

SPECIFICATION	
NUMBER OF PHASES: 4	ROTOR INERTIA: 57 g-cm ² (0.31 oz-in ²) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 152.9 g-cm (2.12 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.
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: 280 g (9.8 oz) APPROXIMATE

CONNECTION	RESISTANCE PER PHASE (ohm $\pm 10\%$)	INDUCTANCE PER PHASE (mH $\pm 20\%$)	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE (oz-in)
BI-POLAR SERIES	7.0	12	0.85	0.37	52.40
BI-POLAR PARALLEL	1.7	3	1.70	0.37	52.40
UNI-POLAR	3.5	3	1.20	0.29	41.07

NOTES, UNLESS OTHER WISE 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: 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 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.
DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.
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.

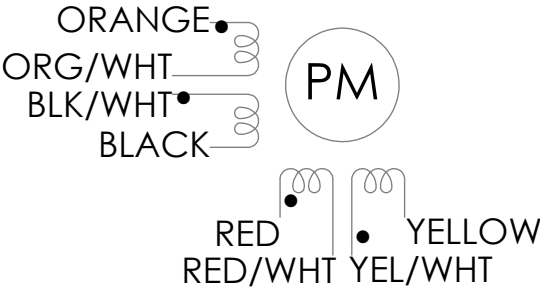
REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	JEFF. K
6090	B	STANDARDIZE ENCODER HOLES	3/29/10	JEFF. K
7247	C	ADDED UL TO LABEL	1/26/16	JEFF. K
7446	D	REVISE NOTE 10	6/6/16	JEFF. K
8209	E	DOCUMENT CLEANUP	4/29/19	JEFF. K
8277	F	REMOVE ENCODER HOLES	7/3/19	JEFF. K
8675	G	RE-DRAW IN SOLIDWORKS, ENCODER HOLE DEPTH CHANGED	6/15/21	LEO. L

DRIVE SEQUENCE MODEL BI-POLAR PARALLEL FULL STEP

STEP	ORG & BLK/WHT	BLK & ORG/WHT	RED & YEL/WHT	YEL & RED/WHT
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 MOONS' COMPANY		UNLESS OTHERWISE SPECIFIED:		NAME		DATE		TITLE: STEPPER MOTOR OUTLINE					
		DIMENSIONS ARE IN MILLIMETERS		DRAWN		ALAN. N						6/15/20	
		TOLERANCES:		CHECKED		YANN. L						6/15/20	
		ANGULAR: ± 0.5		COMMENTS:									
ONE PLACE DECIMAL ± 0.25													
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.		TWO PLACE DECIMAL ± 0.13		SIZE B DWG. NO. HT17-271 REV G									
		THIRD ANGLE PROJECTION											
		MATERIAL											
FINISH		DO NOT SCALE DRAWING		SCALE: 1:1		WEIGHT:		SHEET 1 OF 2					

4

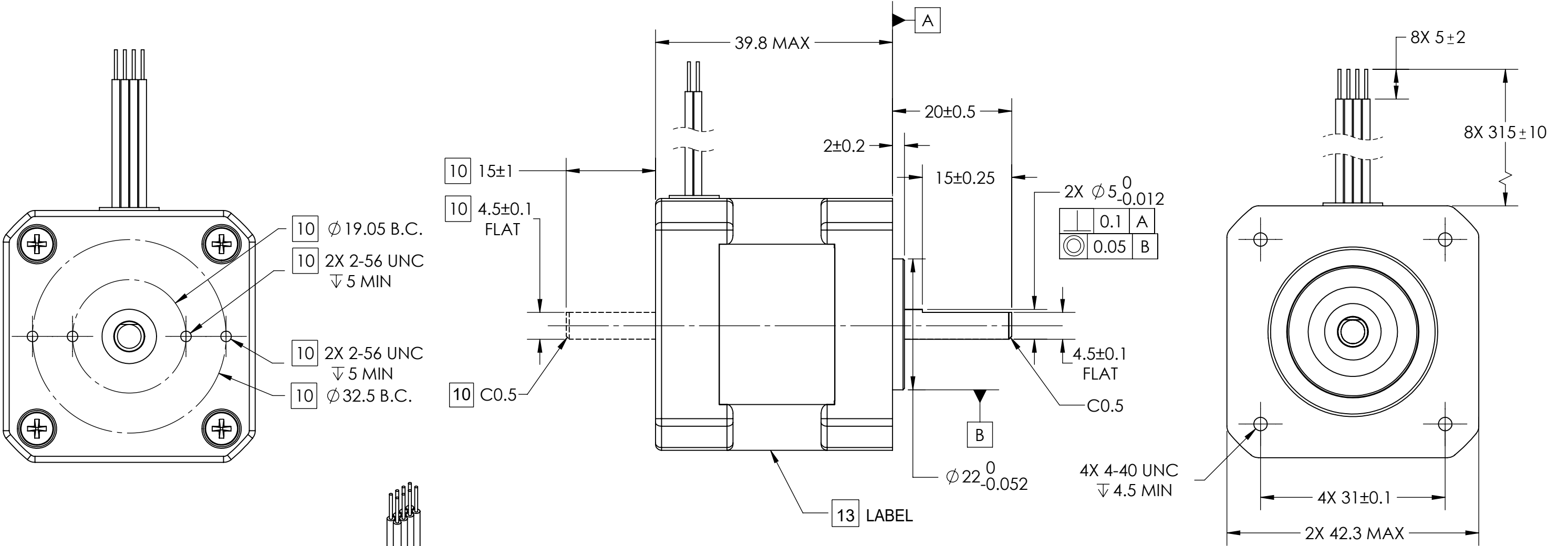
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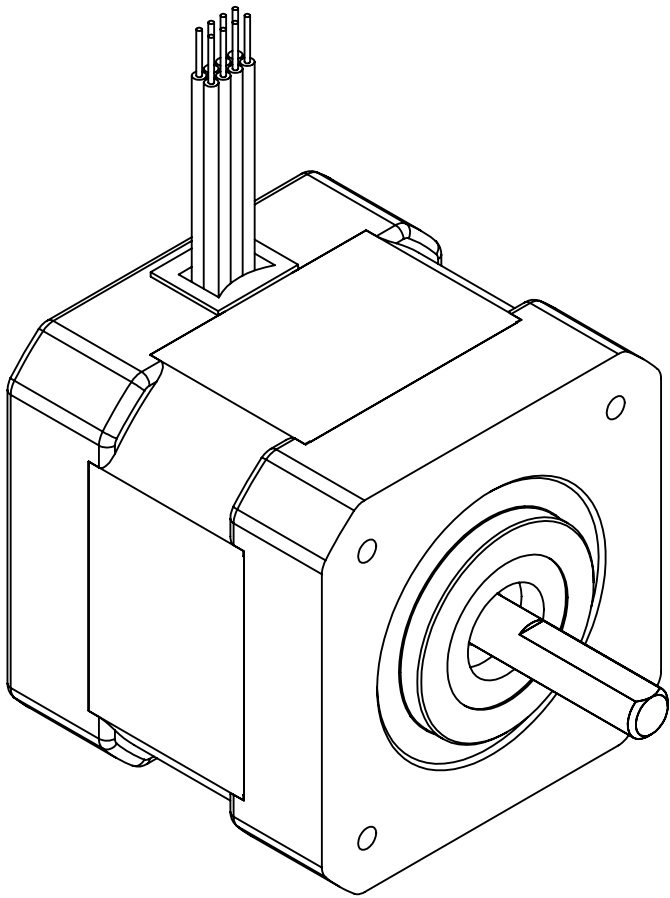
B

B



A

A



4

3

2

1

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	TOLERANCES:		CHECKED		YANN. L		6/15/20			
	ANGULAR: ± 0.5		COMMENTS:							
	ONE PLACE DECIMAL ± 0.25									
TWO PLACE DECIMAL ± 0.13		MATERIAL		SCALE: 1:2		WEIGHT:		SHEET 2 OF 2		
THIRD ANGLE PROJECTION		FINISH								
		DO NOT SCALE DRAWING								