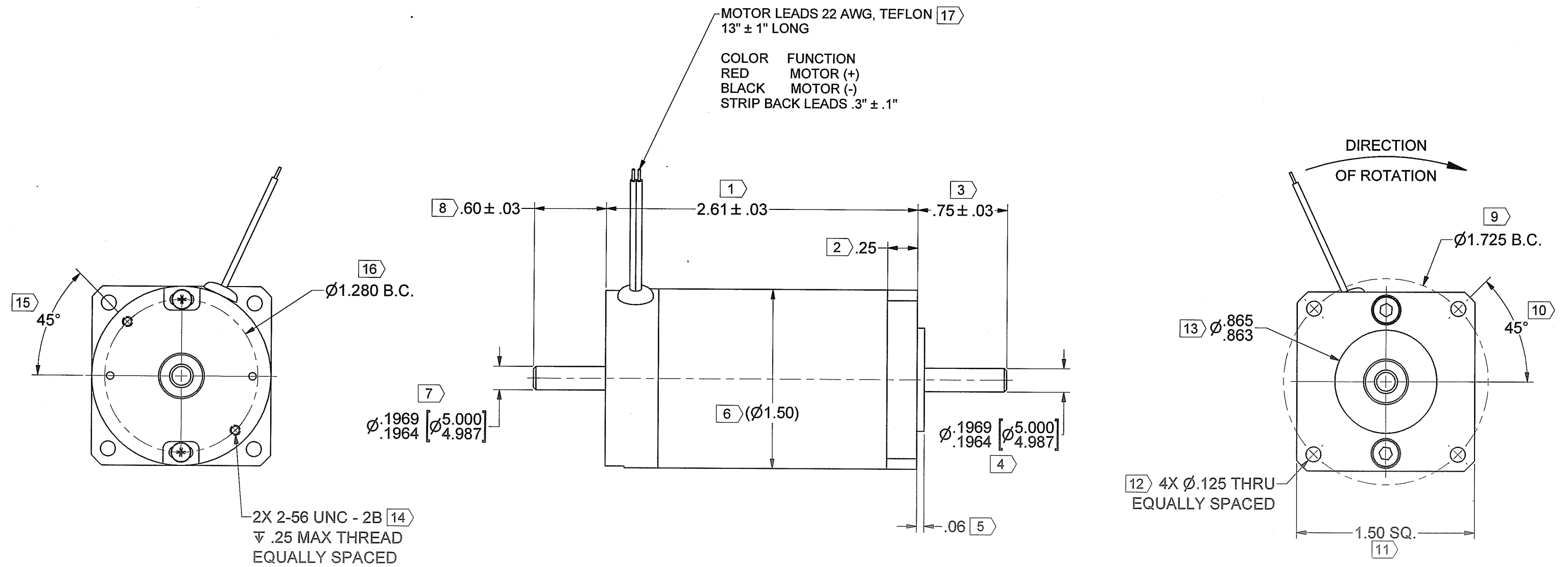


REV	DESCRIPTION	DATE	BY	APPROVED
A	PROTOTYPE			

MOTOR LEADS 22 AWG, TEFLON 17
 13" ± 1" LONG

COLOR FUNCTION
 RED MOTOR (+)
 BLACK MOTOR (-)
 STRIP BACK LEADS .3" ± .1"

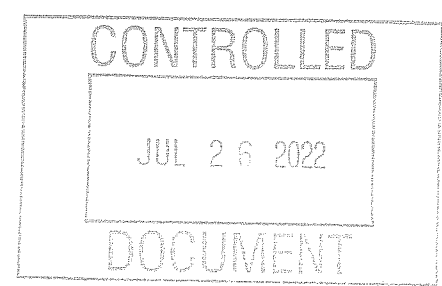


MOTOR SPECIFICATIONS:

TORQUE CONSTANT (Kt) = 3.1 ± 10% OZ-IN/AMP
 VOLTAGE CONSTANT (Ke) = 2.3 ± 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.					
TOLERANCES ON: ANGLES = ± 1/2° X.XX [X.X] = ± .01 [0.25] X.XXX [X.XX] = ± .005 [0.12]		125 ✓		SIGNATURES DRAWN CGW CHECKED <i>Mc</i> ENG APPR. <i>Mc</i> MFG APPR.		DATE 7/21/2022 7/21/22 7/21/22		TITLE MOTOR ASSEMBLY, SR15-L-100FX	
MATERIAL		Q.A.		SIZE		NUMBER		REV	
NONE		UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS & SHARP EDGES, COUNTERSINK TAPPED HOLES TO BODY SIZE FILLETS: .03 MAX. / EXTERNAL CORNERS: .015 MAX.		D		500150100		A	
SPEC		SCALE: -		WEIGHT: - LB.		SHEET 1 OF 3			



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

MOTOR PERFORMANCE / SPECIFICATIONS

Attn.:

Final Product No.: **SR15-L-100FX**

Customer:

RFQ 500150100

Phone/Fax:

By: MM

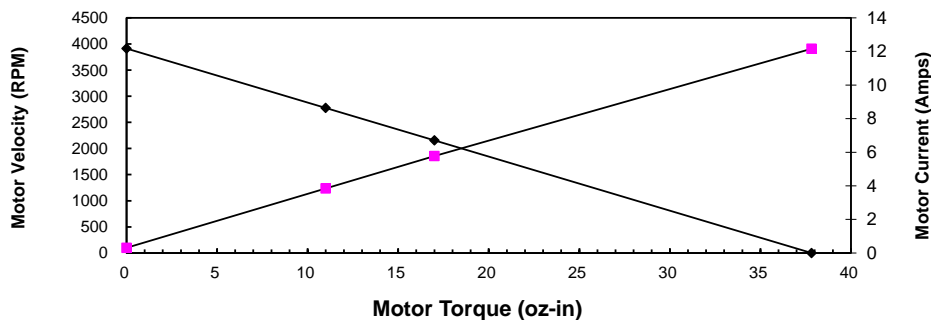
Date: 8/22/2022

This is a calculation data sheet

SPECS	C/S	Frame	PM	-	Winding	-	Stack	Options	Gear Ratio
MODEL #	SR	15			L		100	FX	

V in =*	9 Vdc								Input Voltage	Eff = 0.9
Ke =*	2.30 V/krpm								Voltage Constant	
Kt =	3.1 oz-in/A								Torque Constant	
Rt =*	0.74 Ohms(@20° C)								Terminal Resistance+Amplifier	
Io =*	0.31 Amps								No load current	
I as =	12.2 Amps								Stall Current (reference only)	
T gs =	38 oz-in								Stall Torque (reference only @ V in)	
I 1 =	3.8 Amps								Current @ Torque-1	
I 2 =	5.8 Amps								Current @ Torque-2	
T 1 =*	11 oz-in								Torque-1	
T 2 =*	17 oz-in								Torque-2	
RPM nl =	3913 RPM								No Load Velocity	
RPM r =	2775 RPM								RPM @ T1	
RPM p =	2155 RPM								RPM @ T2	
R ah =	0.97 Ohms(@105° C)								Term. Resistance Hot	
T gsh =	29 oz-in								Stall Torque Hot	
I ash =	9.3 Amps								Stall Current Hot	
R th =*	6.5 °C/W								Thermal Resistance	
Tr =	78 °C	Without cooling air							Temperature Rise @ T1 (above ambient)	
Tr =	162 °C	Without cooling air							Temperature Rise @ T2 (above ambient)	
Nm/A =	0.02								Torque Constant	
Lb in/A =	0.19								Torque Constant	
Km =	3.6	Kt/r							Motor Constant	

Torque Curve



Calculation data

Voltage	Torque	RPM	Amp	Efficiency	Watts out
9	0	3913	0.3		0
9	11	2775	3.8	0.652262866	22.579694
9	17	2155	5.8	0.521227159	27.092302
9	38	0	12.2		0