

SPECIFICATIONS

NUMBER OF PHASES: 2	ROTOR INERTIA: 900 G-CM ² (4.91 OZ-IN ²) REF
STEPS PER REVOLUTION: 200	DETENT TORQUE: 100 mN · m (14.1 OZ-IN) NOM.
STEP ANGLE: 1.8°	BEARINGS: ABEC 3, DOUBLE SHIELDED
STEP TO STEP ACCURACY: ±5% 1 , 2	TEMP. RISE: 80°C MAX 8
POSITION ACCURACY: ±5% 1 , 3	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 (.5 KGF RADIAL LOAD)	RELATIVE HUMIDITY RANGE: 15 TO 99%
END PLAY: 0.08 mm MAX (.5 KGF AXIAL LOAD)	MAX. DYNAMIC AXIAL LOAD: 15N
WEIGHT: 1400 g (3.1 LBS) APPROXIMATE	MAX. DYNAMIC RADIAL LOAD: 75N
INSULATION CLASS: B	

CONNECTION	RESISTANCE PER PHASE (ohm ±15%)	INDUCTANCE PER PHASE (mH ±20%)	7	RATED CURRENT (Amp)	HOLDING 1 TORQUE (Nm ±10%)	HOLDING 1 TORQUE (oz-in ±10%)
BIPOLAR	0.95	1.9		4	3.1	439

NOTES, UNLESS OTHERWISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- 2 BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- 3 MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- 5 CABLE, SHIELDED, 3048MM (10 FEET MIN), 4 CONDUCTORS AND DRAIN, AWG 22, UL2517, 7 STRAND MINIMUM, 105°C INSULATION. DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 7 AS MEASURED USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
- 8 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- 9 MOTOR TO MEET IP65 STANDARDS. REAR END BELL OPTIONS INCLUDE A SOLID END BELL OR A BRASS PLUG COVERING THE SHAFT BEARING, A 3M LABEL MUST COVER THE BRASS PLUG. CABLE GLAND TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
10. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
- 11 MOTOR LABEL TO INCLUDE "RoHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

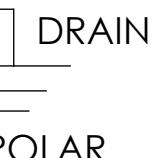
REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
6544	A	INITIAL RELEASE	6/19/12	J.KORDIK
6565	B	MFGR SPEC CHANGES	07/19/12	J.KORDIK
6578	C	SPEC CHANGE	09/19/12	J.KORDIK
6723	D	ADD NOTES	03/22/13	J.KORDIK
7373	E	END BELL SEALING OPTIONS	02/12/16	J.KORDIK
7447	F	REVISE NOTES	06/07/16	J.KORDIK
8366	G	REVISE SPEC	10/30/19	J.KORDIK
9113	H	REVISE SPECS	1/30/25	K.KESLER
9226	J	SPEC CHANGE	2/20/25	K.KESLER

SWITCHING SEQUENCE FOR CW ROTATION
FACING MOUNTING END

STEP	(A+) RED	(A-) BLU	(B+) YEL	(B-) WHT
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

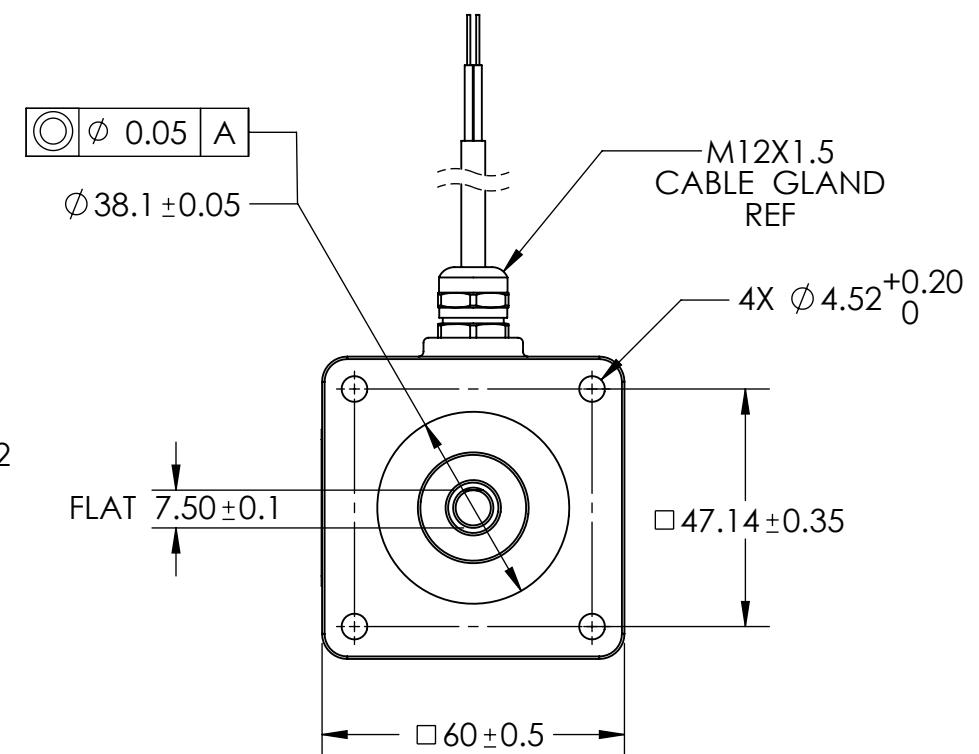
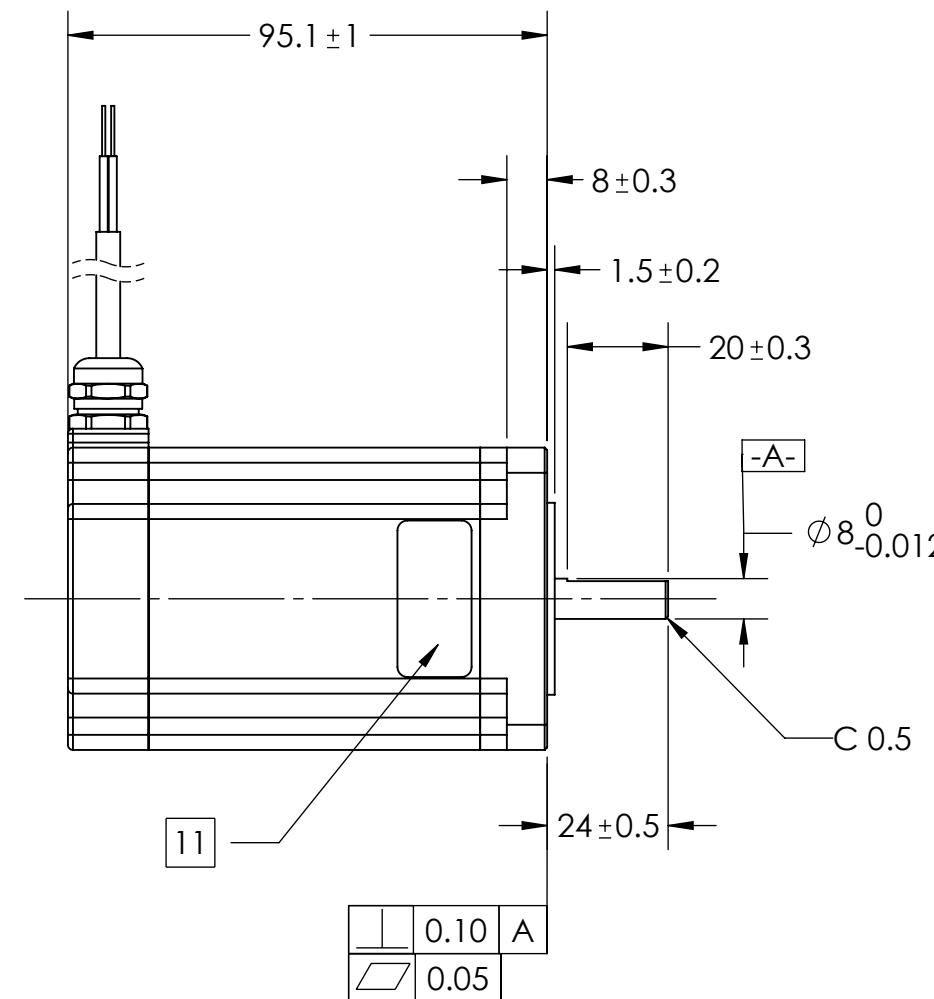
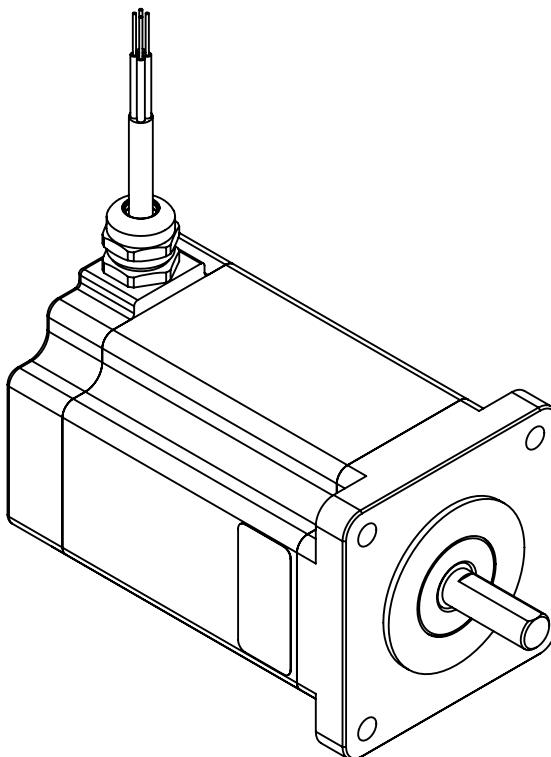
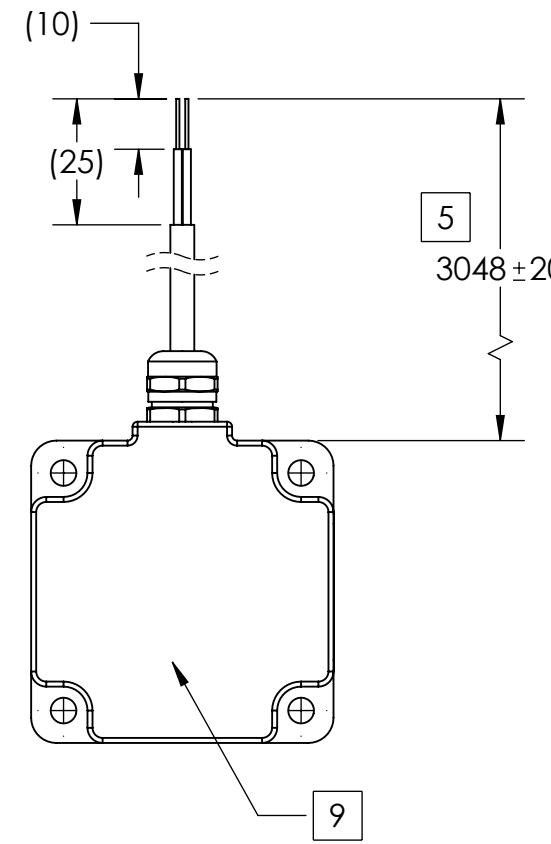
CW

CCW



YELLOW (B+) WHITE (B-)

Applied Motion Products		THIRD ANGLE PROJECTION	NAME	DATE	TITLE: STEPPER MOTOR OUTLINE
A MOONS' COMPANY		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS	DRAWN	F. NG	
TOLERANCES:		PRE.CHECK			
- ANGULAR: ± 0.5		PRE.APPROVAL			
- ONE DECIMAL PLACE: ± 0.25		FIN.CHECK	C. BREUNINGER	2/20/25	
- TWO DECIMAL PLACES: ± 0.13		SAP: 4611110033980			
MATERIAL		FINISH	ALT DWG. NO.:		
DO NOT SCALE DRAWING		DO NOT SCALE DRAWING	ALT SAP:		
SCALE: 1:1					
SHEET 1 OF 2					



A MOONS' COMPANY

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

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:

- ANGULAR: ± 0.5
- ONE DECIMAL PLACE: ± 0.25
- TWO DECIMAL PLACES: ± 0.13

MATERIAL

SAP: 4611110033980

FINISH

ALT DWG. NO.:

DO NOT SCALE DRAWING

ALT SAP:

DRAWN F. NG 2/20/25

PRE.CHECK

PRE.APPROVAL

FIN.CHECK C. BREUNINGER 2/20/25

MATERIAL

FINISH

DO NOT SCALE DRAWING

TITLE:

STEPPER MOTOR
OUTLINE

SIZE

DWG. NO.

B

HW24-108

REV J

SCALE: 2:3

SHEET 2 OF 2