

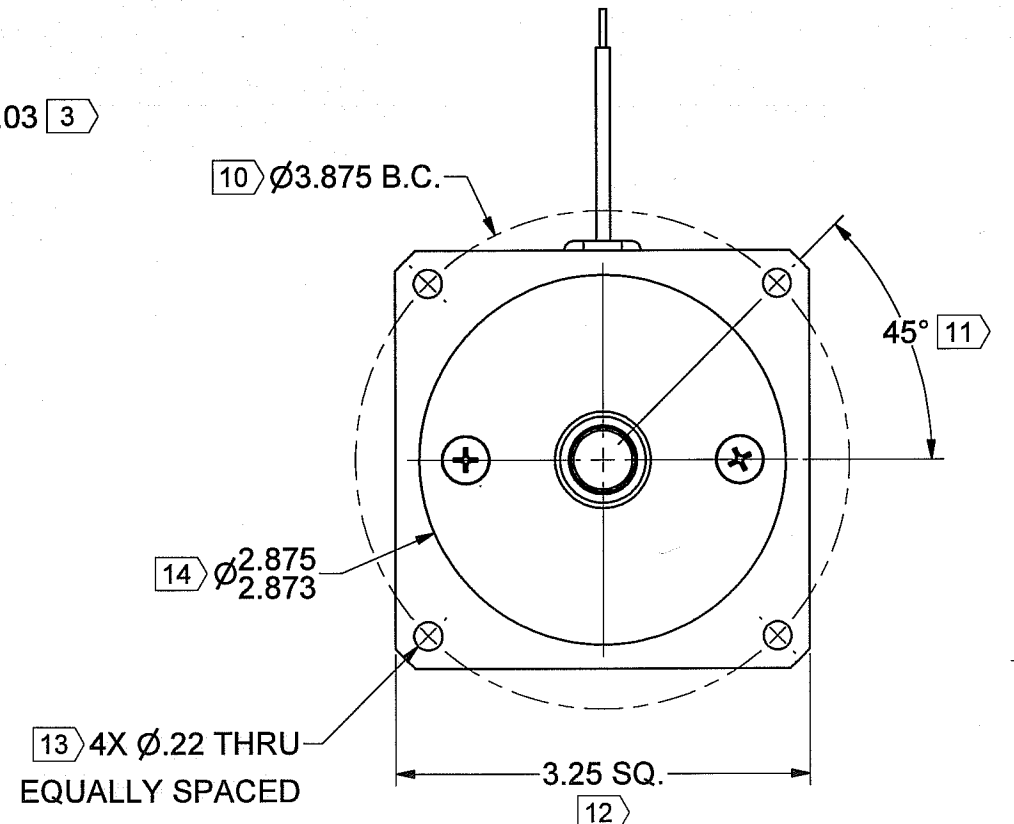
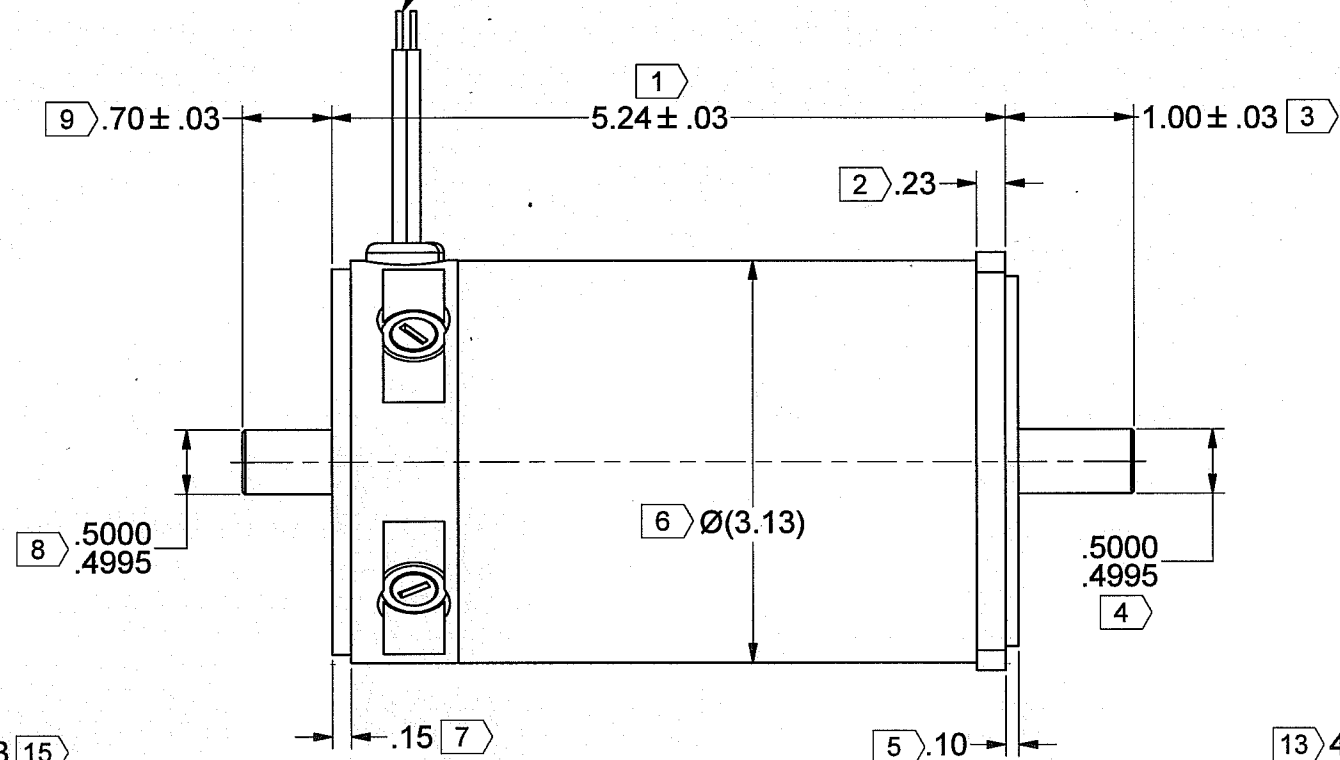
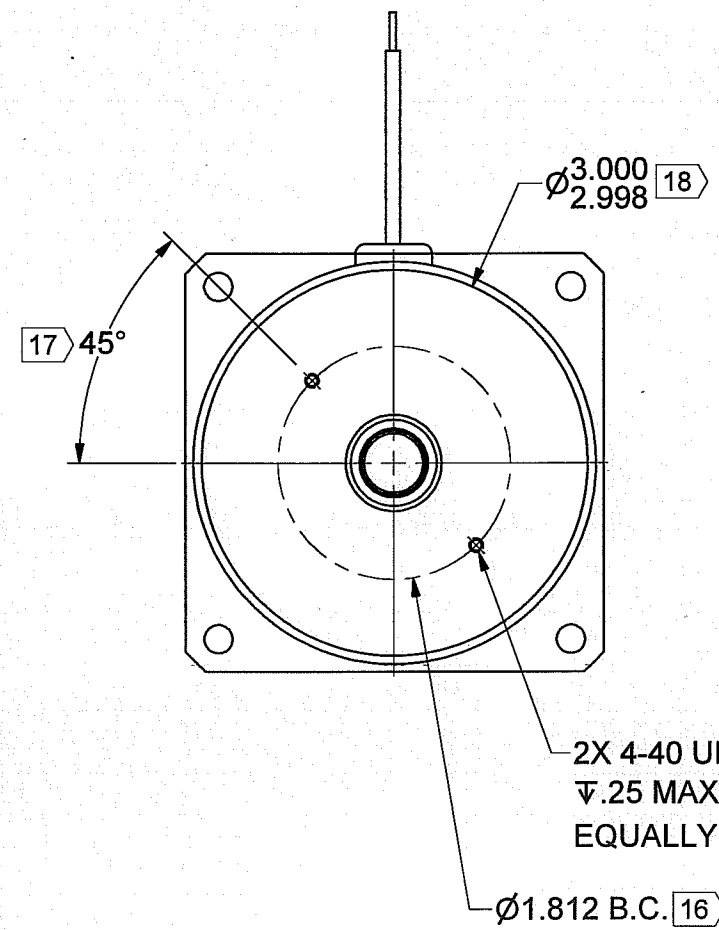
REV	DESCRIPTION	DATE	BY	APPROVED
0	RELEASE TO PRODUCTION, ECO01-0075	5/24/01	-	-
1	DIA. .5000/.4995 WAS .4999/.4995 SZ ECO03-5031	7/8/03	CHEN	-
2	UPDATED DRAWING & MOTOR TO STANDARD, CHANGED TO STANDARD FLANGE & STANDARD MACHINED ENDBELL, ECO # M22-0006	8/26/22	SLC	-

MOTOR LEADS 18 AWG [19]
 13"±1" LONG
 MEASURED FROM TOP OF STRAIN RELIEF

COLOR FUNCTION
 RED MOTOR (+)
 BLACK MOTOR (-)

STRIP BACK LEADS .3"±.1"

DIRECTION
 OF ROTATION



CONTROLLED
 SEP 28 2022
 DOCUMENT

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™	
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]		SIGNATURES		DATE		TITLE	
DRAWN MTC		CHECKED [Signature]		5/23/2001		MOTOR ASSEMBLY, C33-E-300FX	
SPEC		ENG APPR. [Signature]		9/28/22		REV 2	
FINISH NONE		MFG APPR. [Signature]		9/28/22		SIZE D NUMBER 500280217	
SPEC		Q.A.		UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLETS: .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-E-300FX**
RFQ: 500280217
By: MM

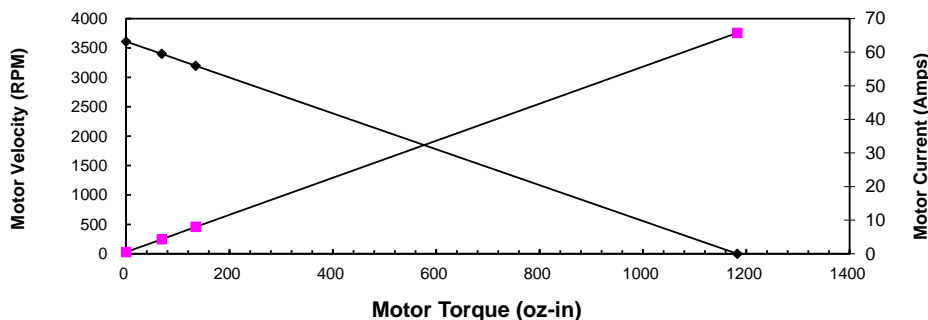
Customer:
Phone/Fax:
Date: 11/23/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	Winding	-	Stack	Options	Gear Ratio
MODEL #	C	33	-	E	-	300	FX	

V in =*	48 Vdc							Input Voltage
Ke =*	13.30 V/krpm							Voltage Constant
Kt =	18.0 oz-in/A							Torque Constant
Rt =*	0.73 Ohms(@20° C)							Terminal Resistance+Amplifier
Io =*	0.50 Amps							No load current
I as =	65.8 Amps							Stall Current (reference only)
T gs =	1183 oz-in							Stall Torque (reference only @ V in)
I 1 =	4.3 Amps							Current @ Torque-1
I 2 =	8.0 Amps							Current @ Torque-2
T 1 =*	69 oz-in							Torque-1
T 2 =*	135 oz-in							Torque-2
RPM nl =	3609 RPM							No Load Velocity
RPM r =	3398 RPM							RPM @ T1
RPM p =	3197 RPM							RPM @ T2
R ah =	0.96 Ohms(@105° C)							Term. Resistance Hot
T gsh =	904 oz-in							Stall Torque Hot
I ash =	50.3 Amps							Stall Current Hot
R th =*	2.3 °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 =	0.13							Torque Constant
Lb in/A =	1.12							Torque Constant
Km =	21.1	Kt/r						Motor Constant

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
48	0	3609	0.5		0
48	69	3398	4.3	0.833322356	173.44255
48	135	3197	8.0	0.830772082	319.23397
48	1183	0	65.8		0