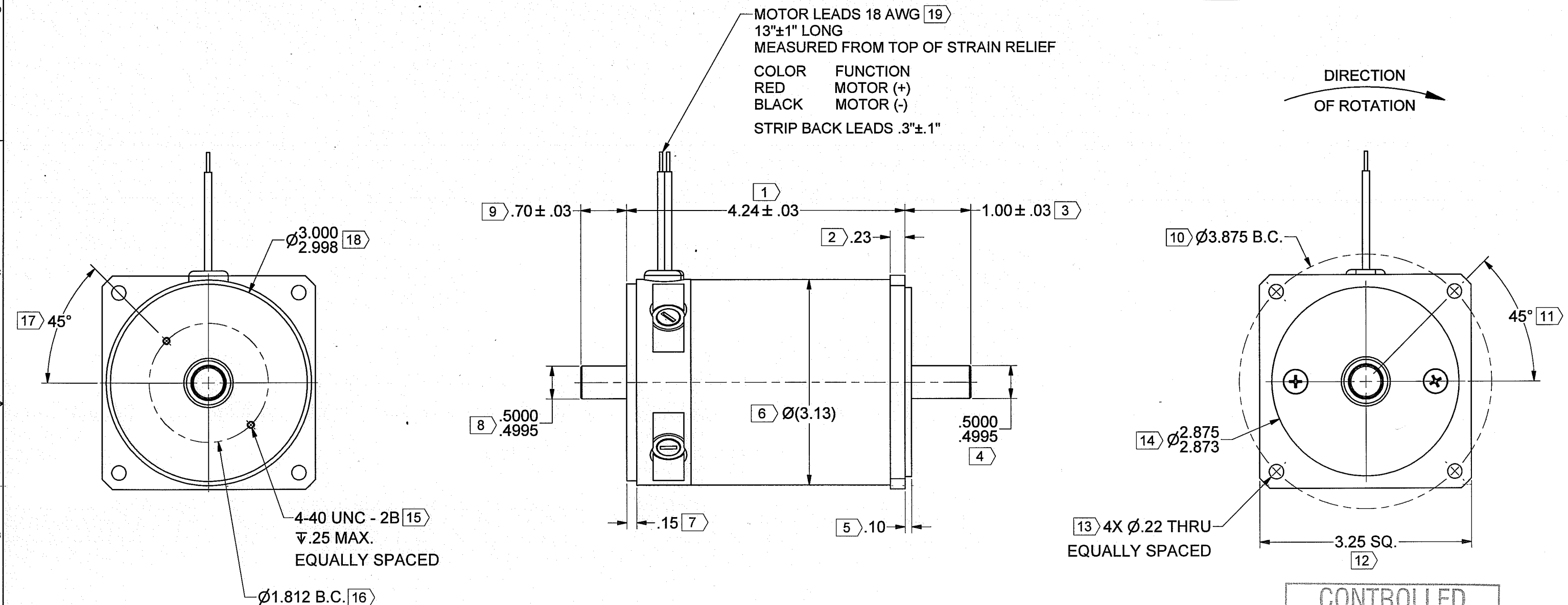


REV	DESCRIPTION	DATE	BY	APPROVED
0	RELEASED TO PRODUCTION ON CAD	5/17/00	-	-
1	CHANGED ENDBELL ASSEMBLY, USE STD. FLANGE, 1.00 WAS .95 DIA. .5000/.4995 WAS .4998/.4994, SZ ECO04-5018	3/20/04	CHEN	-
2	UPDATED DRAWING & MOTOR TO STANDARD, CHANGED TO STANDARD FLANGE & STANDARD MACHINED ENDBELL, ECO # M22-0003	7/28/22	CGW	-



CONTROLLED
 SEP 28 2022
 DOCUMENT

MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 31.4 ± 10% OZ-IN/AMP
 VOLTAGE CONSTANT (Ke) = 23.2 ± 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.		Magnmotor	
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]		SIGNATURES		DATE		TITLE	
MATERIAL		DRAWN JDM		5/17/2004		MOTOR ASSEMBLY, C33-I-200FX	
SPEC		CHECKED <i>SL</i>		9/28/22		REV 2	
FINISH		ENG APPR. <i>MCM</i>		7/28/22		SIZE D	
NONE		MFG APPR. <i>BT</i>		7/27/22		NUMBER 500280088	
SPEC		Q.A.		UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLET: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		SCALE: -	
						WEIGHT: - LB.	
						SHEET 1 OF 3	



10 Coppage Drive
Worcester, MA 01603
11/23/2022

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

Final Product No.: **C33-I-200FX**

RFQ: 500280088

By: MM

Customer:

Phone/Fax:

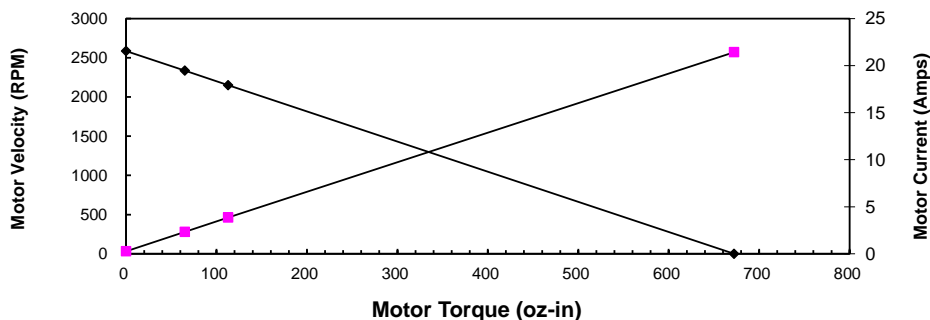
Date: 11/23/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	Winding	-	Stack	Options	Gear Ratio
MODEL #	C	33	-	I	-	200	FX	

V in =*	60 Vdc							Input Voltage
Ke =*	23.20 V/krpm							Voltage Constant
Kt =	31.4 oz-in/A							Torque Constant
Rt =*	2.80 Ohms(@20° C)							Terminal Resistance+Amplifier
Io =*	0.26 Amps							No load current
I as =	21.4 Amps							Stall Current (reference only)
T gs =	672 oz-in							Stall Torque (reference only @ V in)
I 1 =	2.3 Amps							Current @ Torque-1
I 2 =	3.9 Amps							Current @ Torque-2
T 1 =*	65 oz-in							Torque-1
T 2 =*	113 oz-in							Torque-2
RPM nl =	2586 RPM							No Load Velocity
RPM r =	2336 RPM							RPM @ T1
RPM p =	2152 RPM							RPM @ T2
R ah =	3.66 Ohms(@105° C)							Term. Resistance Hot
T gsh =	514 oz-in							Stall Torque Hot
I ash =	16.4 Amps							Stall Current Hot
R th =*	2.9 °C/W							Thermal Resistance
Tr =	80 °C	Without cooling air						Temperature Rise @ T1 (above ambient)
Tr =	150 °C	Without cooling air						Temperature Rise @ T2 (above ambient)
Nm/A =	0.22							Torque Constant
Lb in/A =	1.96							Torque Constant
Km =	18.8	Kt/r						Motor Constant

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
60	0	2586	0.3	0	0
60	65	2336	2.3	0.802831826	112.31625
60	113	2152	3.9	0.776144414	179.82556
60	672	0	21.4	0	0