

1

2

3

4

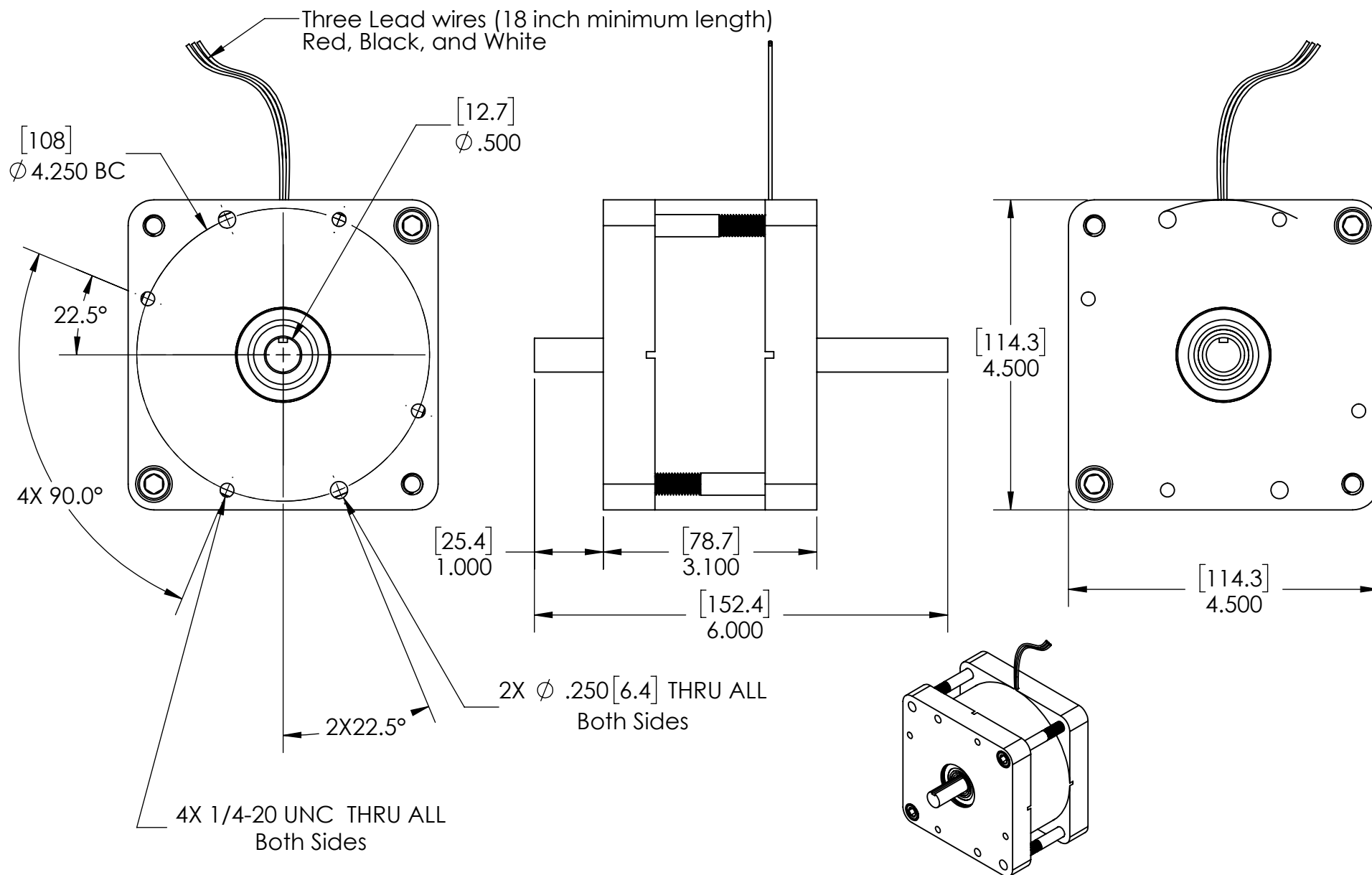
5

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.

Santa Clarita, CA 91350 USA
Tel: (661) 291-1620

www.h2wtech.com

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

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

3

4

5

Black and Red Leads Connected Full Motor

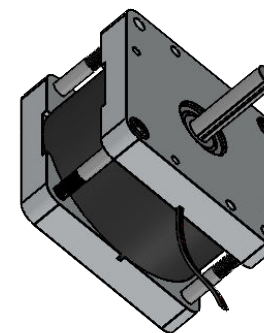
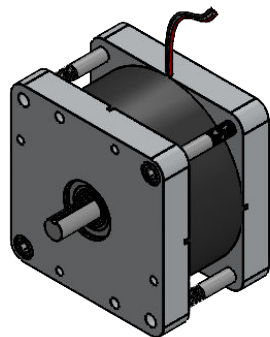
Red and White (CW) Black and White (CCW) Leads Connected Half Motor

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	



H2W Technologies, Inc.
Santa Clarita, CA 91350 USA
Tel: (661) 291-1620
www.h2wtech.com

These drawings and specifications are the property of H2W Technologies, Inc. They are issued in confidence and shall not be reproduced, copied, or used without written permission from H2W Technologies, Inc.

UNLESS SPECIFIED OTHERWISE:
All dimensions are in inches
Standard Tolerances are as follows
.XXX ±.005 ANGLES ±.1°
.XX ±.010 FILLETS .010
.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