WEIGHT:		SHEET 1 OF 2				

4

3

2

1



PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APPLIED MOTION PRODUCTS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF APPLIED MOTION PRODUCTS IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
ANGULAR: ± 0.5
ONE PLACE DECIMAL ± 0.25
TWO PLACE DECIMAL ± 0.13
THIRD ANGLE PROJECTION
MATERIAL
FINISH
DO NOT SCALE DRAWING

DRAWN	ALAN. N	6/25/20
CHECKED	KEVIN. K	6/25/20
COMMENTS:		

TITLE: STEPPER MOTOR OUTLINE
SIZE B DWG. NO. HT11-021 REV B
SCALE: 2:1 WEIGHT: SHEET 2 OF 2