Description	Symbol	Value	Units
Length	L	22	Inches
		0.5588	m
Mass	M	12	lbs
		5.443104	kg
Force	Fg=M*g	53.39685	N
Torque	T=Fg*L	29.83816	Nm

in2m	0.0254
lbs2kg	0.453592
g	9.81
lbf2N	4.44822

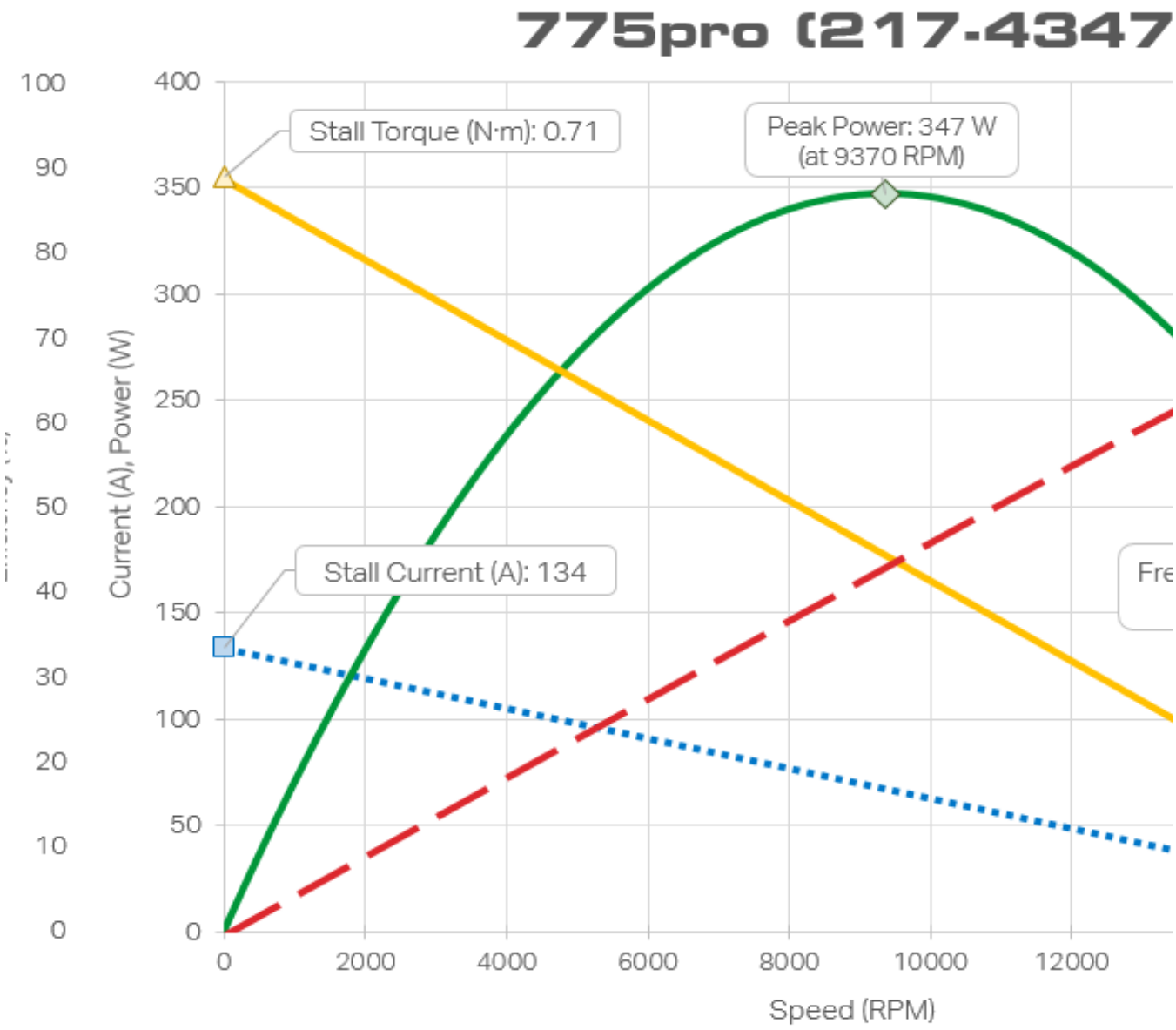
Angle	a	120	Degrees
Diameter	D	5	inches
		0.127	m
Pull	p=∏D*a/360	5.235988	inches
Spring Const.	k	10	lbf/in
Spring Force	Fs=kp	52.35988	lbf
		232.9083	N
Spring Torque	T=Fs*D/2	14.78967	Nm

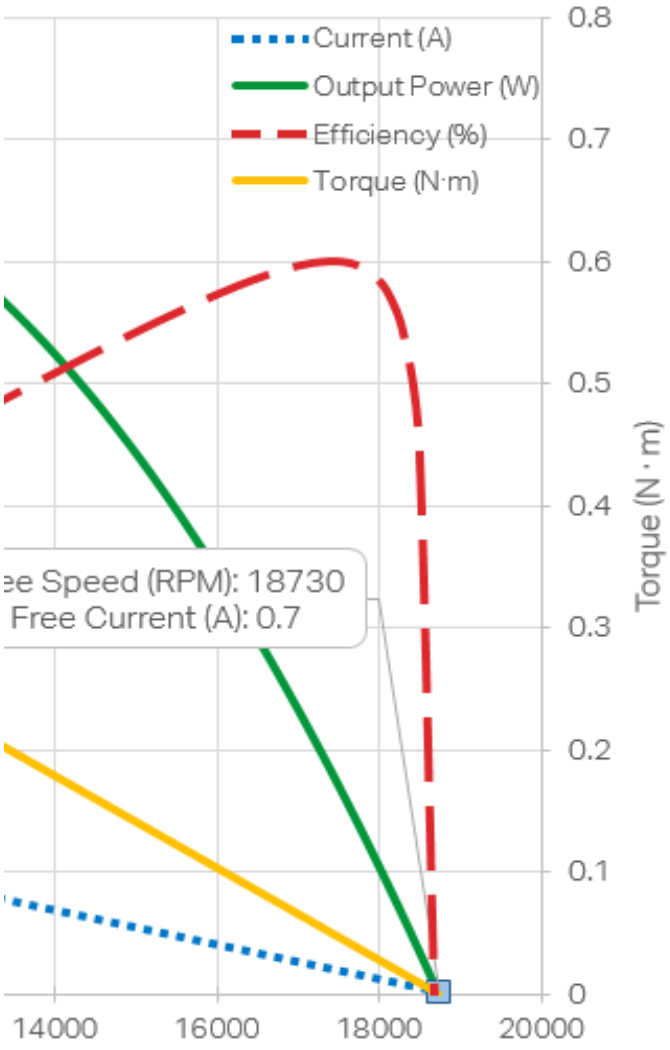
Efficiency (%)

Stall Torque	Tmax	0.71	Nm
Motor Torque	Tm	0.355	Nm
Gear Ratio	R	70	
Useable Torque	Tu	24.85	Nm

Motor Speed	18800	RPM
	313.3333	RPS
Final Speed	4.47619	RPS

m/s^2


775pro (217-4347
Stall Torque (N·m): 0.71
Peak Power: 347 W
(at 9370 RPM)
Stall Current (A): 134
Current (A), Power (W)
Speed (RPM)
0
2000
4000
6000
8000
10000
12000
0
50
100
150
200
250
300
350
400
0
10
20
30
40
50
60
70
80
90
100


Current (A)
Output Power (W)
Efficiency (%)
Torque (N·m)
ee Speed (RPM): 18730
Free Current (A): 0.7
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Torque (N · m)
14000
16000
18000
20000