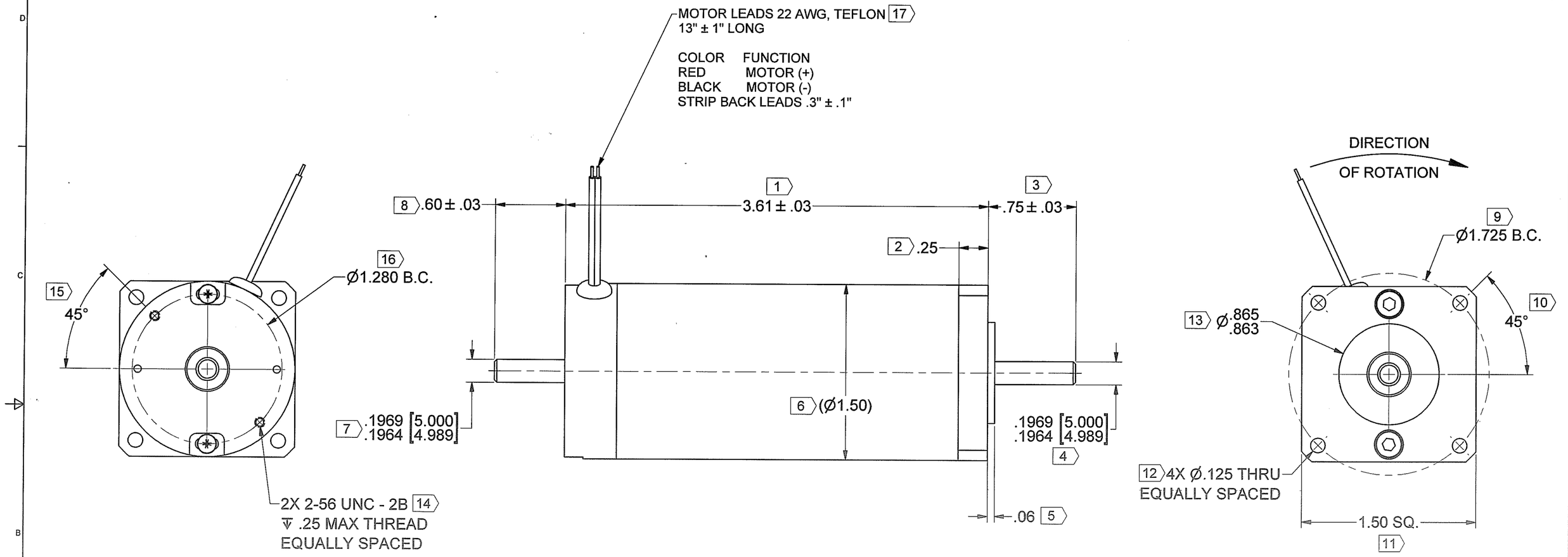
REVISION				
REV	DESCRIPTION	DATE	BY	APPROVED
A	PROTOTYPE	-	-	-



CONTROLLED
JUL 21 2022
DOCUMENT

MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 7.0 ± 10% OZ-IN/AMP
VOLTAGE CONSTANT (Ke) = 5.2 ± 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.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & [mm]
TOLERANCES ON:
ANGLES = ± 1/2°
X.XX [X.X] = ± .01 [0.25]
X.XXX [X.XX] = ± .005 [0.12]
125

MATERIAL: -
SPEC:
FINISH: NONE
SPEC:

THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING

SIGNATURES		DATE
DRAWN	CGW	7/19/2022
CHECKED	M	7/21/22
ENG APPR.	MCM	7/21/22
MFG APPR.	BT	7/21/22
Q.A.		

UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.

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Magmotor™

TITLE: MOTOR ASSEMBLY, SR15-M-200FX

SIZE	NUMBER	REV
D	500150097	A

SCALE: - | WEIGHT: - LB. | SHEET 1 OF 3

10 Coppage Drive
Worcester, MA 01603
8/22/2022

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

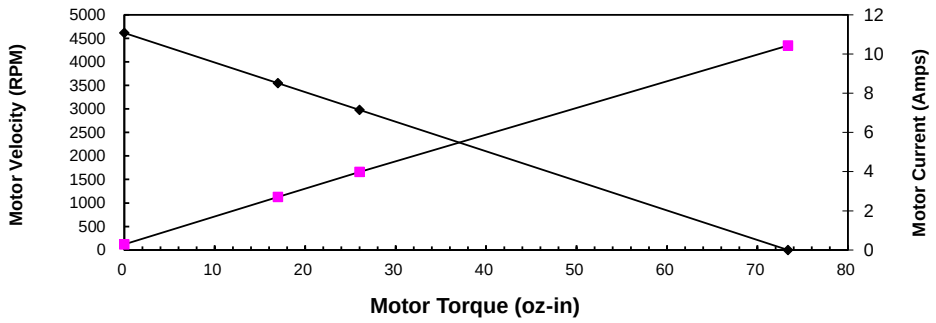
Final Product No.: **SR15-M-200FX**
Customer:
RFQ 500150097
Phone/Fax:
By: MM
Date: 8/22/2022

This is a calculation data sheet X

SPECS	C/S	Frame	PM	-	Winding	-	Stack	Options	Gear Ratio
MODEL #	SR	15		-	M	-	200	FX	

V in =*	**24**	Vdc	Input Voltage	**Eff =** 0.9
Ke =*	**5.20**	V/krpm	Voltage Constant	
Kt =	7.0	oz-in/A	Torque Constant	
Rt =*	**2.30**	Ohms(@20° C)	Terminal Resistance+Amplifier	
Io=*	**0.29**	Amps	No load current	
I as =	10.4	Amps	Stall Current (reference only)	
T gs =	73	oz-in	Stall Torque (reference only @ V in)	
I 1 =	2.7	Amps	Current @ Torque-1	
I 2 =	4.0	Amps	Current @ Torque-2	
T 1 =*	**17**	oz-in	Torque-1	
T 2 =*	**26**	oz-in	Torque-2	
RPM nl =	4615	RPM	No Load Velocity	
RPM r =	3546	RPM	RPM @ T1	
RPM p=	2980	RPM	RPM @ T2	
R ah =	3.01	Ohms(@105° C)	Term. Resistance Hot	
T gsh =	56	oz-in	Stall Torque Hot	
I ash =	8.0	Amps	Stall Current Hot	
R th =*	**4.0**	°C/W	Thermal Resistance	
Tr =	**82**	°C Without cooling air	Temperature Rise @ T1 (above ambient)	
Tr =	**154**	°C Without cooling air	Temperature Rise @ T2 (above ambient)	
Nm/A=	0.05		Torque Constant	
Lb in/A=	0.44		Torque Constant	
Km=	4.6	Kt//r	Motor Constant	

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
24	0	4615	0.3	0	0
24	17	3546	2.7	0.686238916	44.589415
24	26	2980	4.0	0.598905013	57.309906
24	73	0	10.4	0	0