MOTOR SPECIFICATIONS:

NUMBER OF PHASES:	2	ROTOR INERTIA (g-cm^2/oz-in^2):	20/0.109 NOM
STEPS PER REVOLUTION:	200	INSULATION CLASS:	B (130°)
STEP ANGLE (°):	1.8	BEARINGS:	ABEC 3, DOUBLE SHIELDED

CONNECTION	RESISTANCE PER PHASE [5]	INDUCTANCE PER PHASE [6]	RATED CURRENT	HOLDING TORQUE [1]	
	ohm ±10%	mH ±20%	AMP	mNm MIN	oz-in MIN
BI-POLAR	8.3	7.5	0.35	56	7.93

REVISIONS

ECO #	REV.	DESCRIPTION	DATE	APPROVED
7935	A	INITIAL RELEASE	7/2/18	J.KORDIK
8750	B	REDRAWN IN SOLIDWORKS	2/15/22	L. LIU

B

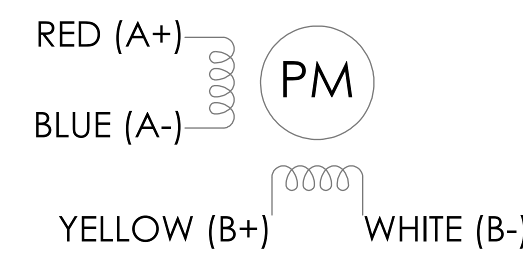
GEARMOTOR SPECIFICATIONS:

TEMP. RISE (°C): [7]	80 MAX	TOTAL WEIGHT (±10g/±0.35oz):	355/12.5
OPERATING AMB. TEMP. RANGE (°C):	-20 to +50	RELATIVE HUMIDITY RANGE (%):	85 NON-CONDENSING
STORAGE TEMP. RANGE (°C):	-20 to +70		

GEARHEAD SPECIFICATIONS:

RATIO:	5.7:1	EFFICIENCY (%):	90
MAX TORQUE CONTINUOUS (Nm/oz-in):	2/283	BACKLASH (°):	$\leq$0.8
MAX TORQUE (Nm/oz-in):	3/424.8	MAX RADIAL LOAD (N/lbf):	$\leq$200/44.96
MAX INPUT SPEED (RPM):	6000	MAX AXIAL LOAD (N/lbf):	$\leq$200/44.96

WIRING DIAGRAM



DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

CW ↓ / CCW ↑

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

CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION WHEN SEEN FROM THE MOUNTING FACE END OF THE MOTOR

A

NOTES, UNLESS OTHER WISE SPECIFIED:

1. [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
2. HIPOT 500 VAC, 60Hz FOR ONE MINUTE.
3. [3] LEADS: 4, 26 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430.
4. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
5. [5] AS MEASURED ACROSS EACH PHASE.
6. [6] AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
7. [7] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES; WITH MOTOR AT REST.
8. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
9. [9] MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, 'MADE IN (COUNTRY)', AND DATE CODE.
10. [10] ADD "D" TO PART NUMBER IF DOUBLE SHAFT IS REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.

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PROPRIETARY AND CONFIDENTIAL

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

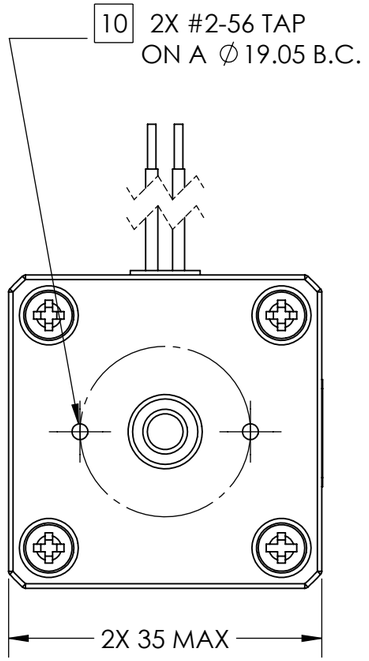
	NAME	DATE
DRAWN	Y. LAPNET	1/28/22
CHECKED	R. BUI	1/31/22

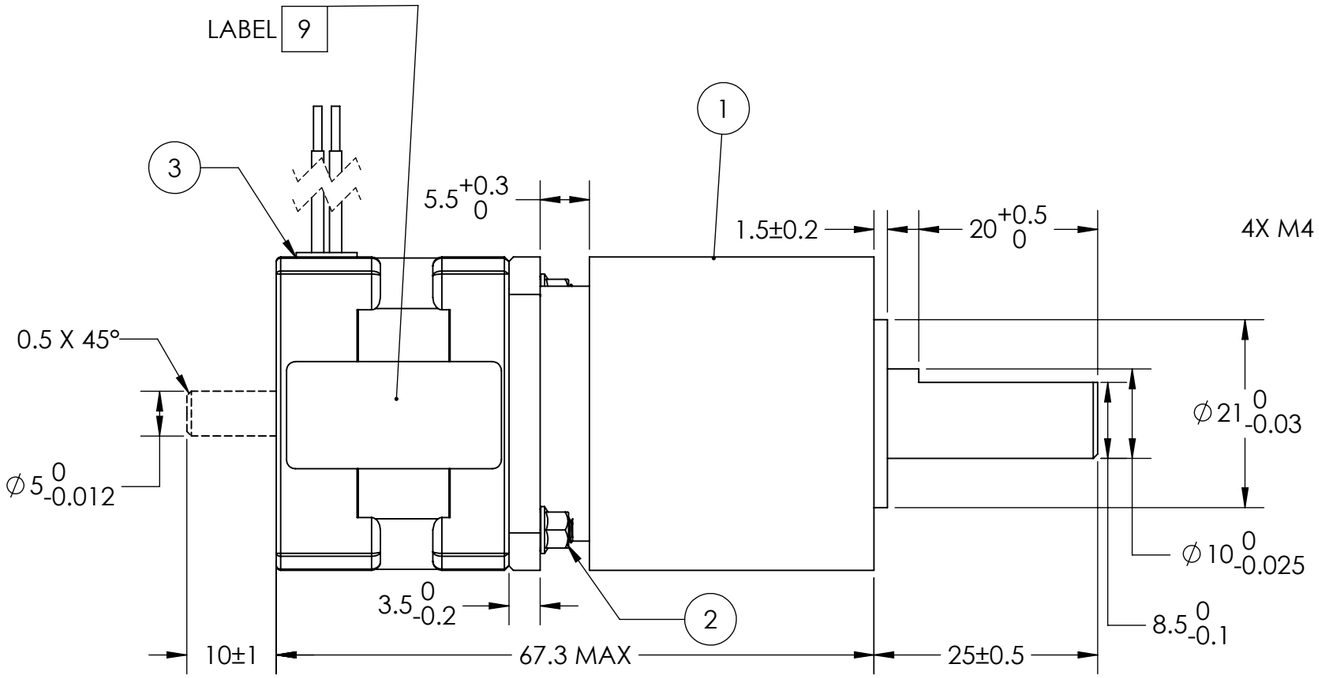
COMMENTS:

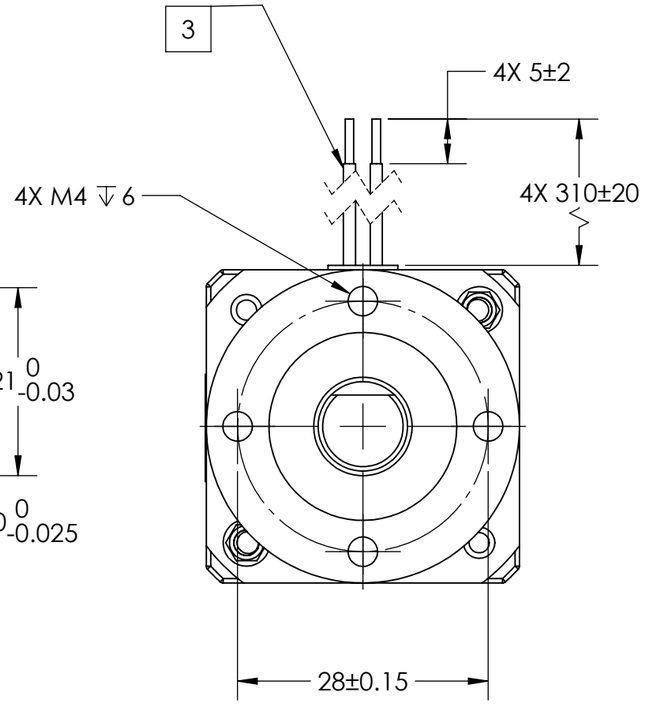
TITLE: STEPPER MOTOR W/ GEARHEAD

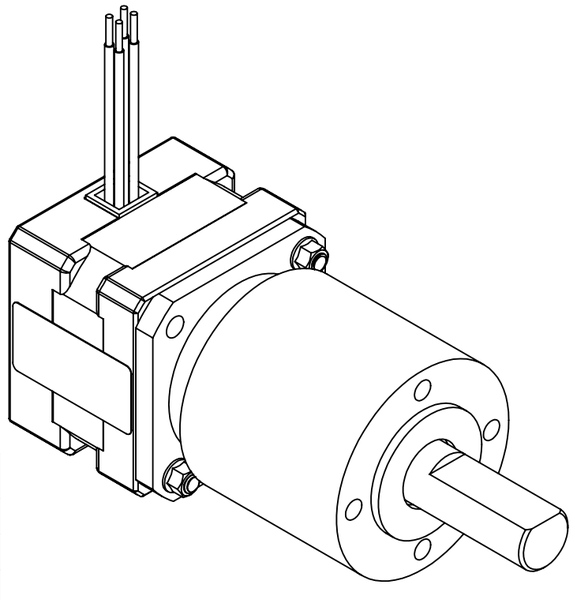
SIZE	DWG. NO.	REV
B	5014-020-G005	B

SCALE: 3:2 | WEIGHT: | SHEET 1 OF 2









ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	35PH005.70-M1	PH GEARHEAD	1
2	11171924 Z/P OR EQUIVALENT	4-40 NYLON LOCKNUT	2
3	5014-020 [10]	STEP MOTOR	1

GEARHEAD MATERIALS:	
GEARTRAIN:	Y15 (1213) STEEL
HOUSING:	304 STAINLESS STEEL
INPUT/OUTPUT FLANGE:	LY12 ALUMINUM
OUTPUT SHAFT:	40Cr STEEL
PINION:	Y15 (1213) STEEL

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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	Y. LAPNET	1/28/22
CHECKED	R. BUI	1/31/22
COMMENTS:		

TITLE:
STEPPER MOTOR W/ GEARHEAD

SIZE	DWG. NO.	REV
B	5014-020-G005	B

SCALE: 3:2 | WEIGHT: | SHEET 2 OF 2