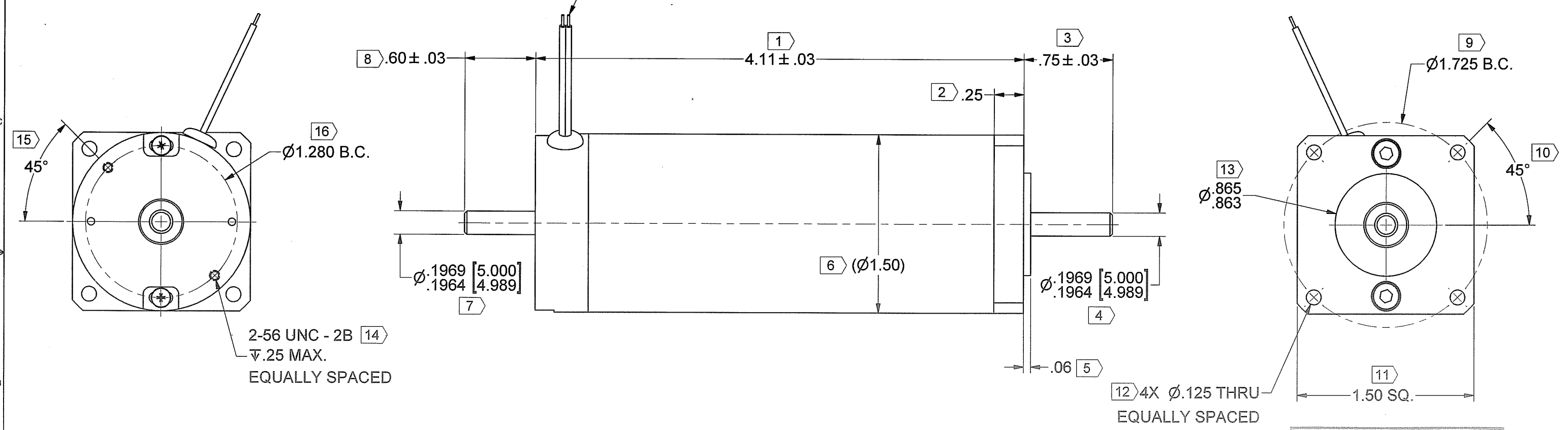


REV	DESCRIPTION	DATE	BY	APPROVED
A	PROTOTYPE	-	-	-

MOTOR LEADS 22 AWG. TEFLON 17
 13"±1" LONG
 COLOR FUNCTION
 RED MOTOR (+)
 BLACK MOTOR (-)
 STRIP BACK LEADS .3"±.1"

DIRECTION
 OF ROTATION →



MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 8.5 ± 10% OZ-IN/AMP
 VOLTAGE CONSTANT (Ke) = 6.3 ± 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
 JUL 21 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.		MAGMOTOR
		SIGNATURES	DATE	
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]	125	DRAWN CGW	7/13/2022	MOTOR ASSEMBLY, SR15-M-250FX
MATERIAL	CHECKED	ENG APPR. <i>MEM</i>	7/21/22	
SPEC	MFG APPR. <i>ZT</i>	7/21/22		
FINISH NONE	Q.A.	SIZE	NUMBER	REV
SPEC	UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES. COUNTERSINK TAPPED HOLES TO BODY SIZE. FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.	D	500150095	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-250FX**

Customer:

RFQ 500150095

Phone/Fax:

By: MM

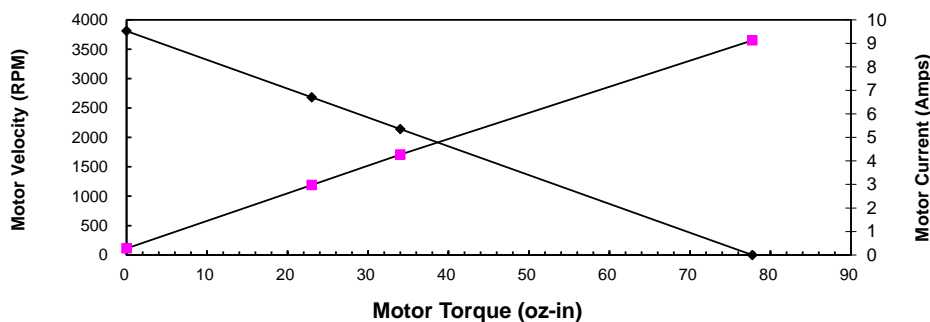
Date: 8/22/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	-	Winding	-	Stack	Options	Gear Ratio
MODEL #	SR	15		-	M	-	250	FX	

V in =*	24 Vdc		Input Voltage	Eff = 0.9
Ke =*	6.30 V/krpm		Voltage Constant	
Kt =	8.5 oz-in/A		Torque Constant	
Rt =*	2.63 Ohms(@20° C)		Terminal Resistance+Amplifier	
Io =*	0.28 Amps		No load current	
I as =	9.1 Amps		Stall Current (reference only)	
T gs =	78 oz-in		Stall Torque (reference only @ V in)	
I 1 =	3.0 Amps		Current @ Torque-1	
I 2 =	4.3 Amps		Current @ Torque-2	
T 1 =*	23 oz-in		Torque-1	
T 2 =*	34 oz-in		Torque-2	
RPM nl =	3810 RPM		No Load Velocity	
RPM r =	2683 RPM		RPM @ T1	
RPM p =	2144 RPM		RPM @ T2	
R ah =	3.44 Ohms(@105° C)		Term. Resistance Hot	
T gsh =	59 oz-in		Stall Torque Hot	
I ash =	7.0 Amps		Stall Current Hot	
R th =*	3.0 °C/W		Thermal Resistance	
Tr =	78 °C	Without cooling air	Temperature Rise @ T1 (above ambient)	
Tr =	146 °C	Without cooling air	Temperature Rise @ T2 (above ambient)	
Nm/A =	0.06		Torque Constant	
Lb in/A =	0.53		Torque Constant	
Km =	5.3	Kt/r	Motor Constant	

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
24	0	3810	0.3	0	0
24	23	2683	3.0	0.638193481	45.635825
24	34	2144	4.3	0.525963652	53.90775
24	78	0	9.1	0	0