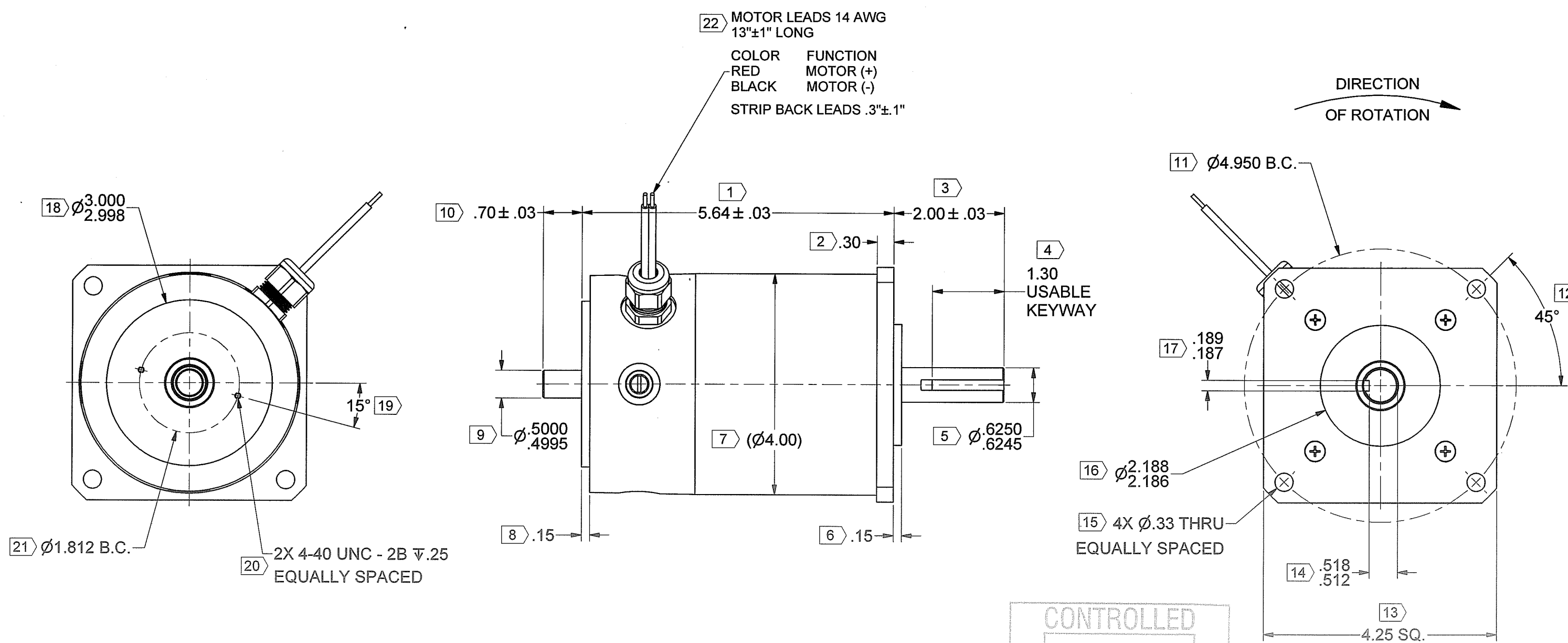


REV	DESCRIPTION	DATE	BY	APPROVED
A	PROTOTYPE			



MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 65.1 ± 10% OZ-IN/AMP
 VOLTAGE CONSTANT (Ke) = 48.1 ± 10% VOLTS/KRPM

NOTES:

- 1.) MOTOR ROTATION IS CLOCKWISE WHEN VIEWED FROM OUTPUT SHAFT WITH POSITIVE VOLTAGE APPLIED TO RED LEAD.
- 2.) SCREW PENETRATION NOT TO EXCEED SPECIFIED THREAD DEPTH.
- 3.) [X] IDENTIFIES INSPECTION DIMENSIONS.

CONTROLLED
 JUN 9 2022
 DOCUMENT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & (mm) TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]	 THIRD ANGLE PROJECTION DO NOT SCALE DRAWING		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MAGMOTOR TECHNOLOGIES. ANY REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED THEREIN IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION FROM MAGMOTOR TECHNOLOGIES IS PROHIBITED.		
	SIGNATURES		DATE	TITLE	
	DRAWN CGW		6/7/2022	MOTOR ASSEMBLY, C40-G-200FX	
	CHECKED <i>du</i>		6/9/22		
SPEC	ENG APPR. <i>MCU</i>		6/9/22		
FINISH NONE	MFG APPR. <i>BT</i>		6/9/22		
SPEC	UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		Q.A.		
SIZE D			NUMBER 500400258	REV A	
SCALE: -			WEIGHT: - LB.	SHEET 1 OF 3	



10 Coppage Drive
Worcester, MA 01603
8/10/2022

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

Final Product No.: **C40-G-200FX**

Customer:

RFQ 500400258

Phone/Fax:

By: MM

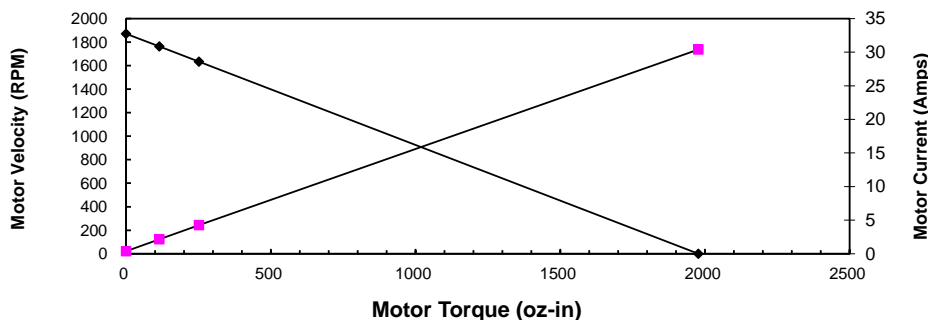
Date: 8/10/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	Winding	-	Stack	Options	Gear Ratio
MODEL #	C	40	-	G	-	200	FX	

V in =*	90 Vdc					Input Voltage		Eff = 0.9
Ke =*	48.1 V/krpm					Voltage Constant		
Kt =	65.1 oz-in/A					Torque Constant		
Rt =*	2.96 Ohms(@20° C)					Terminal Resistance+Amplifier		
Io =*	0.38 Amps					No load current		
I as =	30.4 Amps					Stall Current (reference only)		
T gs =	1978 oz-in					Stall Torque (reference only @ V in)		
I 1 =	2.1 Amps					Current @ Torque-1		
I 2 =	4.3 Amps					Current @ Torque-2		
T 1 =*	115 oz-in					Torque-1		
T 2 =*	252 oz-in					Torque-2		
RPM nl =	1871 RPM					No Load Velocity		
RPM r =	1762 RPM					RPM @ T1		
RPM p =	1633 RPM					RPM @ T2		
R ah =	3.87 Ohms(@105° C)					Term. Resistance Hot		
T gsh =	1512 oz-in					Stall Torque Hot		
I ash =	23.2 Amps					Stall Current Hot		
R th =*	2 °C/W					Thermal Resistance		
Tr =	87 °C	Without cooling air				Temperature Rise @ T1 (above ambient)		
Tr =	157 °C	Without cooling air				Temperature Rise @ T2 (above ambient)		
Nm/A =	0.46					Torque Constant		
Lb in/A =	4.06					Torque Constant		
Km =	37.8	Kt/r				Motor Constant		

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
90	0	1871	0.4	0	0
90	115	1762	2.1	0.775452734	149.90068
90	252	1633	4.3	0.794878201	304.32112
90	1978	0	30.4	0	0