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SPECIFICATION	
NUMBER OF PHASES: 4	ROTOR INERTIA: 38 g-cm ² (0.20 oz-in ²) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 122.3 g-cm (1.69 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: 210 g (7.3 oz) APPROXIMATE

CONNECTION	RESISTANCE PER PHASE (ohm ±10%)	INDUCTANCE PER PHASE (mH ±20%)	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE (oz-in)
BI-POLAR SERIES	8.4	10	0.67	0.22	31.15
BI-POLAR PARALLEL	2.1	2.5	1.34	0.22	31.15
UNI-POLAR	4.2	2.5	0.95	0.16	22.66

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.

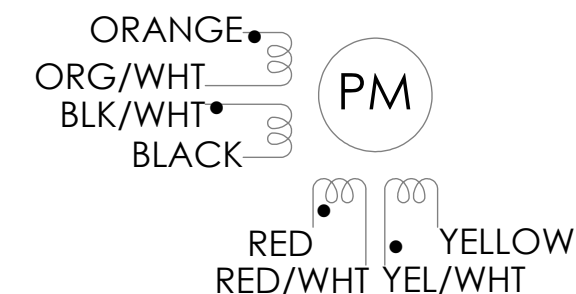
REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	JEFF. K
5995	B	PERPENDICULARITY CORRECTED	9/28/09	JEFF. K
6090	C	STANDARDIZE ENCODER HOLES	3/29/10	JEFF. K
7247	D	ADD UL TO LABEL	1/26/16	JEFF. K
7446	E	REVISED NOTE 10	6/6/16	JEFF. K
8209	F	CLEAN-UP	4/29/19	JEFF. K
8277	G	REMOVE ENCODER HOLES	7/3/19	JEFF. K
8675	H	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:
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.		DIMENSIONS ARE IN MILLIMETERS		DRAWN	ALAN. N	6/15/21
		TOLERANCES:		CHECKED	YANN. L	6/15/21
		ANGULAR: ± 0.5 ONE PLACE DECIMAL ± 0.25 TWO PLACE DECIMAL ± 0.13 THIRD ANGLE PROJECTION		COMMENTS:		
MATERIAL		FINISH		DO NOT SCALE DRAWING		STEPPER MOTOR OUTLINE
SIZE	DWG. NO.	REV				
B	HT17-268	H				
SCALE: 1:1	WEIGHT:	SHEET 1 OF 2				

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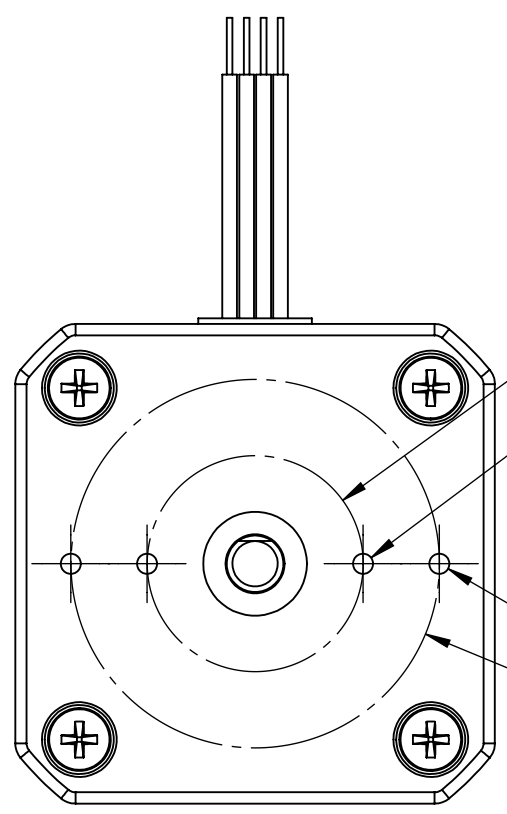
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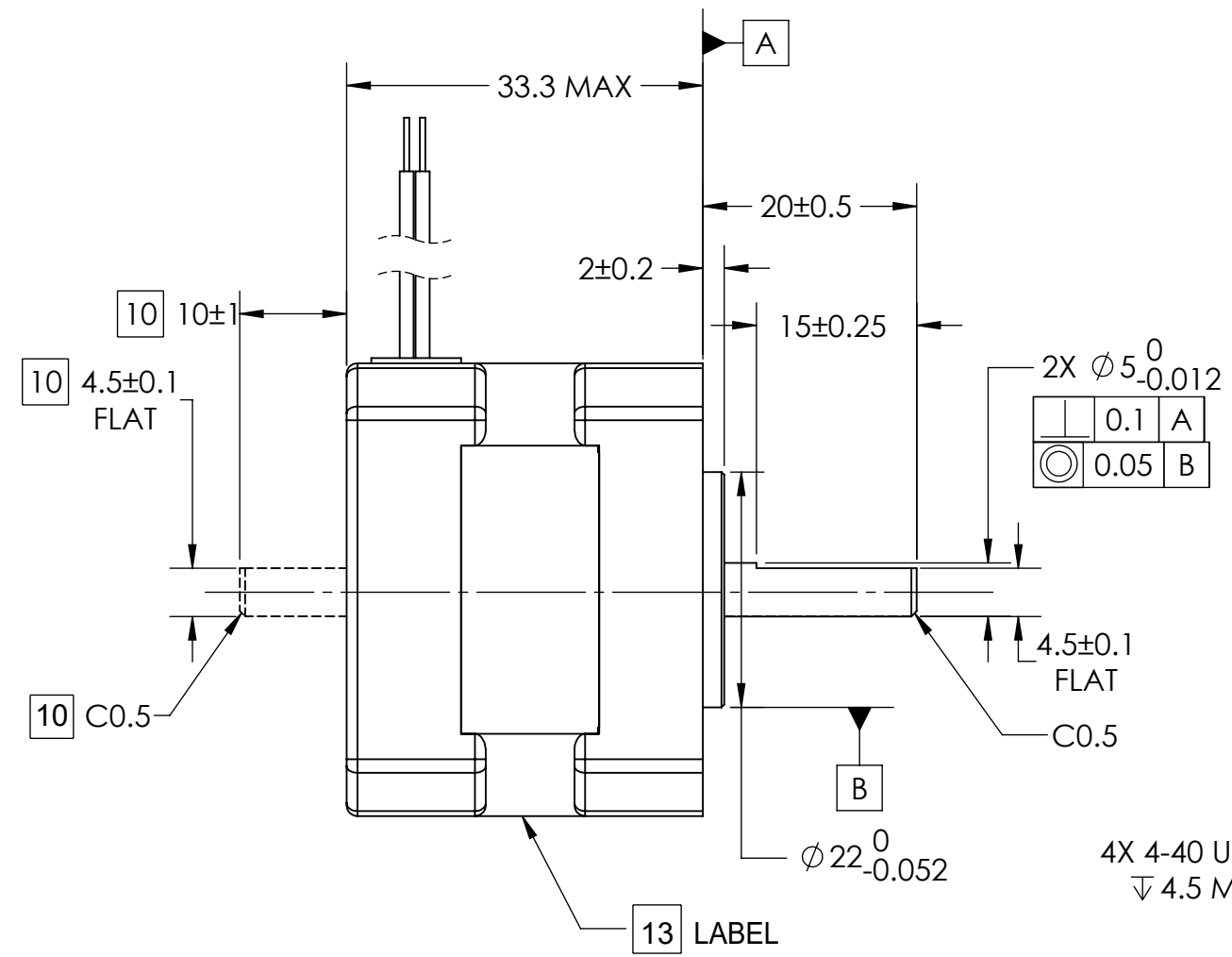
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B

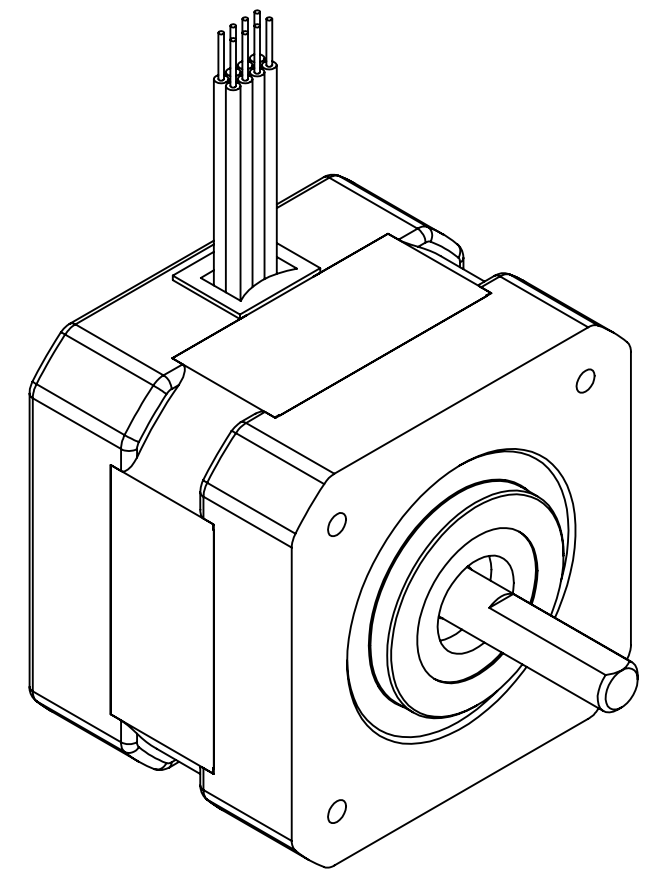
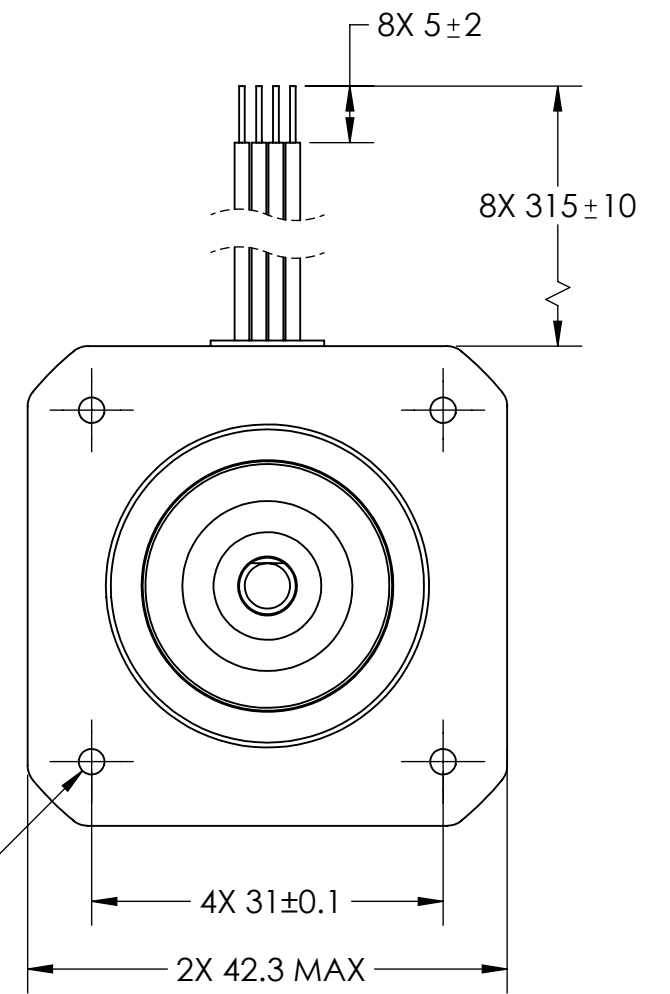
B



- 10 $\phi 19.05$ B.C.
- 10 2X 2-56 UNC $\nabla 2.2$ MIN
- 10 2X 2-56 UNC $\nabla 5$ MIN
- 10 $\phi 32.5$ B.C.




2X $\phi 5^{0}_{-0.012}$	0.1	A
	0.05	B



A

A

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		DRAWN	ALAN. N	6/15/21	STEPPER MOTOR OUTLINE
		CHECKED	YANN. L	6/15/21	
		COMMENTS:			
	MATERIAL	SIZE	DWG. NO.	REV	
	FINISH	B	HT17-268	H	
DO NOT SCALE DRAWING		SCALE: 1:2	WEIGHT:	SHEET 2 OF 2	

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