

4

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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°		1	,	2	BEARINGS: ABEC 3, DOUBLE SHIELDED				
POSITION ACCURACY: 0.09°		1	,	3	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%)	7	INDUCTANCE PER PHASE (mH ±20%)	8	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN)	1	HOLDING TORQUE (oz-in)	1
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	ENCODER INSTALLED PER AMP ASSEMBLY PRACTICES. ENCODER CABLE SOLD SEPARATELY.								
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
8675	A	INITIAL RELEASE	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

		UNLESS OTHERWISE SPECIFIED:		NAME		DATE		TITLE:	
<div>PROPRIETARY AND CONFIDENTIAL</div> <div>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.</div>		DIMENSIONS ARE IN MILLIMETERS		DRAWN		ALAN. N		6/15/20	
		TOLERANCES:		CHECKED		KEVIN. K		6/15/20	
		ANGULAR: ± 0.5		COMMENTS:					
		ONE PLACE DECIMAL ± 0.25							
TWO PLACE DECIMAL ± 0.13		MATERIAL		SCALE: 1:1		WEIGHT:		SHEET 1 OF 2	
THIRD ANGLE PROJECTION		FINISH							
DO NOT SCALE DRAWING									

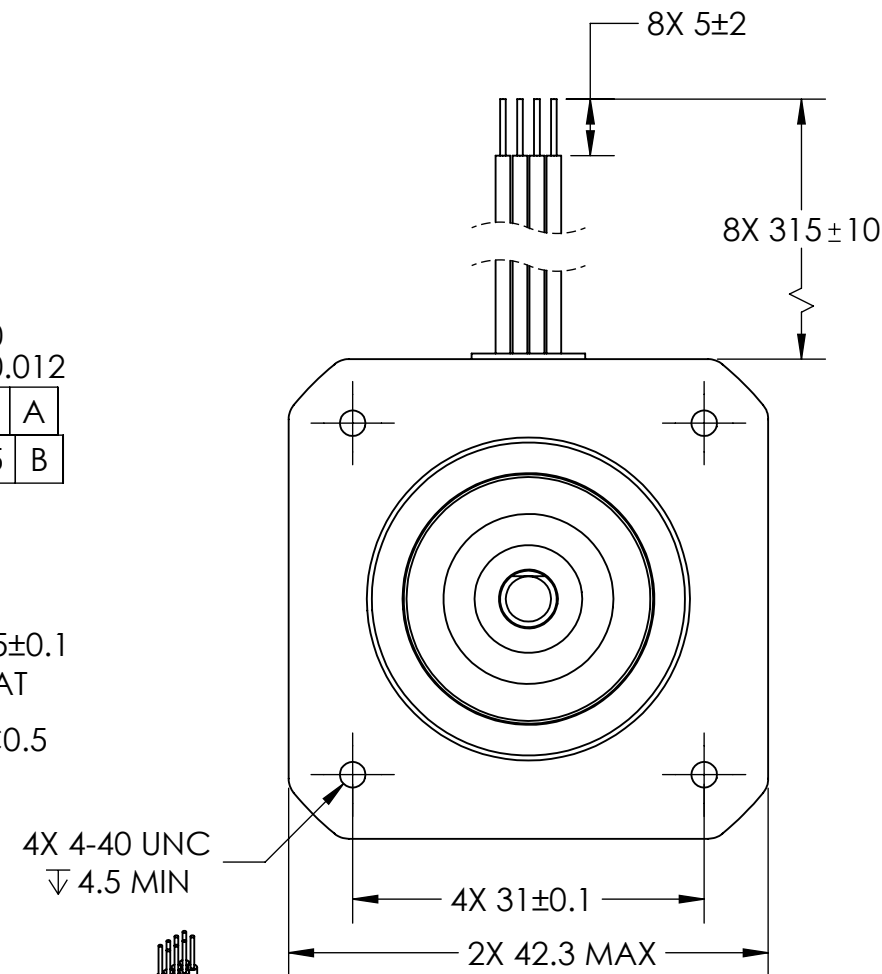
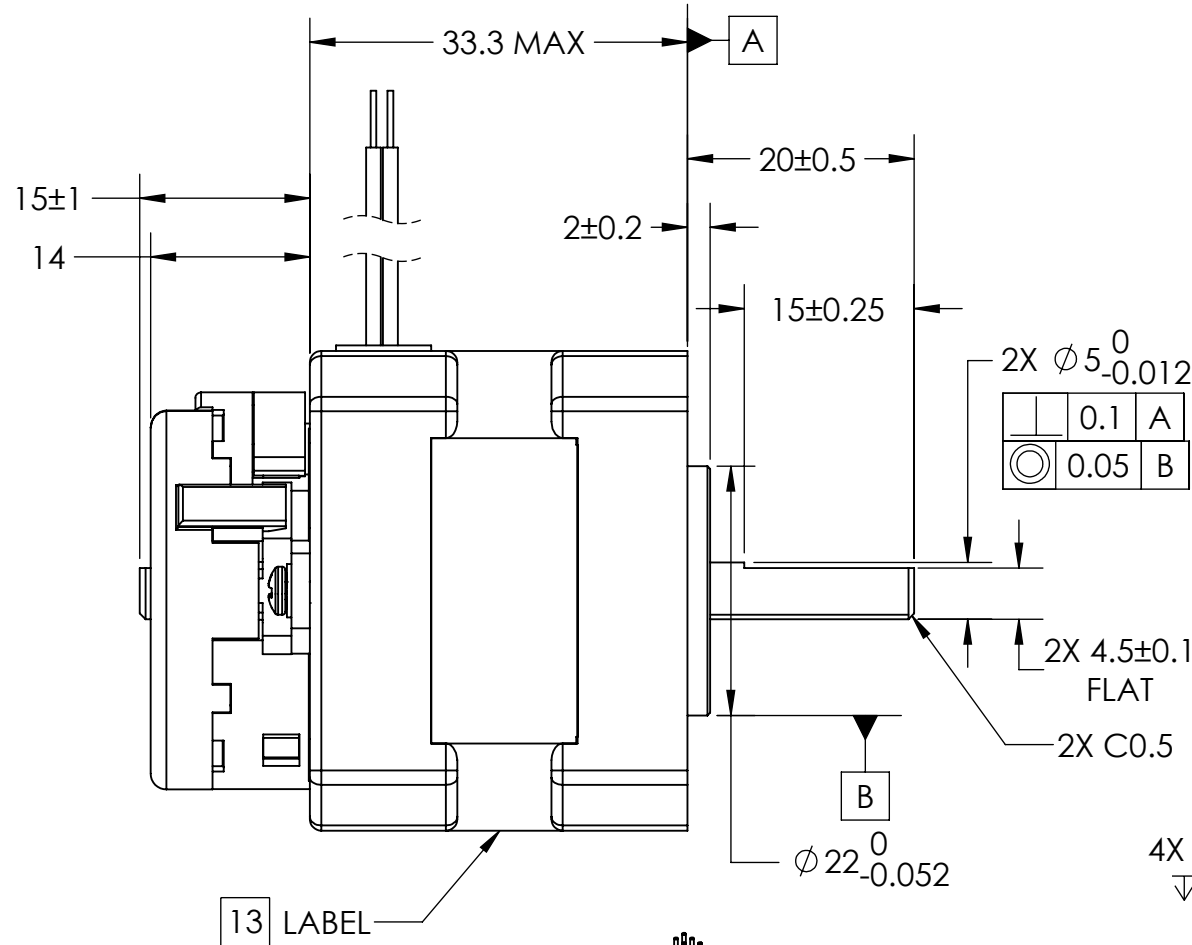
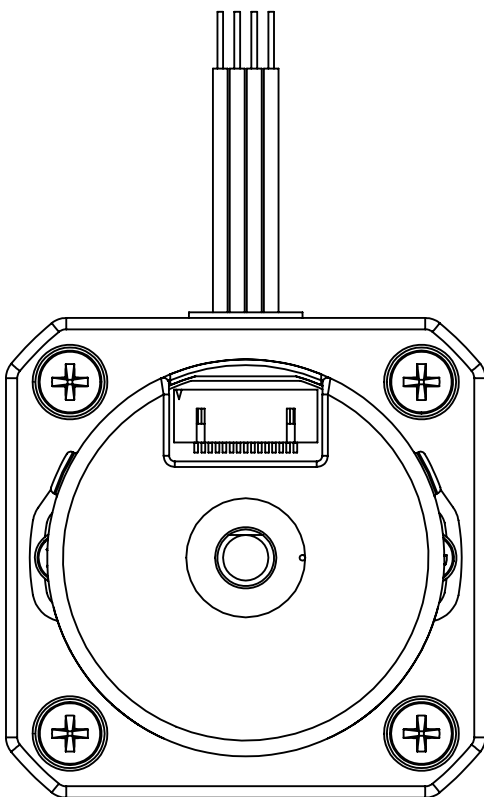
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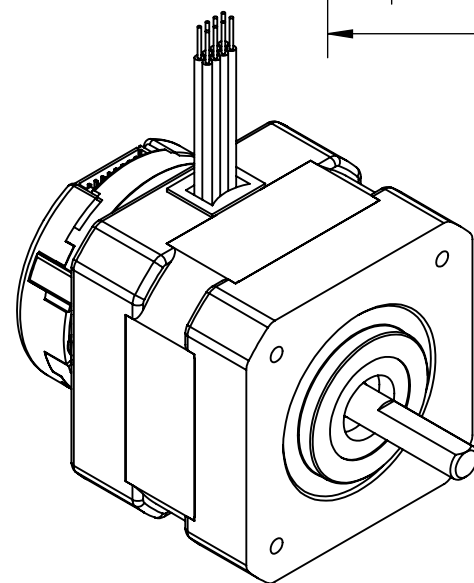
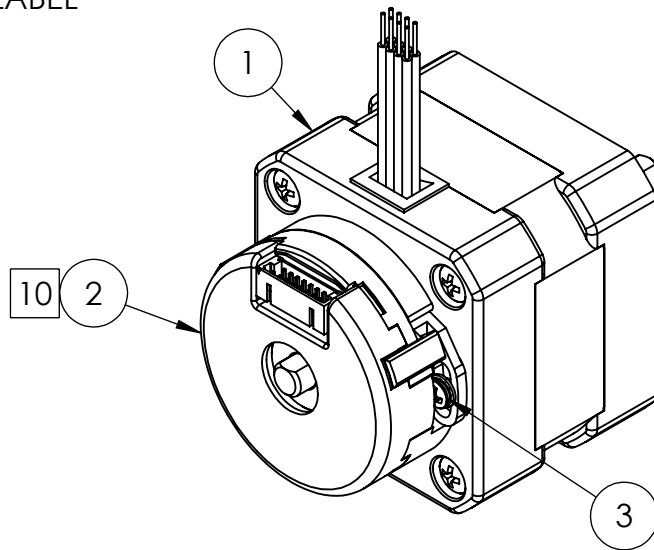
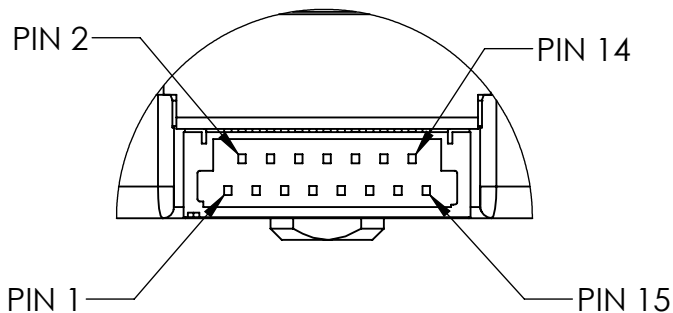
B



B

A

CONNECTOR	
PIN #	SIGNAL
1	CH A
2	CH A-
3	CH B
4	CH B-
5	INDEX
6	INDEX-
7	CH U
8	CH U-
9	CH V
10	CH V-
11	CH W
12	CH W-
13	+Vcc
14	GND
15	N/A



A

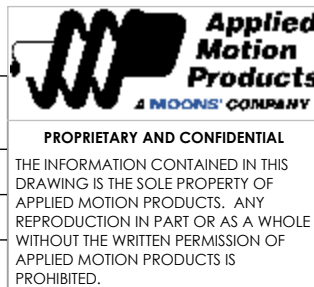
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ITEM NO.	PART NUMBER	QTY.
1	HT17-268D	1
2	ENCODER 970-1012	1
3	SCREW 2-56 X .1875 W-TOOTH LOCK WASHER (90403A077) OR EQUIVALENT	2



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	

	NAME	DATE
DRAWN	ALAN. N	6/15/20
CHECKED	KEVIN. K	6/15/20
COMMENTS:		

TITLE:		
STEPPER MOTOR OUTLINE		
SIZE	DWG. NO.	REV
B	HT17-268D-WAA	A
SCALE: 1:2	WEIGHT:	SHEET 2 OF 2