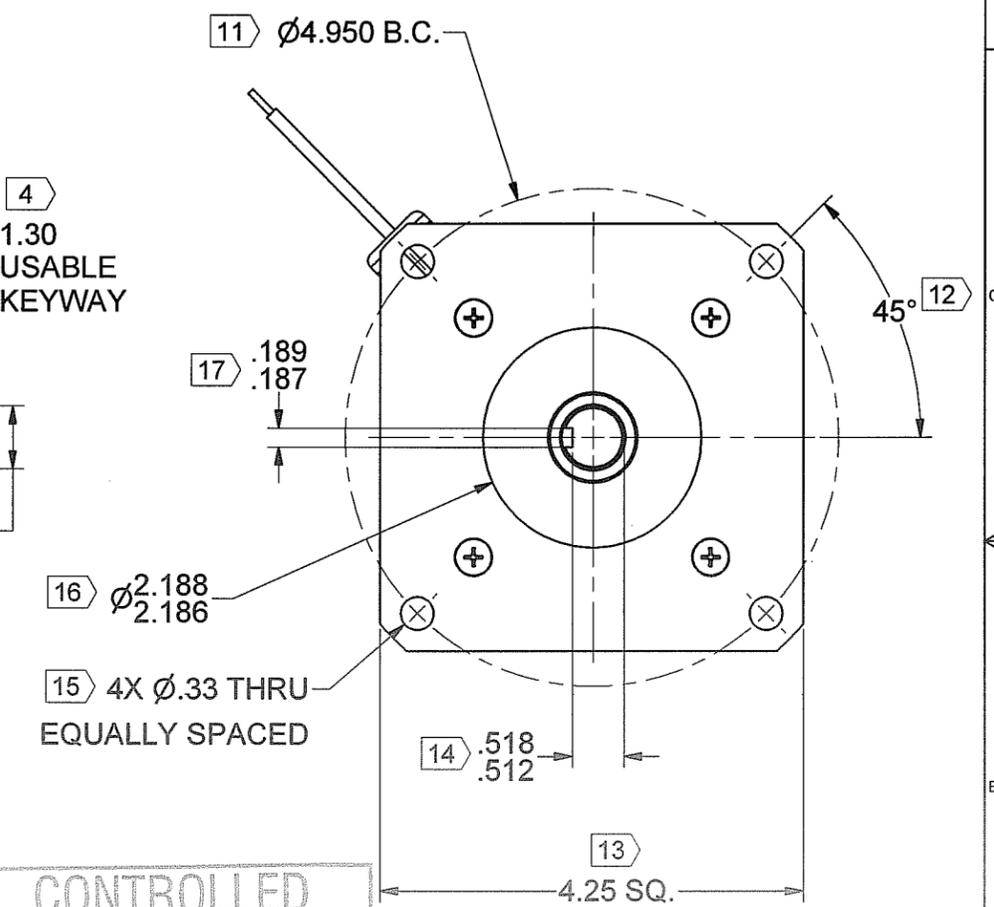
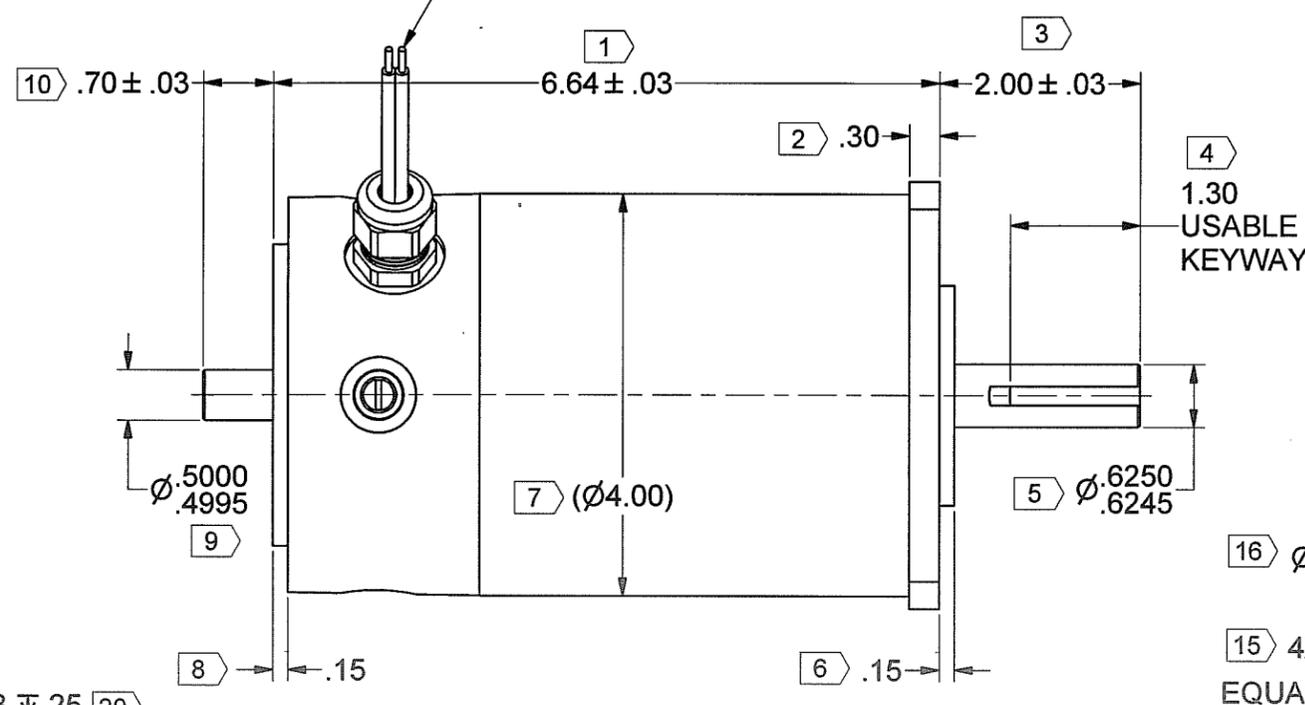
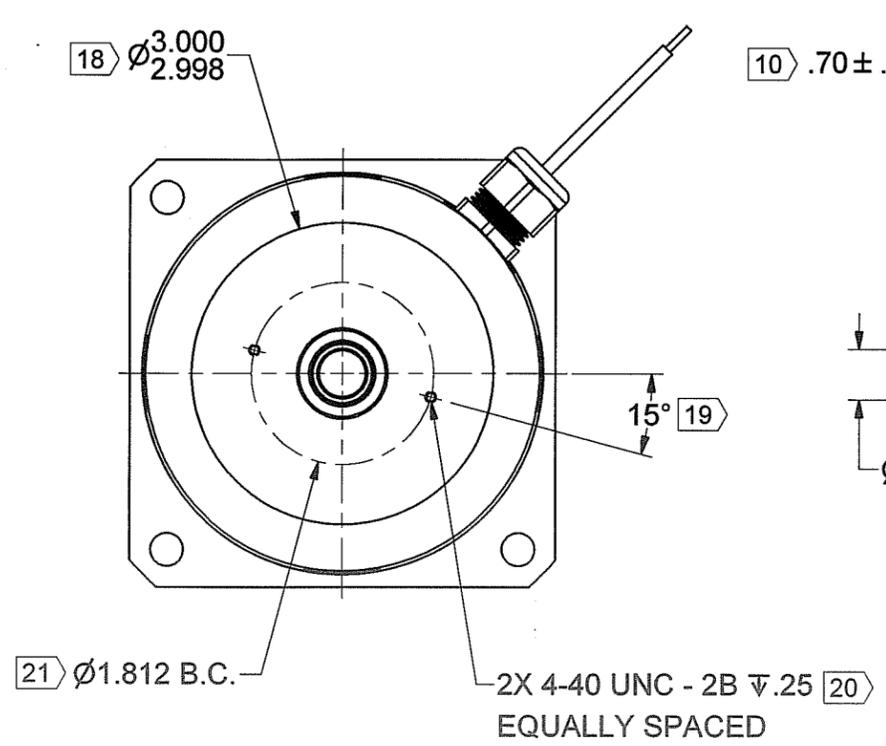


REVISION		DATE	BY	APPROVED
REV	DESCRIPTION			
A	PROTOTYPE	-	-	-
B	UPDATED ENDBELL, FLANGE & SHAFT TO MAKE STANDARD	6/2/2022	CGW	-

22) MOTOR LEADS 14 AWG
13"±1" LONG

COLOR FUNCTION
RED MOTOR (+)
BLACK MOTOR (-)
STRIP BACK LEADS .3"±.1"

DIRECTION
OF ROTATION



MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 30.4 ± 10% OZ-IN/AMP
VOLTAGE CONSTANT (Ke) = 22.5 ± 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.

CONTROLLED
JUN 2 2022
DOCUMENT

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.		
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]		SIGNATURES		DATE		
MATERIAL		DRAWN	R. LANDRY	4/2/2004		MOTOR ASSEMBLY, C40-B-300FX
SPEC		CHECKED		6/2/22		
FINISH		ENG APPR.	MCM	6/2/22		SIZE NUMBER D 500400169
NONE		MFG APPR.	BT	6/2/22		
SPEC		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



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

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

Final Product No.: **C40-B-300FX**

Customer:

RFQ 500400169

Phone/Fax:

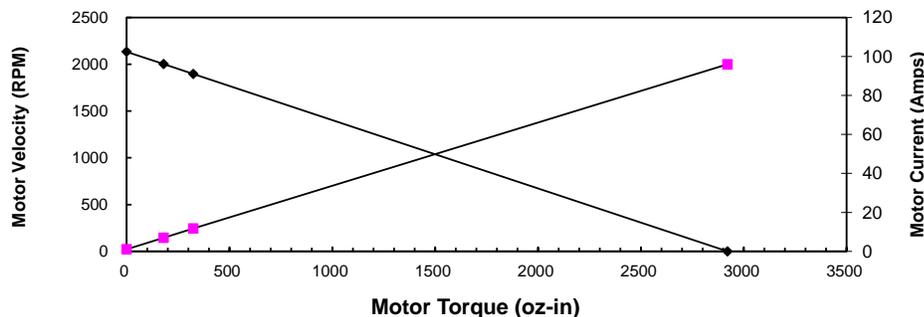
By: MM

Date: 8/10/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	Winding	-	Stack	Options	Gear Ratio
MODEL #	C	40	-	B	-	300	FX	
V in =*	48	Vdc				Input Voltage		Eff = 0.9
Ke =*	22.5	V/krpm				Voltage Constant		
Kt =	30.4	oz-in/A				Torque Constant		
Rt =*	0.5	Ohms(@20° C)				Terminal Resistance+Amplifier		
Io=*	1.045	Amps				No load current		
I as =	96.0	Amps				Stall Current (reference only)		
T gs =	2921	oz-in				Stall Torque (reference only @ V in)		
I 1 =	7.0	Amps				Current @ Torque-1		
I 2 =	11.7	Amps				Current @ Torque-2		
T 1 =*	180	oz-in				Torque-1	0.0 oz-in	0.0 in-lb
T 2 =*	325	oz-in				Torque-2	0.0 oz-in	0.0 in-lb
RPM nl =	2133	RPM				No Load Velocity	#DIV/0!	rpm
RPM r =	2002	RPM				RPM @ T1	#DIV/0!	rpm
RPM p=	1896	RPM				RPM @ T2	#DIV/0!	rpm
R ah =	0.65	Ohms(@105° C)				Term. Resistance Hot		
T gsh =	2233	oz-in				Stall Torque Hot		
I ash =	73.4	Amps				Stall Current Hot		
R th =*	1.3	°C/W				Thermal Resistance		
Tr =	88	°C	Without cooling air			Temperature Rise @ T1 (above ambient)		
Tr =	139	°C	Without cooling air			Temperature Rise @ T2 (above ambient)		
Nm/A=	0.21					Torque Constant		
Lb in/A=	1.90					Torque Constant		
Km=	43.0	Kt/r				Motor Constant		

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
48	0	2133	1.0	0	0
48	180	2002	7.0	0.79773339	266.52246
48	325	1896	11.7	0.809777312	455.76602
48	2921	0	96.0	0	0