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SPECIFICATION					
NUMBER OF PHASES: 4		ROTOR INERTIA: 57 g-cm <sup>2</sup> (0.31 oz-in <sup>2</sup> ) 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°		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: 280 g (9.8 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	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:

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MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.

BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.

MAXIMUM ERROR IN 360°.

HIPOT 500 VAC, 60Hz FOR ONE MINUTE.

LEADS: 8, 26 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430 OR UL 3265

INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.

AS MEASURED ACROSS EACH PHASE.

AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.

AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES: WITH MOTOR AT REST.

ENCODER INSTALLED PER AMP ASSEMBLY PRACTICES. ENCODER CABLE SOLD SEPARATELY.

ROTOR AND STATOR LAMINATED CONSTRUCTION.

THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.

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
7747	A	INITIAL RELEASE	12/20/17	JEFF. K
8675	B	RE-DRAW IN SOLIDWORKS, MATCH 3D MODEL	6/15/21	LEO. L

DRIVE SEQUENCE MODEL  
BI-POLAR PARALLEL FULL STEP

CW

CCW

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

ORANGE  
ORG/WHT  
BLK/WHT  
BLACK

PM

RED  
RED/WHT  
YELLOW  
YEL/WHT

<div><div>Applied Motion Products</div><div>4 MOONS' COMPANY</div></div> <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>	UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:  STEPPER MOTOR OUTLINE		
	DIMENSIONS ARE IN MILLIMETERS	DRAWN	ALAN. N	6/15/21			
	TOLERANCES: ANGULAR: ± 0.5 ONE PLACE DECIMAL ± 0.25 TWO PLACE DECIMAL ± 0.13 THIRD ANGLE PROJECTION	CHECKED	YANN. L	6/15/21			
	MATERIAL	COMMENTS:			SIZE	DWG. NO.	REV
	FINISH				<b>B</b>	HT17-271D-BAA	B
DO NOT SCALE DRAWING			SCALE: 1:1		WEIGHT:	SHEET 1 OF 2	

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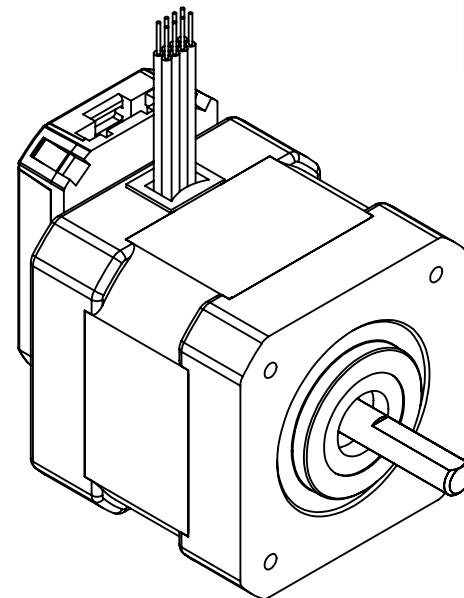
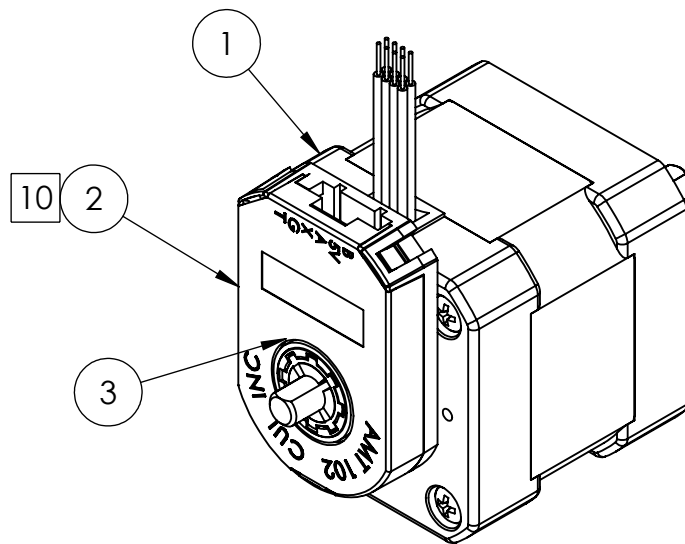
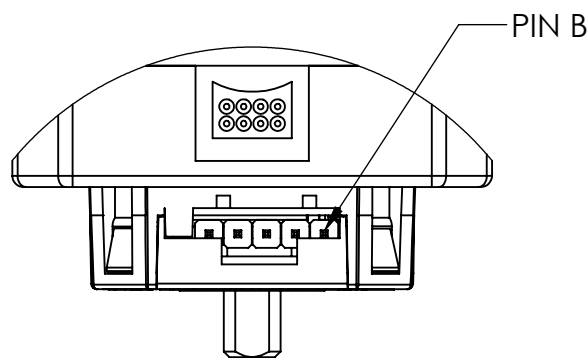
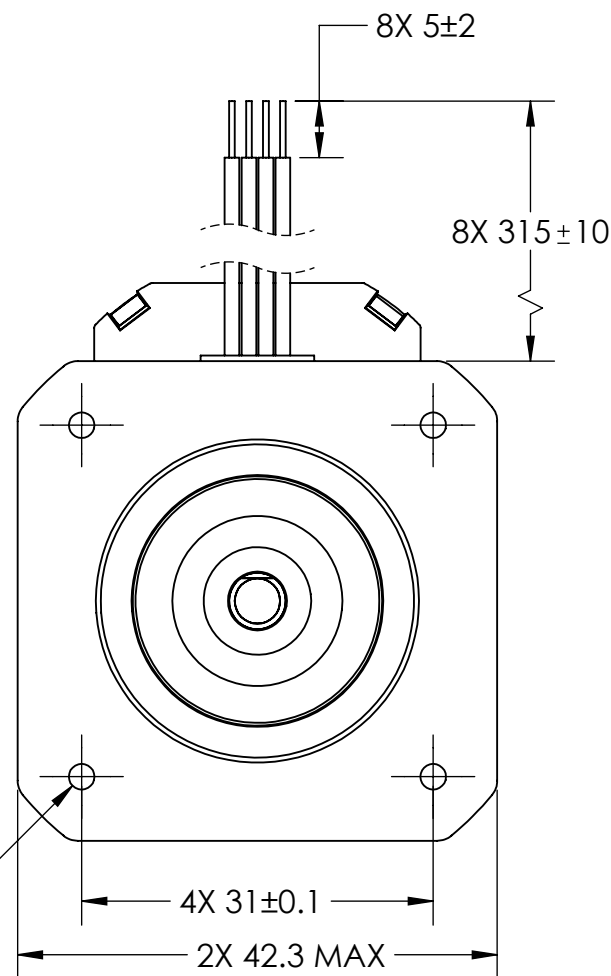
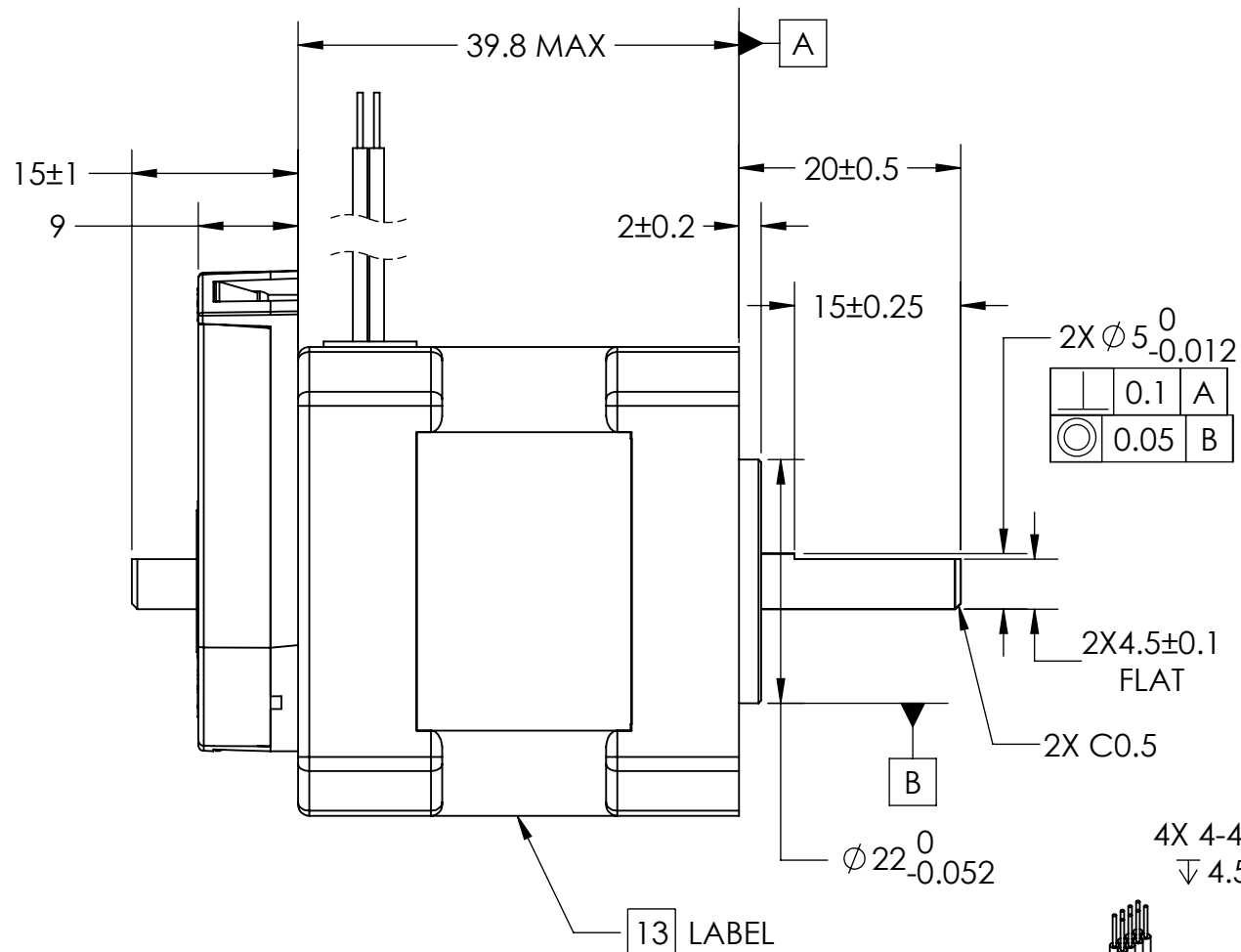
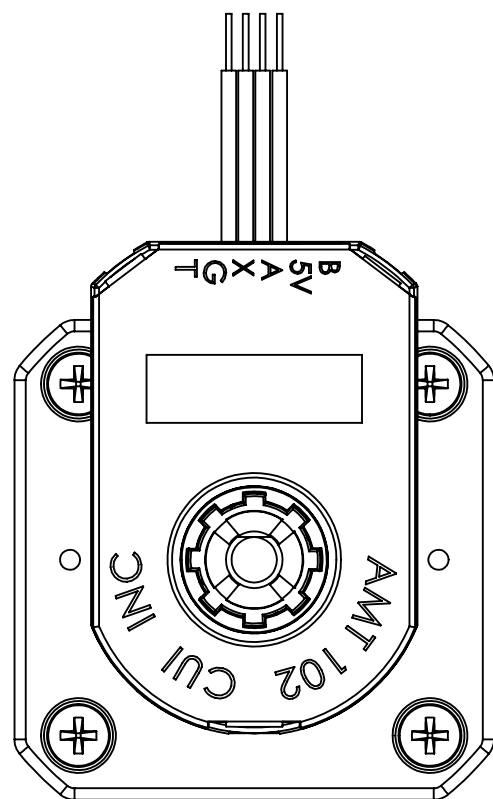
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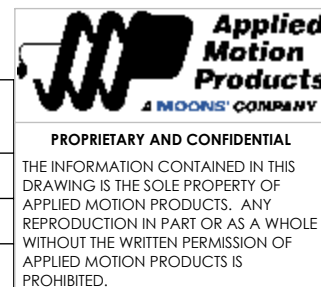
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### CONNECTOR

PIN #	SIGNAL
B	B CHANNEL
5V	+5 V
A	A CHANNEL
X	INDEX CHANNEL
G	GND
T	N/A

ITEM NO.	PART NUMBER	QTY.
1	HT17-271D	1
2	ENCODER 970-1028	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

DRAWN	NAME	DATE
CHECKED	ALAN. N	6/15/21
COMMENTS:	YANN. L	6/15/21

TITLE:		
STEPPER MOTOR OUTLINE		
SIZE	DWG. NO.	REV
B	HT17-271D-BAA	B
SCALE: 1:2	WEIGHT:	SHEET 2 OF 2

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