

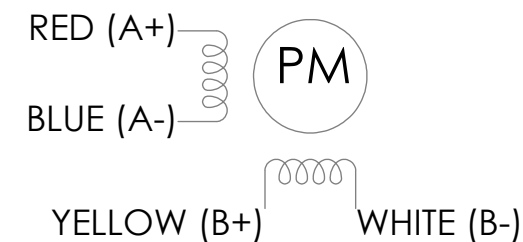
MOTOR SPECIFICATIONS:					
NUMBER OF PHASES:	2	ROTOR INERTIA (g-cm ² /oz-in ²):	9/0.05 NOM		
STEPS PER REVOLUTION:	200	INSULATION CLASS:	B (130°C)		
STEP ANGLE (°):	1.8	BEARINGS:	ABEC 3, DOUBLE SHIELDED		
CONNECTION	RESISTANCE PER PHASE 5	INDUCTANCE PER PHASE 6	RATED CURRENT	HOLDING TORQUE 1	
	ohm ±10%	mH ±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):	165/5.82
OPERATING AMB. TEMP. RANGE (°C):		-10 to +50	RELATIVE HUMIDITY RANGE (%):	85 NON-CONDENSING
STORAGE TEMP. RANGE (°C):		0 to +40		

GEARHEAD SPECIFICATIONS:			
RATIO:	22:1	EFFICIENCY (%):	81
MAX TORQUE CONTINUOUS (Nm/oz-in):	2/283.2	BACKLASH (°):	≤1.8
MAX TORQUE (Nm/oz-in):	3/424.8	MAX RADIAL LOAD (N/lbf):	≤20/4.49
MAX INPUT SPEED (RPM):	6000	MAX AXIAL LOAD (N/lbf):	≤20/4.49

REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
7935	A	INITIAL RELEASE	7/2/18	J. KORDIK
8429	B	TYP0 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

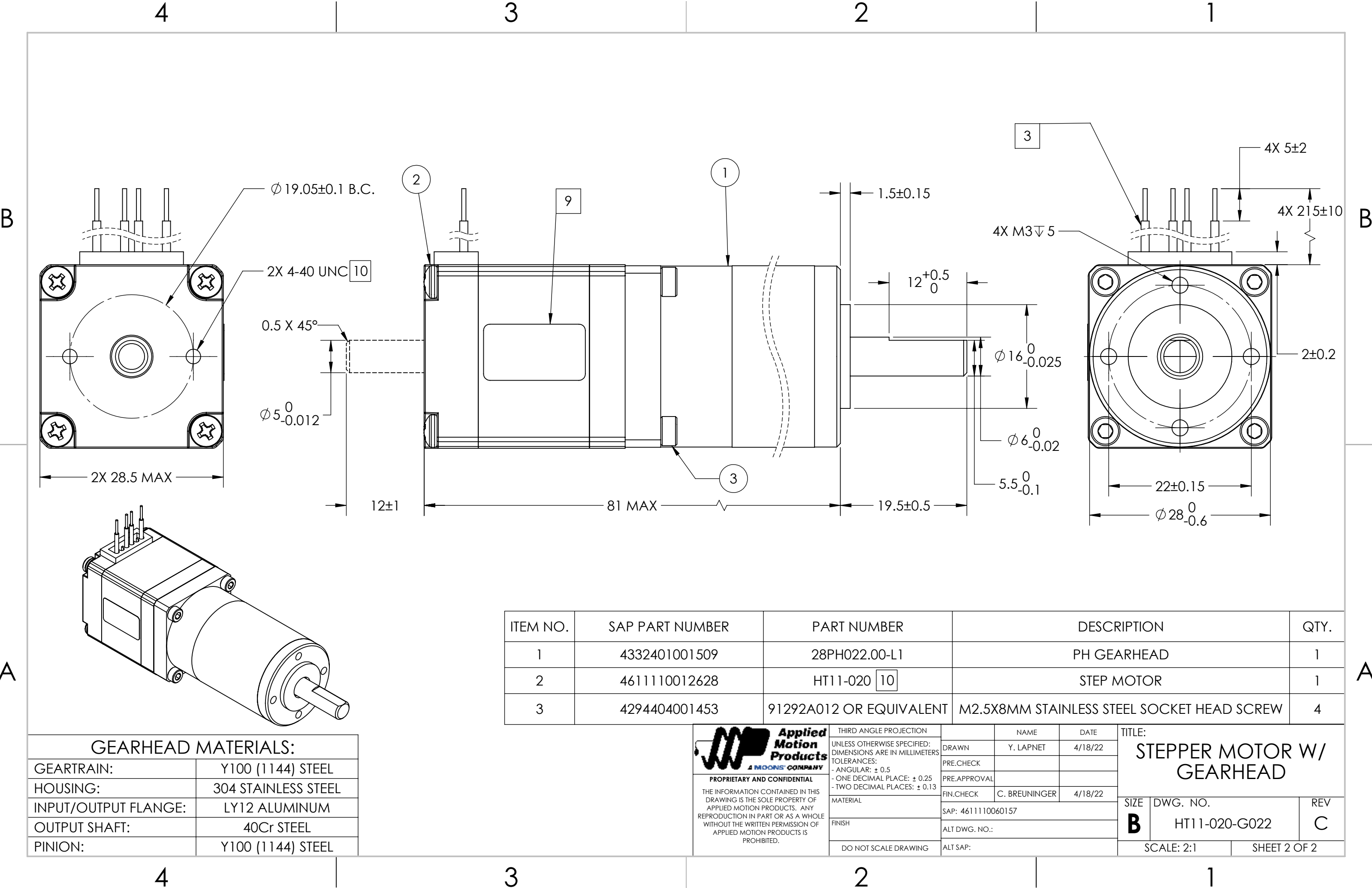
STEP	A+	A-	B+	B-
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

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

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.

 <p>Applied Motion Products A MOONS' COMPANY</p>	THIRD ANGLE PROJECTION		NAME	DATE	TITLE: <h1>STEPPER MOTOR W/ GEARHEAD</h1>		
	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			
<p>PROPRIETARY AND CONFIDENTIAL</p> <p>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.</p>		PRE.CHECK			SIZE	DWG. NO.	REV
		PRE.APPROVAL					
		FIN.CHECK	C. BREUNINGER	4/18/22	B	HT11-020-G022	C
	MATERIAL	SAP: 4611110060157					
	FINISH	ALT DWG. NO.:					
DO NOT SCALE DRAWING	ALT SAP:			SCALE: 2:1		SHEET 1 OF 2	



ITEM NO.	SAP PART NUMBER	PART NUMBER	DESCRIPTION	QTY.
1	4332401001509	28PH022.00-L1	PH GEARHEAD	1
2	4611110012628	HT11-020 10	STEP MOTOR	1
3	4294404001453	91292A012 OR EQUIVALENT	M2.5X8MM STAINLESS STEEL SOCKET HEAD SCREW	4

GEARHEAD MATERIALS:	
GEARTRAIN:	Y100 (1144) STEEL
HOUSING:	304 STAINLESS STEEL
INPUT/OUTPUT FLANGE:	LY12 ALUMINUM
OUTPUT SHAFT:	40Cr STEEL
PINION:	Y100 (1144) STEEL



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