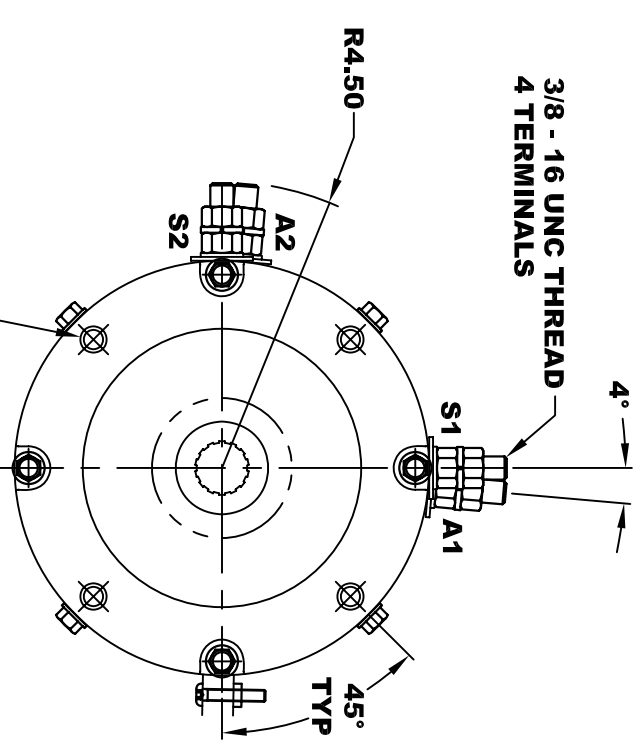
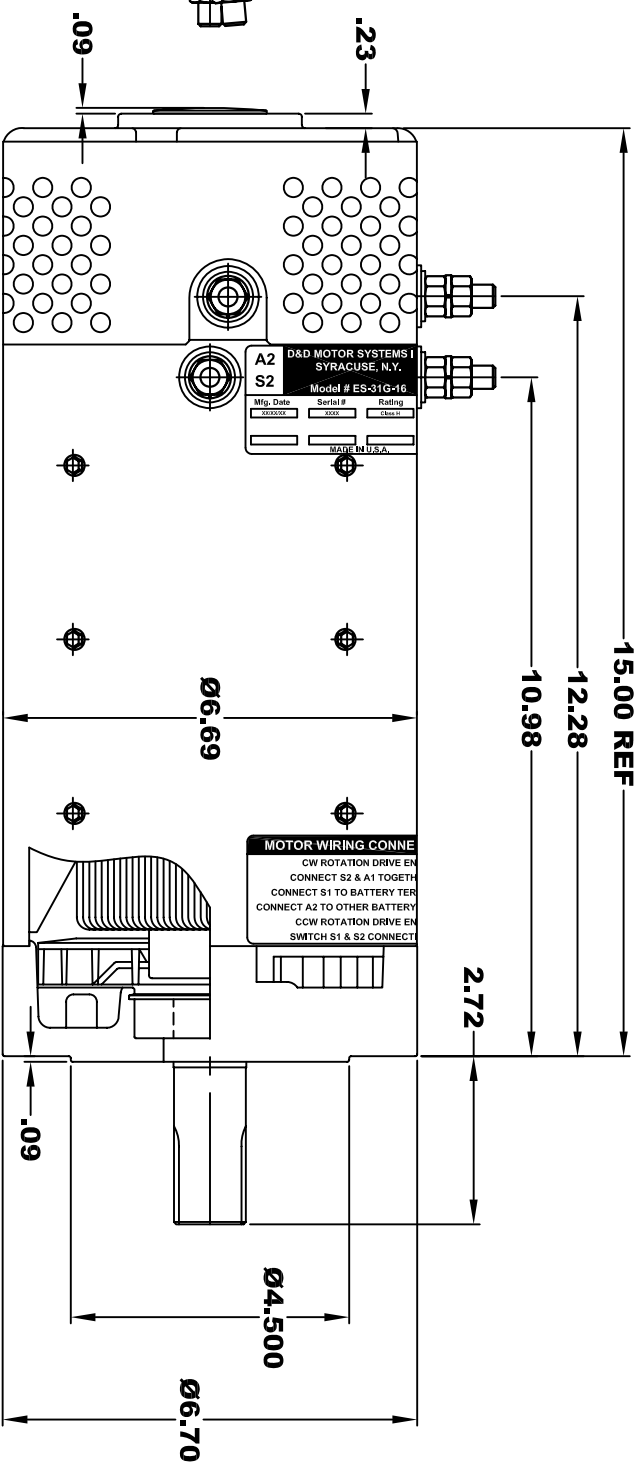
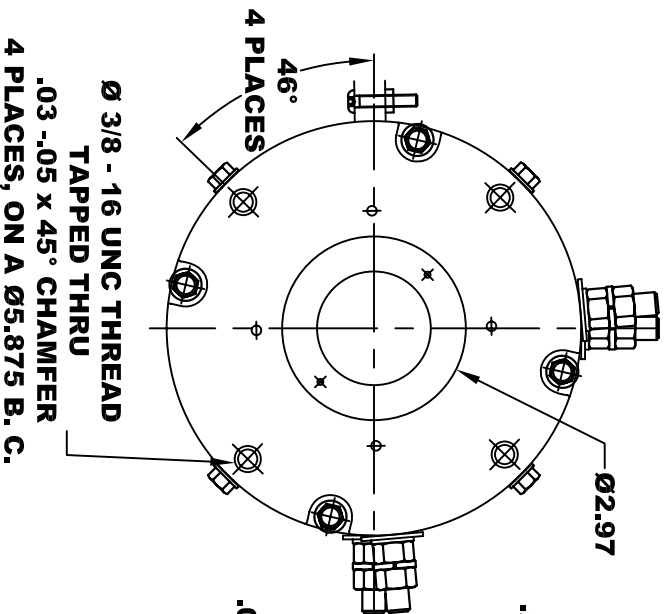


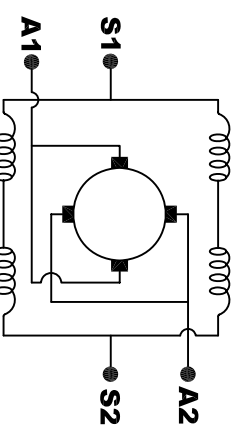
D&D MOTOR SYSTEMS INC.			
A2	SYRACUSE N.Y.		A1
S2	Model # ES-31G-16		
Mfg. Date	Serial #	Rating	Voltage
XXXXXX	XXXX	Class H	XX
MADE IN U.S.A.			



EXTERNAL INVOLUTE SPLINE DATA TO DIN5480	
SPLINE DESIGNATION	W30x2x14x9g
TYPE OF FIT	SIDE FIT
NUMBER OF TEETH	14
MODULE	2
PRESSURE ANGLE	30°
MAJOR DIAMETER (h11)	1.160 - 1.165
MINOR DIAMETER (h14)	.988 - 1.007
MEASURING PIN	.1574
DIMENSION OVER PINS	1.3620 - 1.3595
TOOTH THICKNESS (9g)	.1157 - .1177
REFERENCE DIAMETER	1.181
PITCH DIAMETER	1.102
BASE CIRCLE DIAMETER	.9547
FORM DIAMETER	1.021
MIN FILLET RADII	.0118
MATING PART NO	G1036

MOTOR WEIGHT: 83 LBS
CLASS "H" INSULATION
PERFORMANCE SPEC: 16

MOTOR WIRING CONNE
CW ROTATION DRIVE EN
CONNECT S2 & A1 TOGETHER
CONNECT S1 TO BATTERY TER
CONNECT A2 TO OTHER BATTERY
CCW ROTATION DRIVE EN
SWITCH S1 & S2 CONNECT



ELECTRICAL WIRING DIAGRAM

MOTOR WIRING CONNECTIONS:
CW ROTATION DRIVE END
CONNECT S2 & A1 TOGETHER
CONNECT S1 TO BATTERY TERMINAL
CONNECT A2 TO OTHER BATTERY TERMINAL
CCW ROTATION DRIVE END
SWITCH S1 & S2 CONNECTIONS

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"

D & D MOTOR SYSTEMS INC

MOTOR OUTLINE

SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.	REV
B	8-26-09		ES-31G-16	
SCALE	STF	DRAWN BY	MJG	REV DATE

**TORQUE SPECIFICATION FOR
POWER CABLE SECURING TOP NUTS**
3/8-16 UNC - 140 IN / LBS MAX