

MOTOR SPECIFICATIONS:

NUMBER OF PHASES:	2	ROTOR INERTIA (g-cm ² /oz-in ²):	9/0.05 NOM
STEPS PER REVOLUTION:	200	INSULATION CLASS:	B (130°C)
STEP ANGLE (°):	1.8	BEARINGS:	ABEC 3, DOUBLE SHIELDED

CONNECTION	RESISTANCE PER PHASE 5	INDUCTANCE PER PHASE 6	RATED CURRENT	HOLDING TORQUE 1	
	ohm $\pm 10\%$	mH $\pm 20\%$	AMP	mNm MIN	oz-in MIN
BI-POLAR	1.4	1.3	1.0	50	7.08

GEARMOTOR SPECIFICATIONS:

TEMP. RISE (°C):	7	80 MAX	TOTAL WEIGHT (±10g/±0.35oz):	150/5.29
OPERATING AMB. TEMP. RANGE (°C):	-10 to +50		RELATIVE HUMIDITY RANGE (%):	85 NON-CONDENSING
STORAGE TEMP. RANGE (°C):	0 to +40			

GEARHEAD SPECIFICATIONS:

RATIO:	4:1	EFFICIENCY (%):	90
MAX TORQUE CONTINUOUS (Nm/oz-in):	0.5/70.8	BACKLASH (°):	≤1.2
MAX TORQUE (Nm/oz-in):	0.8/113.3	MAX RADIAL LOAD (N/lbf):	≤20/4.49
MAX INPUT SPEED (RPM):	6000	MAX AXIAL LOAD (N/lbf):	≤20/4.49

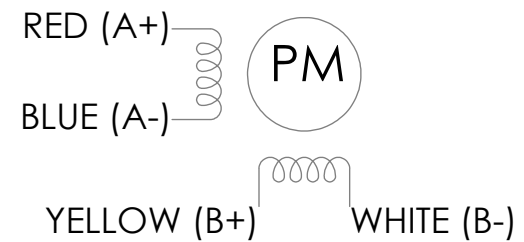
NOTES, UNLESS OTHER WISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
2. HIPOT 500 VAC, 60Hz FOR ONE MINUTE.
- 3 LEADS: 4, 26 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1007.
4. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 5 AS MEASURED ACROSS EACH PHASE.
- 6 AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
- 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 MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, 'MADE IN (COUNTRY)', AND DATE CODE.
- 10 ADD "D" TO PART NUMBER IF DOUBLE SHAFT IS REQUIRED.
DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.

REVISIONS

ECO #	REV.	DESCRIPTION	DATE	APPROVED
7935	A	INITIAL RELEASE	7/2/18	J. KORDIK
8429	B	TYPO CORRECTION	3/3/20	J. KORDIK
8758	C	REDRAWN IN SOLIDWORKS	4/18/22	L. LIU

WIRING DIAGRAM



DRIVE SEQUENCE MODEL BI-POLAR FULL STEP

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

Diagram illustrating the sequence of steps for a 4-bar linkage mechanism. The steps are numbered 1 through 5, with the last row labeled '1' instead of '5'. Arrows indicate the direction of rotation: CW (Clockwise) and CCW (Counter-clockwise).

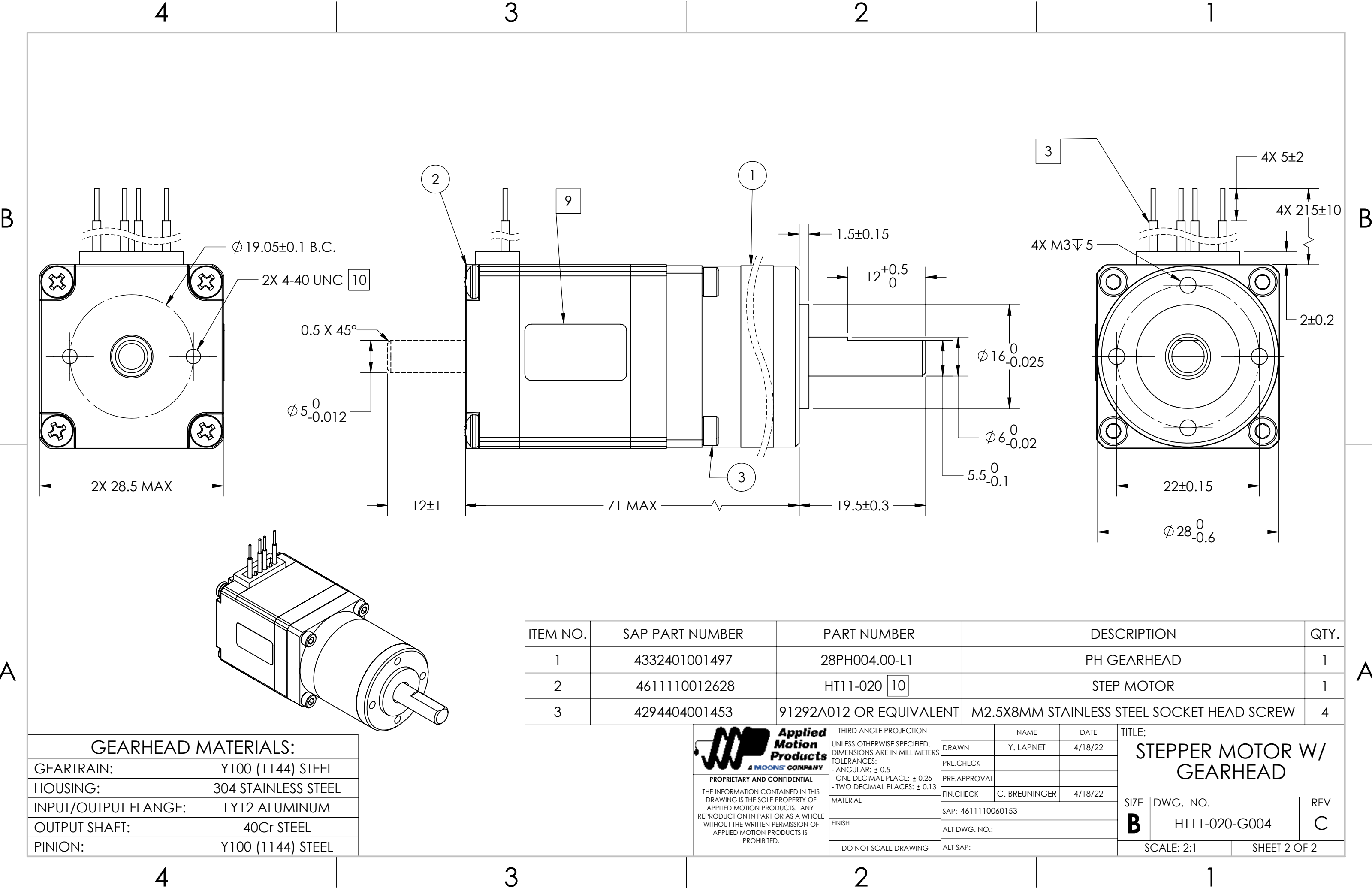
CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION
WHEN SEEN FROM THE MOUNTING FACE END OF THE MOTOR



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.

THIRD ANGLE PROJECTION		NAME		DATE		TITLE: STEPPER MOTOR W/ GEARHEAD		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: - ANGULAR: ± 0.5 - ONE DECIMAL PLACE: ± 0.25 - TWO DECIMAL PLACES: ± 0.13		DRAWN	Y. LAPNET	4/18/22				
		PRE.CHECK						
		PRE.APPROVAL						
		FIN.CHECK	C. BREUNINGER	4/18/22				
MATERIAL		SAP: 4611110060153				SIZE	DWG. NO.	REV
FINISH		ALT DWG. NO.:				B	HT11-020-G004	C
DO NOT SCALE DRAWING		ALT SAP:				SCALE: 2:1		SHEET 1 OF 2



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