

1

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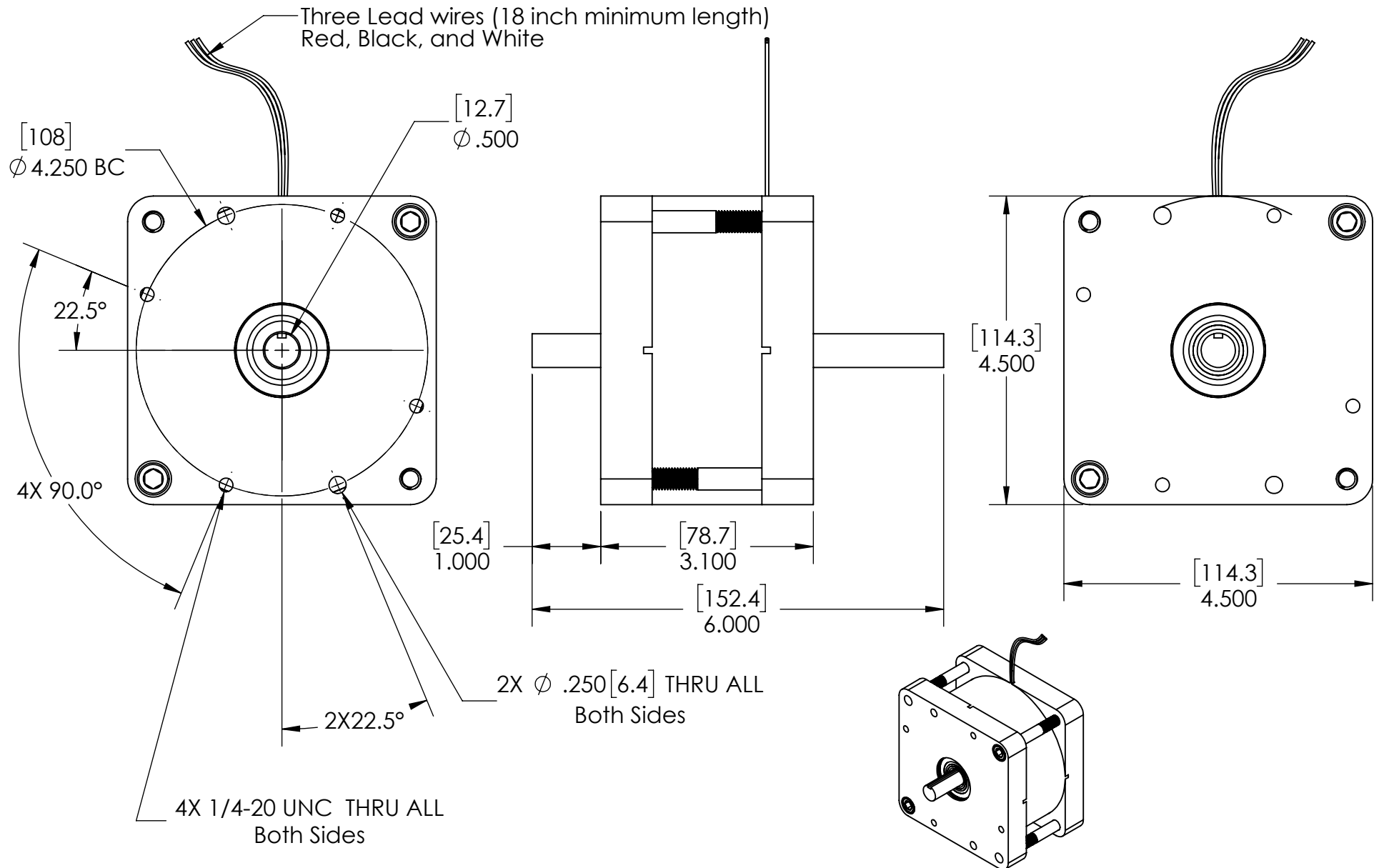
5

Notes:

1. Shaft is shown in the center of travel and maximum torque location. Keyway lines up with lead wire exit.
2. Red to + and Black or White to - turns Clockwise.
3. Black to + and White or Red to - turns Counterclockwise.

REVISION TABLE

REV	ECN#	DESCRIPTION	REV BY	APPROVED	DATE
---	---	Original Drawing	JRM	MPW	5-4-23



H2W Technologies, Inc.

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UNLESS SPECIFIED OTHERWISE:
All dimensions are in inches
Standard Tolerances are as follows
.XXX \pm .005 ANGLES \pm .1°
.XX \pm .010 FILLETS .010
.X \pm .020 CORNERS .010
Remove All Burrs and Sharp Edges

RELEASED FOR
MANUFACTURING

5-4-23

MATERIAL

FINISH

TITLE

TMR-060-50-150-2H3

DWG #

80-0472

REV

DATE

5-4-23

SHEET

1 of 2

1

2

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4

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Black and Red Leads Connected Full Motor

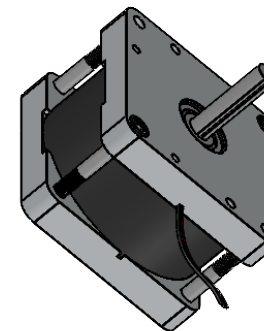
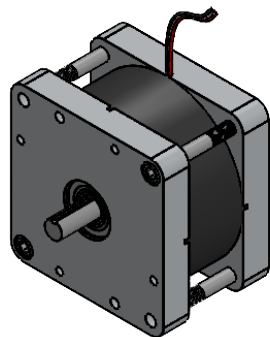
Red and White (CW) Black and White (CCW) Leads Connected Half Motor

LIMITED ANGLE TORQUE MOTOR SPECIFICATIONS

Motor P/N	TMR-060-50-150-2H3	
Device Type	MR	
Stroke	60 degrees	1.05 radians
Radial Clearance	0.025 in	0.6 mm
Housed with Bearings	Yes	
Rotor Inertia	29.0 oz-in ²	5.2 E-4 kg-m ²
Total Mass	8.4 lbs	3.8 kgs
Resistance @ 20C	30 ohms	
Inductance @ 20C	29 mH	
Electrical Time Constant	1.0 msec	
Motor Constant	36 in-oz/sqrt(watt)	25 N-cm/sqrt(watt)
Torque Constant	197 in-oz/amp	138 N-cm/amp
Back EMF	1.4 V/rpm	14 V/rad/sec
Torque @ 100% Duty	150 in-oz	105 N-cm
Power @ 100% Duty	18 watts	
Current @ 100% Duty	0.8 amps	
Torque @ 10% Duty	450 in-oz	315 N-cm
Power @ 10% Duty	160 watts	
Current @ 10% Duty	2.4 amps	

LIMITED ANGLE TORQUE MOTOR SPECIFICATIONS

Motor P/N	TMR-060-50-150-2H3 (HALF)	
Device Type	MR	
Stroke	60 degrees	1.05 radians
Radial Clearance	0.025 in	0.6 mm
Housed with Bearings	Yes	
Rotor Inertia	29.0 oz-in ²	5.2 E-4 kg-m ²
Total Mass	8.4 lbs	3.8 kgs
Resistance @ 20C	15 ohms	
Inductance @ 20C	15 mH	
Electrical Time Constant	1.0 msec	
Motor Constant	24 in-oz/sqrt(watt)	17 N-cm/sqrt(watt)
Torque Constant	99 in-oz/amp	69 N-cm/amp
Back EMF	1.4 V/rpm	14 V/rad/sec
Torque @ 100% Duty	99 in-oz	69 N-cm
Power @ 100% Duty	15 watts	
Current @ 100% Duty	1 amps	
Torque @ 10% Duty	300 in-oz	210 N-cm
Power @ 10% Duty	135 watts	
Current @ 10% Duty	3 amps	



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.X ±.020 CORNERS .010
Remove All Burrs and Sharp Edges

**RELEASED FOR
MANUFACTURING**
[Signature]
5-4-23

MATERIAL
FINISH

TITLE

**TMR-060-50-150-2H3
Specifications**

DWG # **80-0472**
REV ----
DATE 5-4-23 SHEET 2 of 2