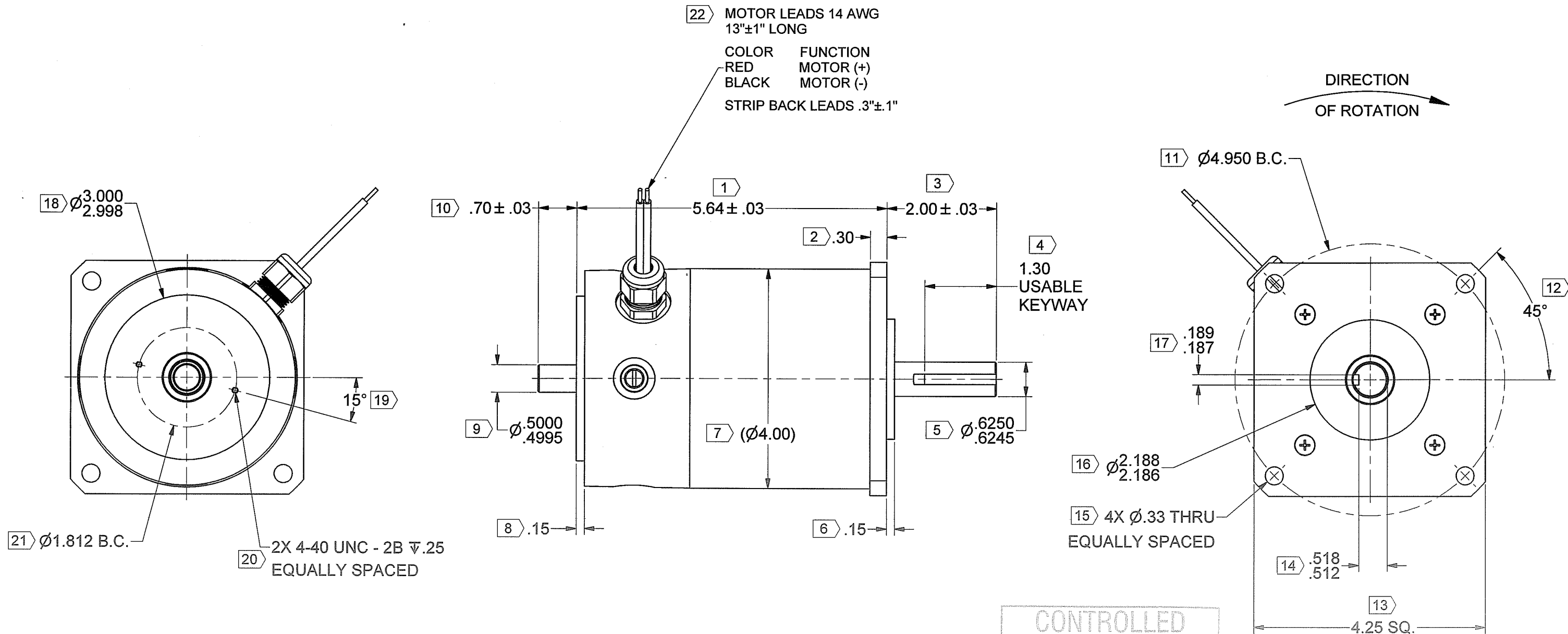


REV	DESCRIPTION	DATE	BY	APPROVED
A	PROTOTYPE	-	-	-
B	UPDATED ENDBELL & SHAFT TO STANDARD	6/8/2022	CGW	-

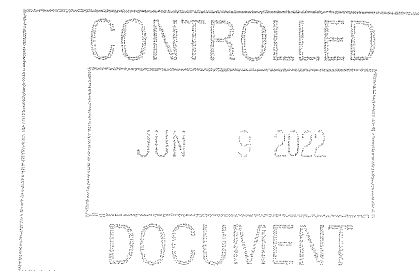


**MOTOR SPECIFICATIONS:**

TORQUE CONSTANT (Kt) = 18.0 ± 10% OZ-IN/AMP  
VOLTAGE CONSTANT (Ke) = 13.3 ± 10% VOLTS/KRPM

**NOTES:**

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



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & [mm]	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.		MAGMOTOR™
		SIGNATURES	DATE	
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]	125 ✓	DRAWN R. LANDRY	2/9/2005	MOTOR ASSEMBLY, C40-A-200FX
MATERIAL	CHECKED		6/8/22	
SPEC	ENG APPR. MCA		6/9/22	
FINISH NONE	MFG APPR. BT		6/9/22	SIZE D
SPEC	Q.A.			NUMBER 500400180
UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		SCALE: -	WEIGHT: - LB.	REV B
			SHEET 1 OF 3	



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

**MOTOR PERFORMANCE / SPECIFICATIONS**

**Attn.:**

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

Customer:

RFQ 500400180

Phone/Fax:

By: MM

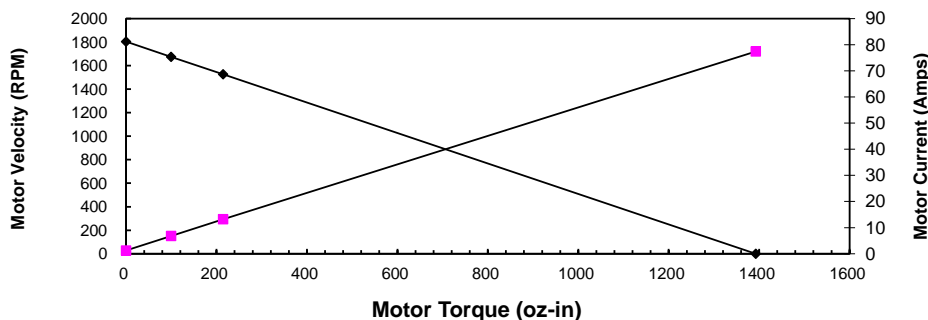
Date: 8/10/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	Winding	-	Stack	Options	Gear Ratio
MODEL #	<b>C</b>	<b>40</b>	-	<b>A</b>	-	<b>200</b>	<b>FX</b>	

V in =*	<b>24</b> Vdc					Input Voltage		Eff = 0.9
Ke =*	<b>13.3</b> V/krpm					Voltage Constant		
Kt =	18.0 oz-in/A					Torque Constant		
Rt =*	<b>0.31</b> Ohms(@20° C)					Terminal Resistance+Amplifier		
Io =*	<b>1.26</b> Amps					No load current		
I as =	77.4 Amps					Stall Current (reference only)		
T gs =	1393 oz-in					Stall Torque (reference only @ V in)		
I 1 =	6.8 Amps					Current @ Torque-1		
I 2 =	13.2 Amps					Current @ Torque-2		
T 1 =*	<b>100</b> oz-in					Torque-1		
T 2 =*	<b>215</b> oz-in					Torque-2		
RPM nl =	1805 RPM					No Load Velocity		
RPM r =	1675 RPM					RPM @ T1		
RPM p =	1526 RPM					RPM @ T2		
R ah =	0.41 Ohms(@105° C)					Term. Resistance Hot		
T gsh =	1064 oz-in					Stall Torque Hot		
I ash =	59.2 Amps					Stall Current Hot		
R th =*	<b>2</b> °C/W					Thermal Resistance		
Tr =	<b>80</b> °C	Without cooling air				Temperature Rise @ T1 (above ambient)		
Tr =	<b>149</b> °C	Without cooling air				Temperature Rise @ T2 (above ambient)		
Nm/A =	0.13					Torque Constant		
Lb in/A =	1.12					Torque Constant		
Km =	32.3	Kt/r				Motor Constant		

**Torque Curve**



**Calculation data**

Voltage	Torque	RPM	Amp	Efficiency	Watts out
24	0	1805	1.3		0
24	100	1675	6.8	0.756918745	123.88511
24	215	1526	13.2	0.765195054	242.65493
24	1393	0	77.4		0