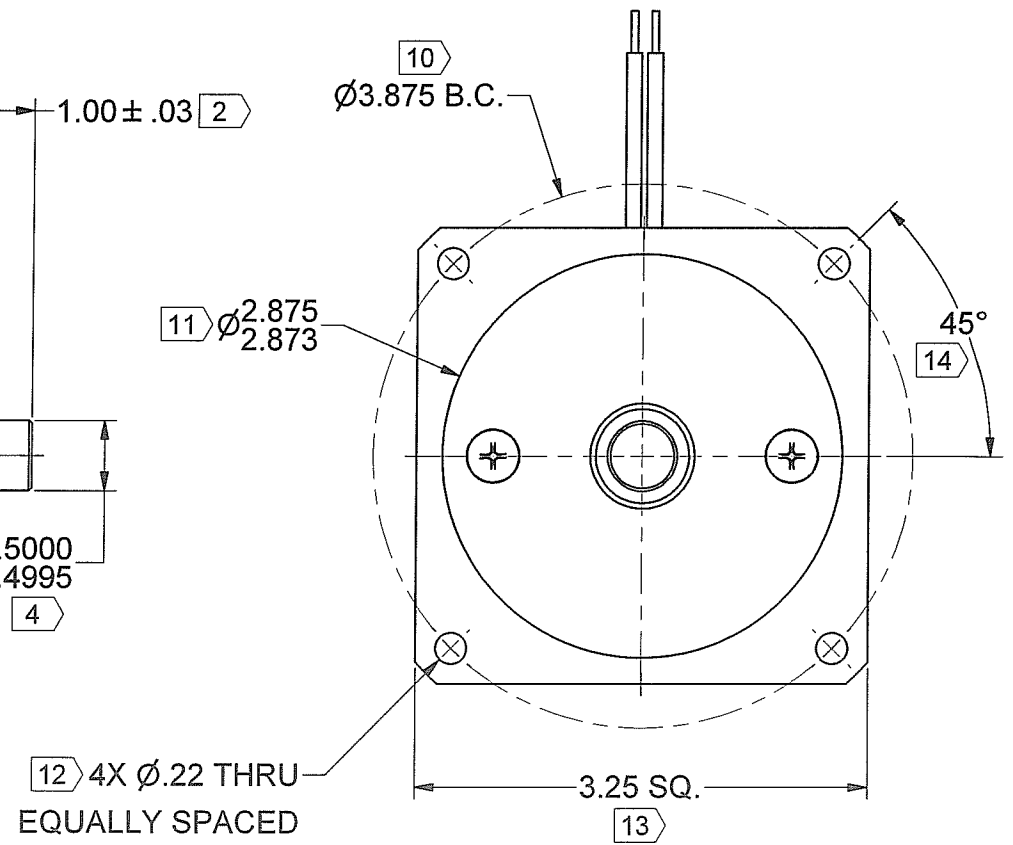
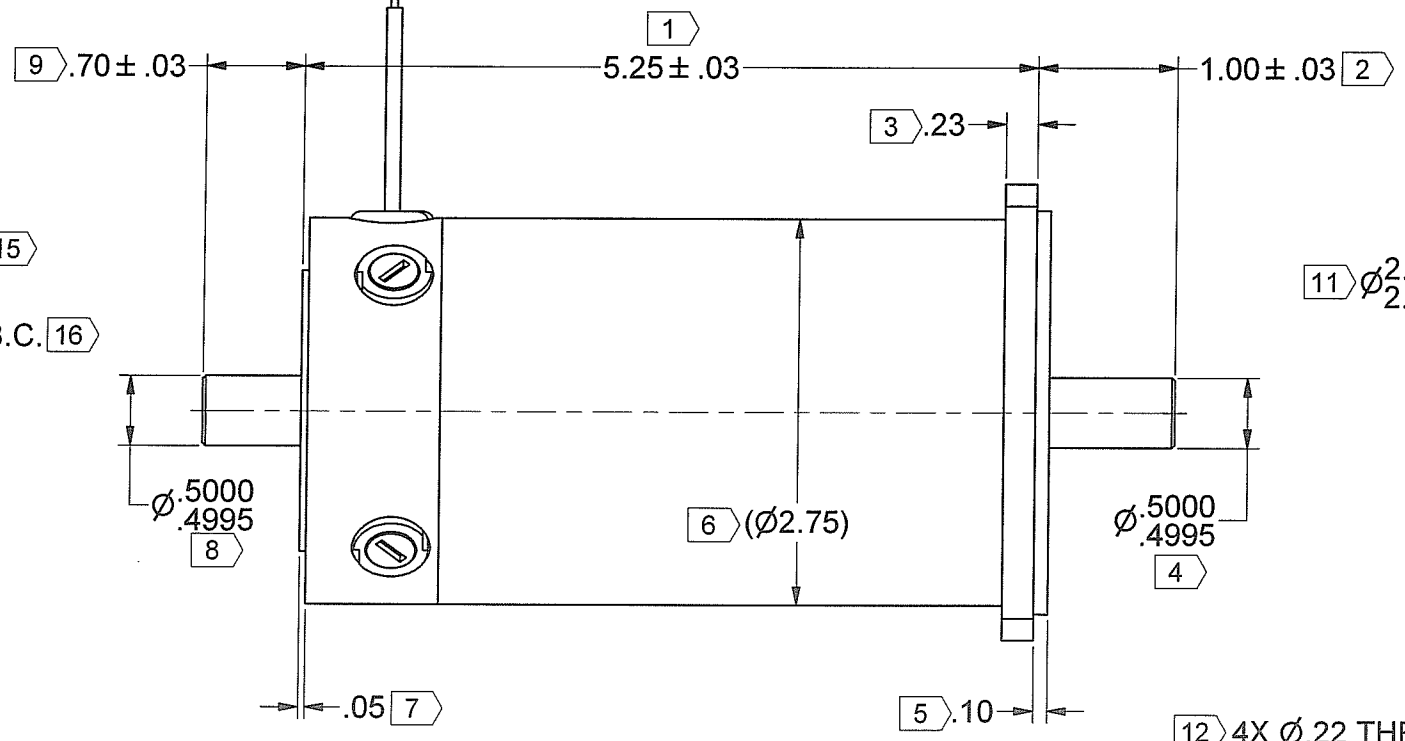
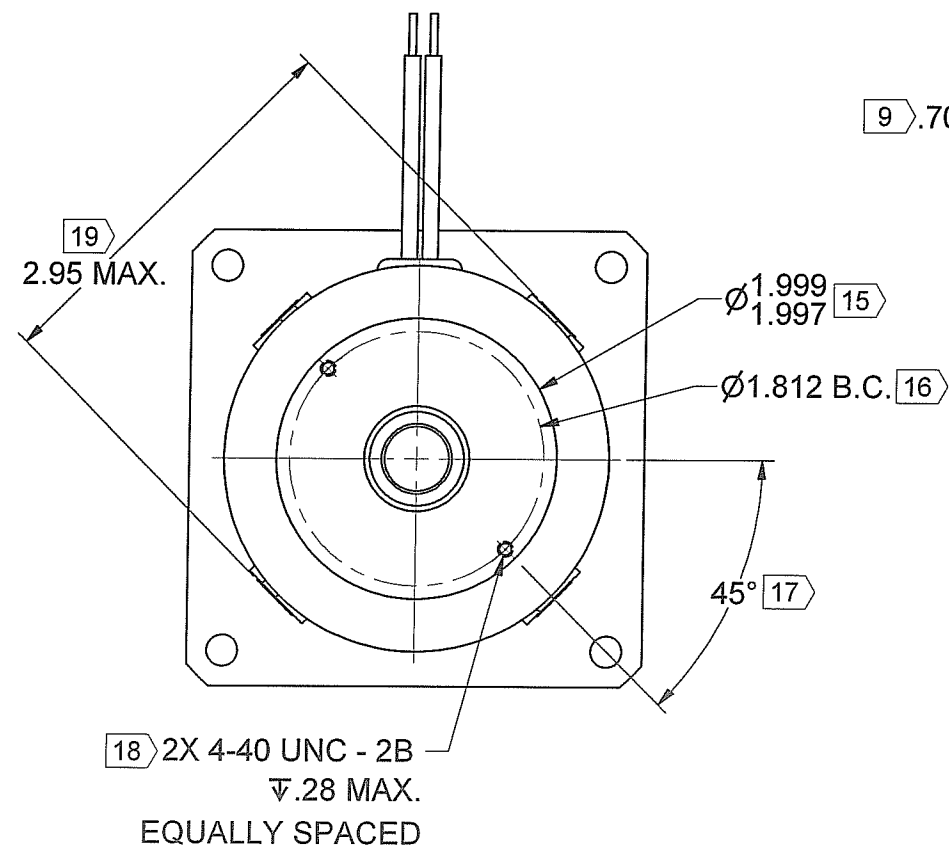


REV	DESCRIPTION	REVISION	DATE	BY	APPROVED
A	PROTOTYPE				

MOTOR LEADS 18 AWG [20]
 13"±1" LONG
 COLOR FUNCTION
 RED MOTOR (+)
 BLACK MOTOR (-)
 STRIP BACK LEADS .3"±.1"

DIRECTION OF ROTATION



MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 32.5 ± 10% OZ-IN/AMP
 VOLTAGE CONSTANT (Ke) = 24.0 ± 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
 OCT 26 2017
 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 DRAWN SLC CHECKED [Signature] ENG APPR. MFG APPR. [Signature] Q.A.		DATE 8/15/2017 10/26/17 10/20/17		
MATERIAL		MATERIAL		SIZE		NUMBER D 500280455
SPEC		SPEC		REV		
FINISH		FINISH		REV		A
NONE		NONE		REV		
SPEC		SPEC		REV		A
UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES. COUNTERSINK TAPPED HOLES TO BODY SIZE. FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES. COUNTERSINK TAPPED HOLES TO BODY SIZE. FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES. COUNTERSINK TAPPED HOLES TO BODY SIZE. FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		



10 Coppage Drive
Worcester, MA 01603
10/26/2017

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

Final Product No.: **S28 F 300 FX**

Customer:

RFQ **500280455**

Phone/Fax:

By: **JC**

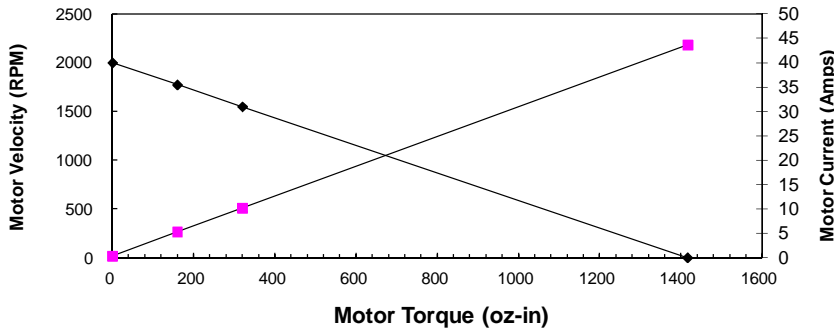
Date: **8/15/2017**

This is a calculation data sheet

SPECS	C/S	Frame	PM	- Winding	- Stack	Options	Gear Ratio
MODEL #	S	28		F	300	FX	1.0

V in =*	48 Vdc		Input Voltage	eff = 0.9
Ke =*	24.0 V/krpm		Voltage Constant	
Kt =	32.5 oz-in/A		Torque Constant	
Rt =*	1.1 Ohms (@20°C)		Terminal Resistance+Amplifier	
Io =*	0.35 Amps		No load current	
I as =	43.6 Amps		Stall Current (reference only)	
T gs =	1416 oz-in		Stall Torque (reference only @ V in)	
I 1 =	5.3 Amps		Current @ Torque-1	
T 1 =*	160 oz-in		Torque-1	144.0 oz-in 149.5 Nm
T 2 =*	320 oz-in		Torque-2	288.0 oz-in 299 Nm
I 2 =	10.2 Amps		Current @ Torque-2	
RPM nl =	2000 RPM		No Load Velocity	2000.0 rpm
RPM r =	1774 RPM		RPM @ T1	1774.1 rpm
RPM p =	1548 RPM		RPM @ T2	1548.1 rpm
R ah =	1.44 Ohms (@105°C)		Term. Resistance Hot	
T gsh =	1083 oz-in		Stall Torque Hot	
I ash =	33.4 Amps		Stall Current Hot	
R th =*	2.3 °C/W		Thermal Resistance	
Tr =	100 °C	Without cooling air	Temperature Rise (above ambient)	
Nm/A =	0.23		Torque Constant	
Lb in/A =	2.03		Torque Constant	
Km =	30.9 Kt/r		Motor Constant	

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
48	0	2000	0.4	0	0
48	160	1774	5.3	0.82847	209.94843
48	320	1548	10.2	0.74775	366.42093
48	1416	0	43.6	0	0