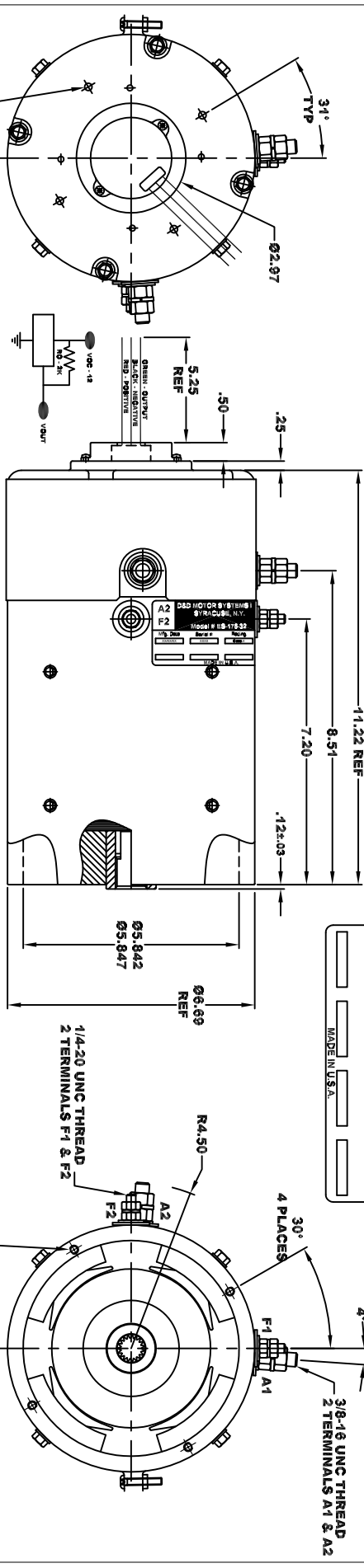
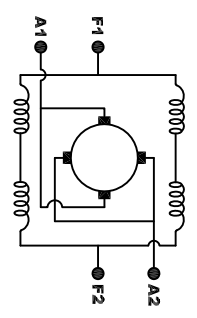


<b>D&amp;D MOTOR SYSTEMS INC.</b>			
<b>A2</b>	<b>SYRACUSE N.Y.</b>		<b>A1</b>
<b>F2</b>	<b>Model # ES-176-32</b>		<b>F1</b>
Mfg. Date	Serial #	Rating	Voltage
XXXXXX	XXXX	CL-100	30V-48V
MADE IN U.S.A.			

**TORQUE SPECIFICATION FOR POWER CABLE SECURING TOP NUTS**  
 3/8-16 UNC (A1 / A2) - 140 IN / LBS MAX  
 1/4-20 UNC (F1 / F2) - 50 IN / LBS MAX

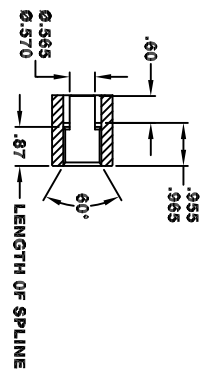


**ELECTRICAL SPECIFICATION:**  
 4.5V TO 24V OPERATING VOLTAGE  
 -20°C TO 85°C OPERATING TEMPERATURE  
 CURRENT SINKING UP TO 25mA  
 -AN EXTERNAL OUTPUT PULL UP RESISTOR IS REQUIRED  
 -SENSOR IS DESIGNED TO OPERATE BETWEEN THE MAGNET  
 AND THE HOUSING, INCLUDING ANY RUNOUT  
 SHOULD NOT EXCEED .030 INCHES



**MOTOR WIRING CONNECTIONS:**  
 CW ROTATION DRIVE END  
 CONNECT A1 & F1 TO ONE BATTERY TERMINAL  
 CCW ROTATION DRIVE END  
 SWITCH F1 & F2 CONNECTIONS

- INTERNAL INVOLUTE SPLINE SPECIFICATION CLASS 5 FILLET ROOT SIDE FIT (PER A.N.S.I. B92.1)**
- NO. OF TEETH \_\_\_\_\_ 19
  - SPLINE PITCH \_\_\_\_\_ 24/48
  - PRESSURE ANGLE \_\_\_\_\_ 45°
  - BASE Ø \_\_\_\_\_ .5997 REF
  - PITCH Ø \_\_\_\_\_ .7916 REF
  - MAJOR Ø \_\_\_\_\_ .890 - .899
  - FORM Ø \_\_\_\_\_ .935
  - MINOR Ø \_\_\_\_\_ .787 - .772
  - CIRCULAR SPACE WIDTH \_\_\_\_\_ .0764
  - EFFECTIVE SPACE WIDTH \_\_\_\_\_ .0738
  - MAX. DIMENSION BETWEEN TWO PINS \_\_\_\_\_ .8714
  - PIN Ø \_\_\_\_\_ .0800
  - SPLINE HARDNESS TO BE R/C 26-34



**MOTOR WEIGHT XX LBS**  
**CLASS "H" INSULATION**  
**PERFORMANCE SPEC: 32**

THIS PRINT IS THE PROPERTY OF D&D MOTOR SYSTEMS INC.  
 DO NOT SCALE  
 WORK TO DIMENSIONS  
 TOLERANCES UNLESS OTHERWISE SPECIFIED ARE AS FOLLOWS  
 .XX \_\_\_\_\_ .01  
 .XXX \_\_\_\_\_ .005  
 .XX RUGH CASTING \_\_\_\_\_ .03  
 HOLES \_\_\_\_\_ .001 / +.006  
 ANGLES \_\_\_\_\_ 0-30°

<b>D &amp; D MOTOR SYSTEMS INC</b>			
<b>MOTOR OUTLINE</b>			
SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.
B	8-8-24		ES-176-32
SCALE	STF	DRAWN BY	REV DATE
		MJG	