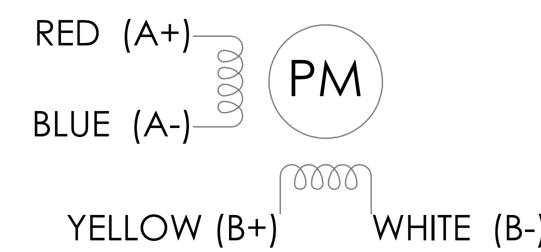
SPECIFICATIONS:	
NUMBER OF PHASES: 2	ROTOR INERTIA: 260 g-cm^2 (1.42 oz-in^2) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 40 mNm (5.66 oz-in) MIN
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY: ±5% [1], [2]	BEARINGS: ABEC 3, DOUBLE SHIELDED
POSITION ACCURACY: ±5% [1], [3]	TEMP. RISE: 80°C MAX. [9]
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)	MAX. DYNAMIC AXIAL LOAD: 15N
WEIGHT: 600 g (1.3 Lbs) APPROXIMATE	MAX. DYNAMIC RADIAL LOAD: 75N

REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
5896	A	INITIAL RELEASE	02/17/09	J. KORDIK
5961	B	REV'D SPECS, HOLES, WIRE COLORS	09/04/09	J. KORDIK
6022	C	CONN CHG, TOLERANCE CHG	11/04/09	J. KORDIK
6303	D	CONN ORIENTATION CHG	05/12/11	J. AMOS
7172	E	SPEC CLEANUP	04/15/15	J. KORDIK
7238	F	WIRING DETAIL REVISED	06/22/15	J. KORDIK
7247	G	ADD UL TO LABEL	01/26/16	J. KORDIK
7447	H	REVISE NOTE 10	06/07/16	J. KORDIK
8774	I	CHANGED LAM STACK/ END BELL SHAPE	04/05/22	K.KESLER
8768	J	MOVED TO REV J PER ASME Y14.35M	04/18/22	K.KESLER

CONNECTION	RESISTANCE PER PHASE (ohm ±15%) [7]	INDUCTANCE PER PHASE (mH ±20%) [8]	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN) [1]	HOLDING TORQUE (oz-in MIN) [1]
BI-POLAR	0.73	1.6	2.8	0.87	123

WIRING DIAGRAM



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: 4, 22 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430
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. ROTOR AND STATOR LAMINATED CONSTRUCTION.
11. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
12. MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.
13. THE MOTOR IS UL RECOGNIZED IN THE US AND CANADA, FILE NO. E472271.
14. ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.

DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

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

CW (↓) CCW (↑)

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

Applied Motion Products
A MOONS' COMPANY

PROPRIETARY AND CONFIDENTIAL

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
- ANGULAR: ± 0.5
- ONE DECIMAL PLACE: ± 0.25
- TWO DECIMAL PLACES: ± 0.13

MATERIAL

FINISH

DO NOT SCALE DRAWING

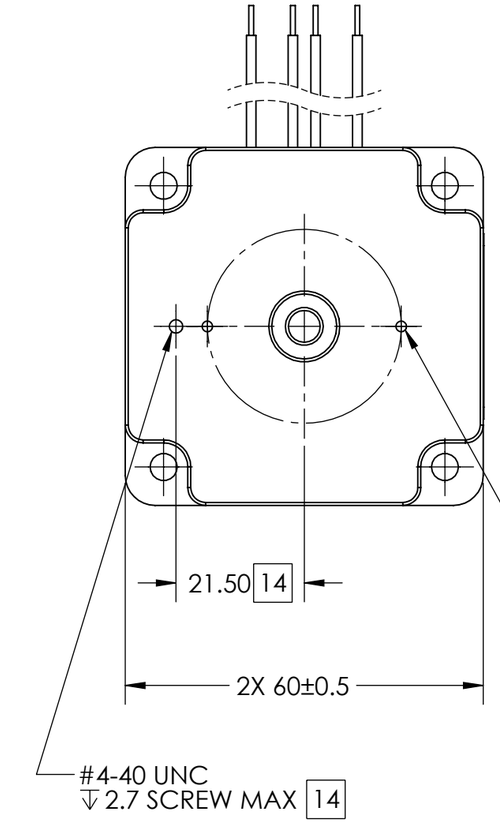
	NAME	DATE
DRAWN	C.BREUNINGER	04/12/22
PRE.CHECK		
PRE.APPROVAL		
FIN.CHECK	K.KESLER	04/18/22

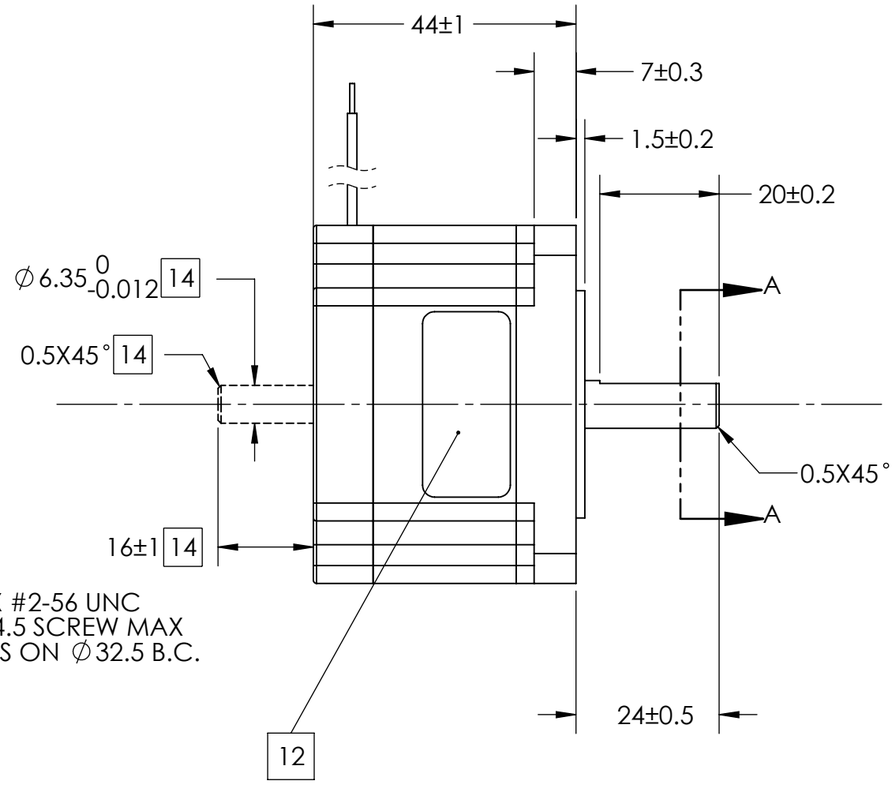
SAP: 4611110029099
ALT DWG. NO.: HT24-100D
ALT SAP: 4611110029100

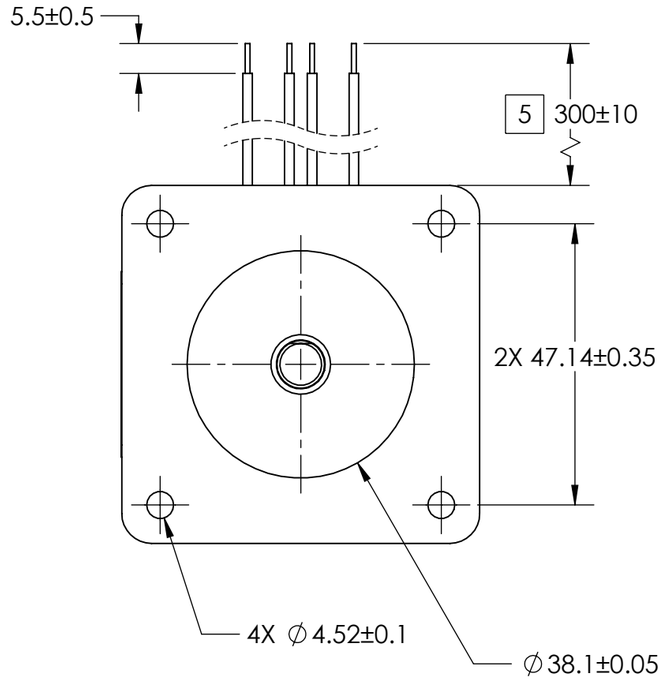
TITLE: STEPPER MOTOR

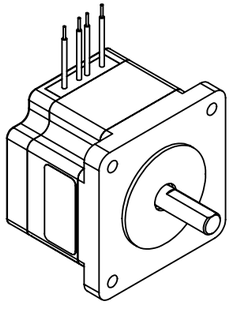
SIZE	DWG. NO.	REV
B	HT24-100	J

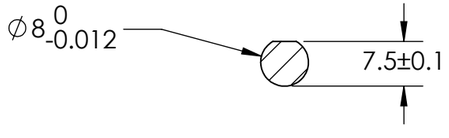
SCALE: 1:1 SHEET 1 OF 2











SECTION A-A

Applied Motion Products — A MOONS' COMPANY	THIRD ANGLE PROJECTION		TITLE: STEPPER MOTOR
PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: - ANGULAR: ± 0.5 - ONE DECIMAL PLACE: ± 0.25 - TWO DECIMAL PLACES: ± 0.13	DRAWN: C.BREUNINGER 04/12/22 PRE.CHECK: PRE.APPROVAL: FIN.CHECK: K.KESLER 04/18/22	SIZE B · DWG. NO. HT24-100 · REV J
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.	MATERIAL FINISH DO NOT SCALE DRAWING	SAP: 4611110029099 ALT DWG. NO.: HT24-100D ALT SAP: 4611110029100	SCALE: 1:1 · SHEET 2 OF 2