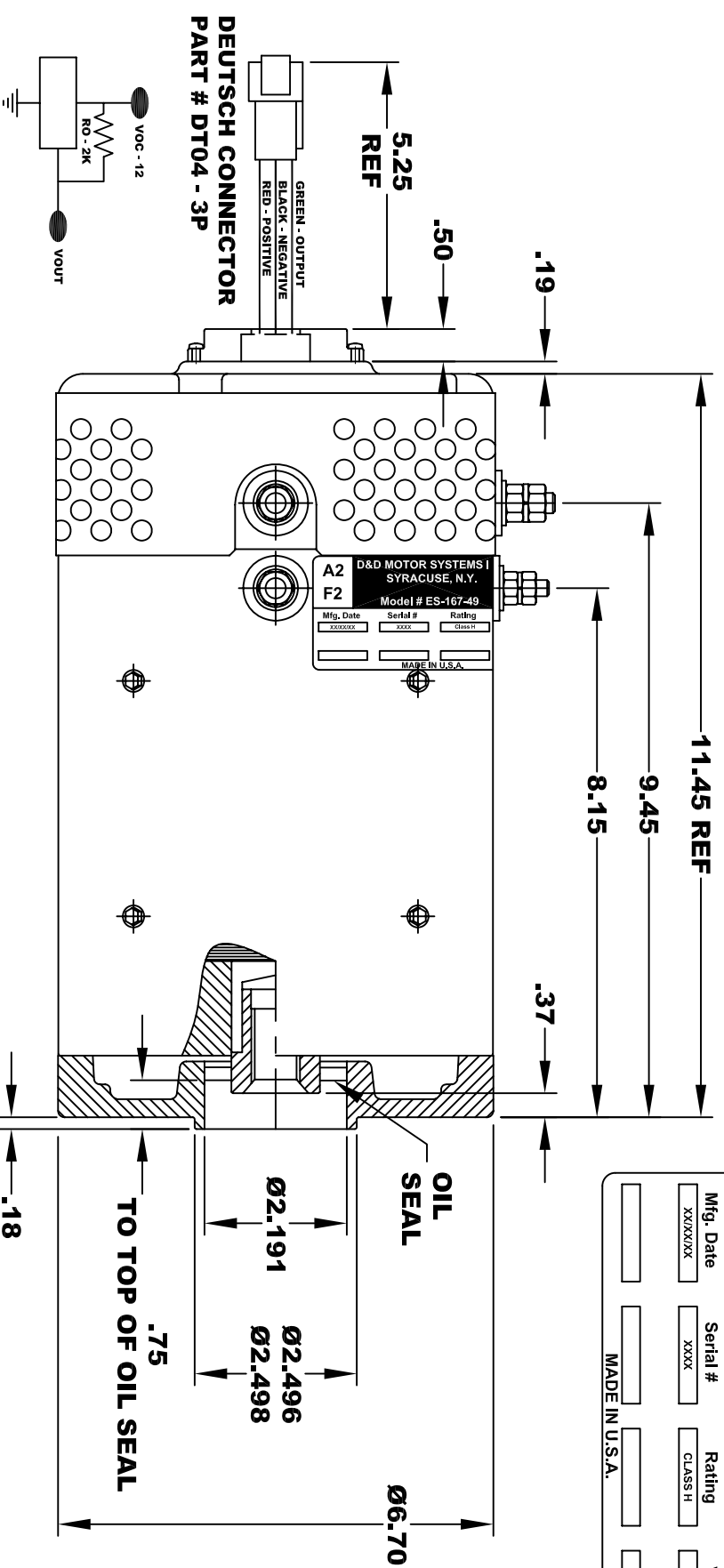
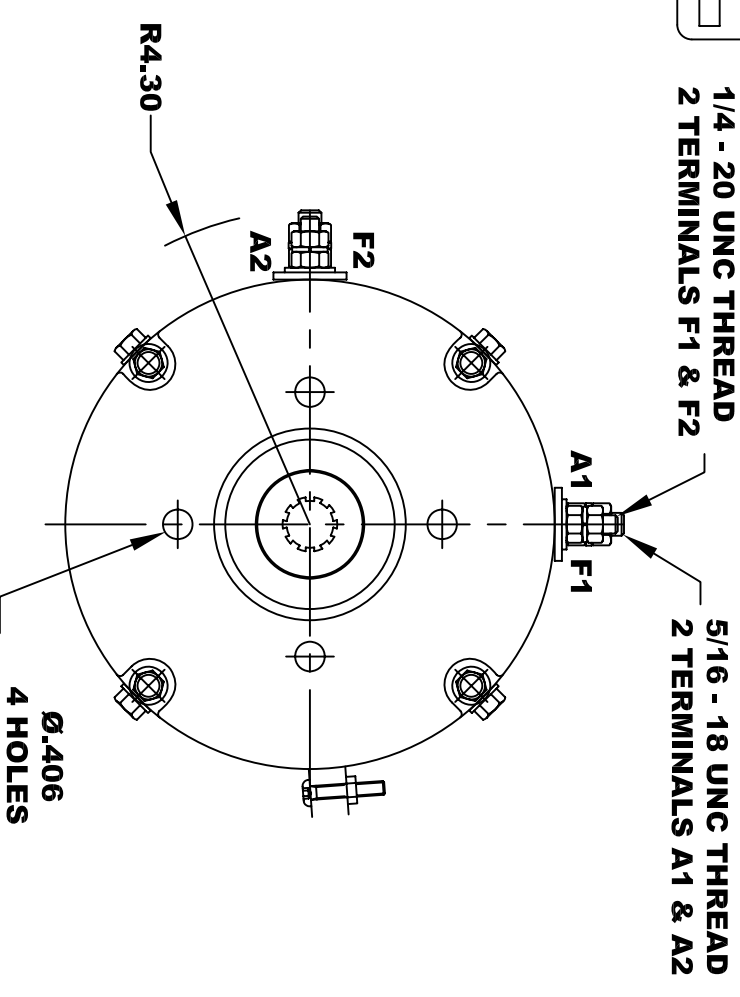


D&D MOTOR SYSTEMS INC.			
SYRACUSE N.Y.			
A2	F2	A1	F1
Model # ES-167-49			
Mfg. Date	Serial #	Rating	Voltage
XXXX/XX	XXXX	CLASS H	XX
MADE IN U.S.A.			

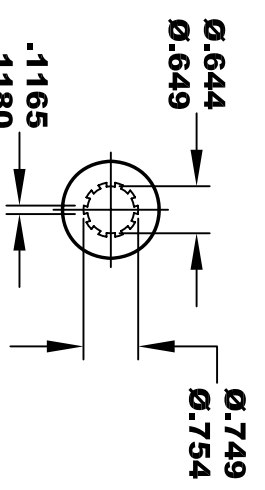


SPEED SENSOR ELECTRICAL SPECIFICATION:
-4.5V TO 24V OPERATING VOLTAGE
-20°C TO 85°C OPERATING TEMPERATURE
-CURRENT SINKING UP TO 25mA
-AN EXTERNAL OUTPUT PULL UP RESISTOR IS REQUIRED
-SENSOR IS DESIGNED TO OPERATE WITH 4 N/S POLEPAIRS
-THE OPERATIONAL DISTANCE BETWEEN THE MAGNET
AND THE HOUSING, INCLUDING ANY RUNOUT
SHOULD NOT EXCEED .030 INCHES



**TORQUE SPECIFICATION FOR
POWER CABLE SECURING TOP NUTS**
5/16-18 UNC (A1 / A2) - 110 IN / LBS MAX
1/4-20 UNC (F1 / F2) - 50 IN / LBS MAX

**10 TOOTH
INTERNAL SPLINE
HARDNESS OF SPLINE
TO BE R/C 46 - 53 (.02 DEPTH MIN)**



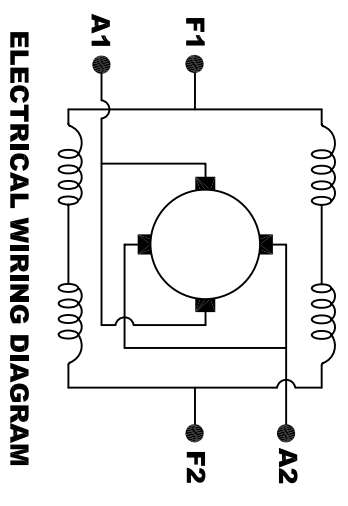
**MOTOR WEIGHT: 61 LBS (R1)
CLASS "H" INSULATION
PERFORMANCE SPEC: 49**

D & D MOTOR SYSTEMS INC

MOTOR OUTLINE

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 ROUGH CASTING _____ .03
HOLES _____ -.001 / +.006
ANGLES _____ 0°30"

SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.	REV
B	8-8-14		ES-167-49	R1
SCALE	STF	DRAWN BY	MJG	REV DATE
				8-25-14



ELECTRICAL WIRING DIAGRAM

MOTOR WIRING CONNECTIONS:
CW ROTATION DRIVE END
CONNECT A1 & F1 TO ONE BATTERY TERMINAL
CONNECT A2 & F2 TO OTHER BATTERY TERMINAL
CCW ROTATION DRIVE END
SWITCH F1 & F2 CONNECTIONS