SPECIFICATIONS			
STEP ANGLE	1.8°	ROTOR INERTIA	2700 g·cm^2 (14.8 oz-in^2) ± 5%
STEP TO STEP ACCURACY	±0.09° [1], [2]	DETENT TORQUE	160 mN·m (22.6 oz-in) ± 15%
POSITIONAL ACCURACY	±0.09° [1], [3]	RADIAL PLAY	0.02 mm MAX (@500 gf RADIAL)
OPERATING TEMP. RANGE	-20 TO +50°C	END PLAY	0.08 mm MAX (@500 gf AXIAL)
STORAGE TEMP. RANGE	-40 TO +70°C	INSULATION CLASS	B (130°C)
TEMP. RISE	80°C MAX [9]	WEIGHT	3.9 kg (8.6 lb) ±5%
RELATIVE HUMIDITY RANGE	5 TO 99%	APPROVALS	CURRENT EU RoHS DIRECTIVE, UL RECOGNIZED
IP RATING	IP65 [11]		

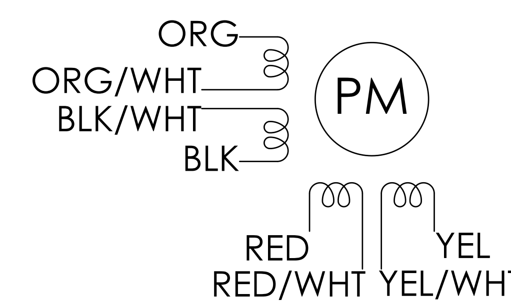
CONNECTION	RESISTANCE PER PHASE [7] (ohm ±10%)	INDUCTANCE PER PHASE [8] (mH ±20%)	RATED CURRENT (Amp)	HOLDING TORQUE [1] (N·m MIN)	HOLDING TORQUE [1] (oz-in MIN)
BI-POLAR SERIES	4.8	43.2	2.03	7.5	1062
BI-POLAR PARALLEL	1.2	10.8	4.06	7.5	1062
UNI-POLAR	2.4	10.8	2.9	5.5	778

NOTES, UNLESS OTHERWISE 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 1150 VAC, 60Hz FOR ONE MINUTE.
[5] MOTOR LEADS: 8, 22 AWG, UL 2517 WITH GROUND TERMINATED INSIDE ENDBELL. CABLE TO MEET APPLIED MOTION SPEC 666-2126
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 ALL PHASES AND MOTOR AT REST.
[10] MOTOR LABEL TO INCLUDE "RoHS" COMPLIANT, DATE CODE, "MADE IN (COUNTRY OF ORIGIN)", AND AMP P/N.
[11] MOTOR TO MEET IP65 STANDARDS, EXCEPT CABLE END OPPOSITE OF MOTOR
[12] CABLE GLANDS TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT
13. END BELLS TO BE PROTECTED WITH BLACK COATING
[14] ENCODER CABLE 3004-195-10 TO BE INCLUDED WITH MOTOR, SEE SHEET 2 FOR MODIFIED PINOUT
[15] ASSEMBLE PER APPLIED MOTION SPEC 960-0082

REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
6449	A	INITIAL RELEASE	03/07/12	J.KORDIK
6578	B	WAS -YAA, DRAWING CLEANUP	07/31/12	J.KORDIK
8864	C	REDRAWN IN SOLIDWORKS, UPDATED NOTES	11/10/22	K.KESLER

WIRING DIAGRAM



DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

CW ↓ / CCW ↑

STEP	(A+) ORG & BLK/WHT	(A-) BLK & ORG/WHT	(B+) RED & YEL/WHT	(B-) YEL & RED/WHT
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

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

Applied Motion Products
A MOONS' COMPANY

THIRD ANGLE PROJECTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS LINEAR AND ANGULAR DIM. ISO 2768-1: M GEOMETRIC TOLERANCES ISO 2768-2 : K
MATERIAL -
FINISH -
DO NOT SCALE DRAWING

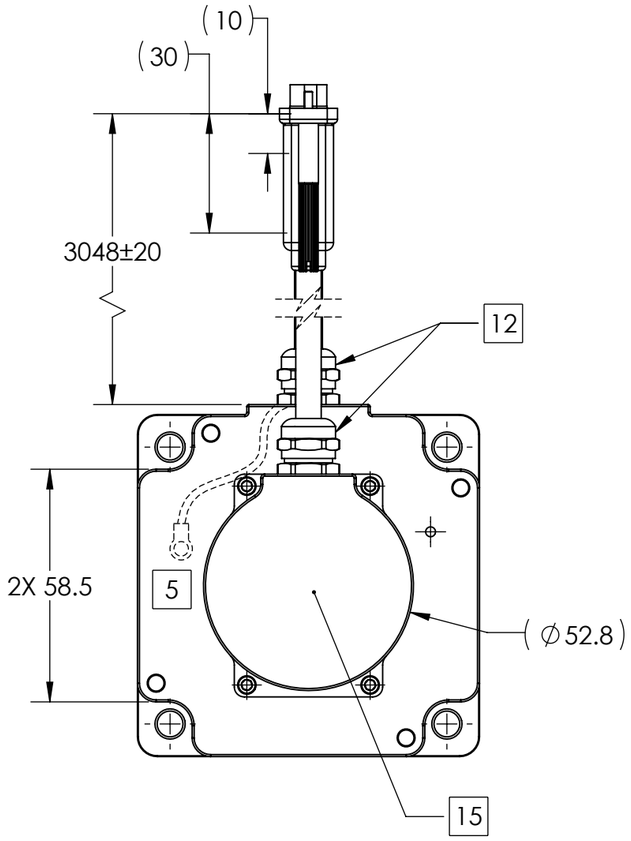
	NAME	DATE
DRAWN	C.BREUNINGER	11/10/22
PRE.CHECK	-	-
PRE.APPROVAL	-	-
FIN.CHECK	K.KESLER	11/10/22

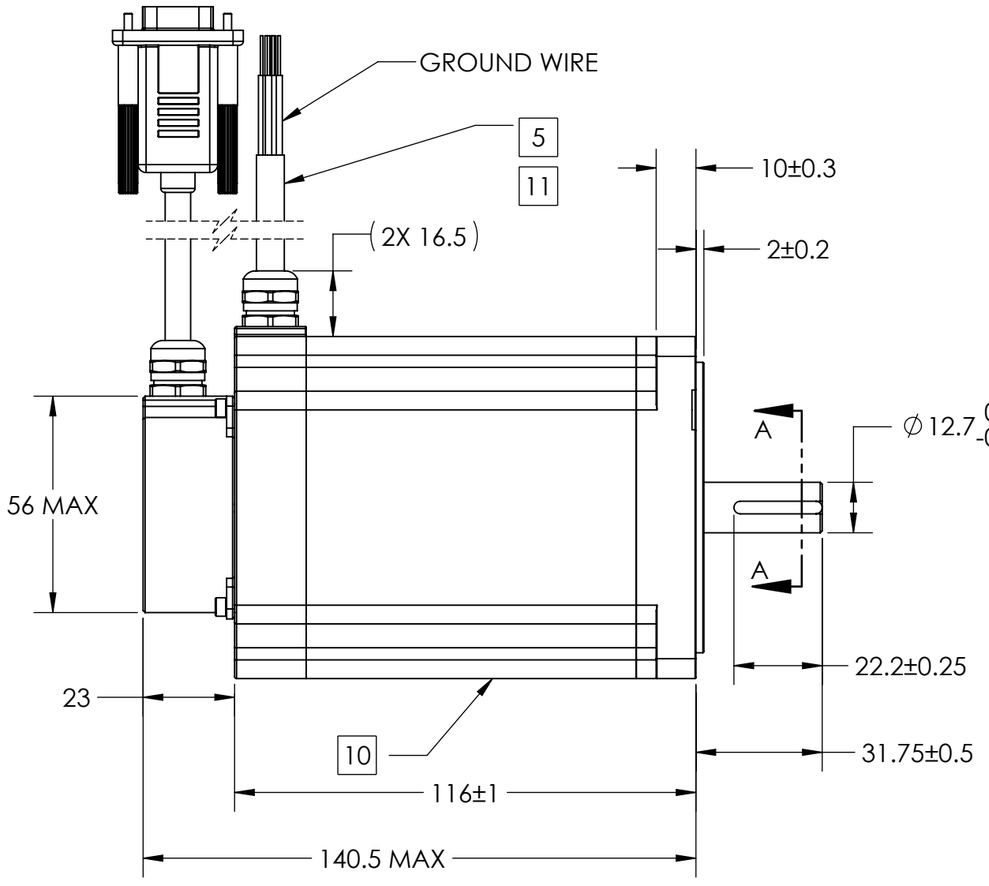
SAP: 4611110061222
ALT DWG. NO.: -
ALT SAP: -

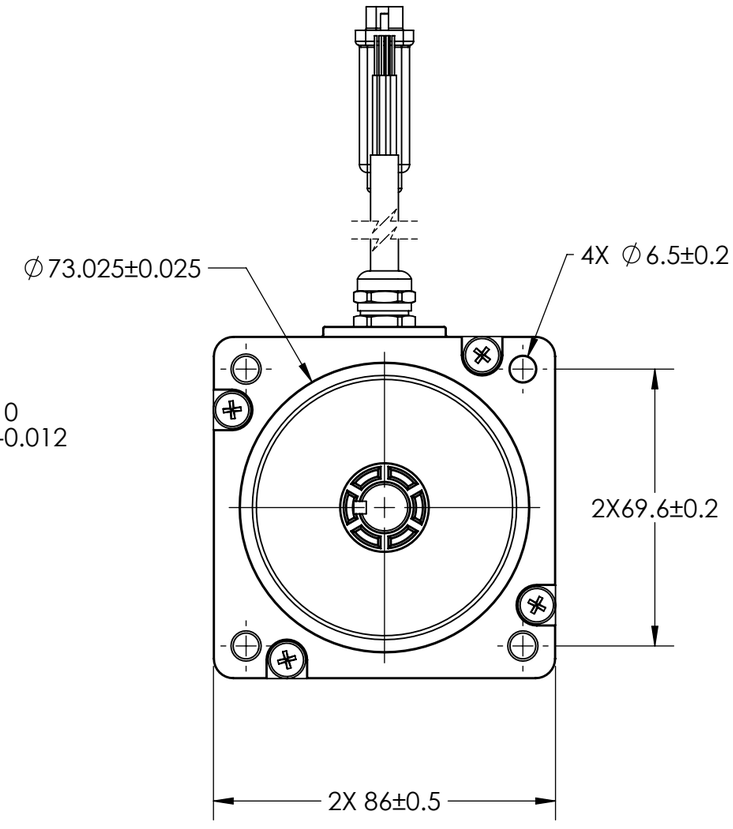
TITLE: STEPPER MOTOR W/ ENCODER

SIZE	DWG. NO.	REV
B	HW34-696D-YAC	C

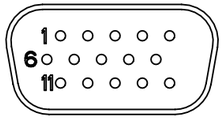
SCALE: 2:3 | SHEET 1 OF 2



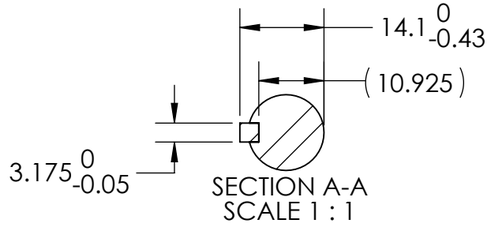




14 ENCODER		
PIN #	COLOR	SIGNAL
1	BLUE	A
2	BLUE/WHITE	A-
3	YELLOW	B
4	YELLOW/WHITE	B-
5	ORANGE	INDEX
6	ORANGE/WHITE	INDEX-
7	RED	+Vcc
8	BLACK	GND
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	DRAIN	SHIELD



ENCODER CABLE PINOUT



SECTION A-A
SCALE 1 : 1

Applied Motion Products
A MOONS' COMPANY

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
LINEAR AND ANGULAR DIM. ISO 2768-1: M
GEOMETRIC TOLERANCES ISO 2768-2 : K

MATERIAL
-

FINISH
-

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	C.BREUNINGER	11/10/22
PRE.CHECK	-	-
PRE.APPROVAL	-	-
FIN.CHECK	K.KESLER	11/10/22

SAP: 4611110061222

ALT DWG. NO.: -

ALT SAP: -

TITLE:
STEPPER MOTOR W/ ENCODER

SIZE	DWG. NO.	REV
B	HW34-696D-YAC	C

SCALE: 2:3 | SHEET 2 OF 2